



Macro and Fiscal Landscape of the State of Kerala



Macro and Fiscal Brief: Kerala March 2025

Contents:

- 1. <u>Summary</u>
- 2. <u>Demography and Employment</u>
- 3. <u>Economic Structure (Growth and Sectoral Composition)</u>
- 4. <u>Socio-Economic Indicators (Education and Health)</u>
- 5. <u>Fiscal Indicators</u>
- 6. <u>Devolution to Kerala from Centre in 14th & 15th Finance Commission</u>
- 7. Kerala's Fiscal Rules
- 8. Extra Slides on Fiscal Indicators

9. <u>Annexure</u>

1. Summary and Overview of the State of Kerala

Demography and Employment

- Kerala has a population of 35.8 million and represents 2.6 percent of India's total population. The State's projected population growth rate is lower than the national average as of 2022-23.
- As per the 2021 population projections, Kerala's population density at 913 person per sq. km. is more than double national average (415 persons per sq. km.). Its dependency ratio (58.5 percent) is slightly higher than the national average (55.7 percent). According to 2022-23 projections, 75.3 percent of its population resides in urban areas.
- > As per Census 2011, sex ratio in Kerala (960 females per 1000 males) is significantly higher than the national average.
- The annual unemployment rate in the State has decelerated during the five-year period from 2017-18 to 2022-23, but is still significantly higher (7 percent in 2022-23) compared to the national average (3.2 per cent). The Female Labour Force Participation rate at 37.5 per cent is close to the national average.
- The working population in the State is predominantly concentrated in Services (45.6 per cent); Agriculture, Forestry, and Fishing (27.3 per cent); and, Construction sectors (15.4 per cent), as of 2022-23.

Source: i. Census of India 2011, Population Projections Report 2011 - 2036; ii. Periodic Labour Force Survey 2022-23 (PLFS)

Economic Structure (Growth and Sectoral Composition)

- Kerala's real GSDP has grown at an average rate of 4.8 percent during the period from 2012-13 to 2021-22, which is lower than the national average growth of 5.6 percent.
- The State's share in India's nominal GDP has declined after 1996 and returned to its 1991 level of 4 percent by 2022. But, its nominal per capita income as a ratio to India's Nominal Per Capita Income has consistently increased since 1991 and stood at 50 percent above the national per capita income in 2021-22.
- The services sector in the State accounts for nearly two-thirds of total GSVA (64.2 per cent), which is higher than the States' average (51 per cent). The industry sector commands a 24.9 per cent share of the State's GSVA and agriculture sector contributes 10.84 per cent to its GSVA.
- At a disaggregated level, the Real Estate, Ownership of Dwellings and Business Services sector has shown the highest growth (7.5 per cent) in Gross State Value Added during the period from 2012-13 and 2021-22. This sector is closely followed by Banking and Insurance which also recoded a growth of 7.0 per cent during the same period.

Source: Ministry of Statistics and Programme Implementation (MoSPI), as of August 2023.

Socio-Economic Indicators (Health and Education)

- Kerala's literacy rate has increased rapidly over the decades and remains significantly higher at 94 per cent compared to the national average of 73 per cent, as of 2011.
- As of 2016-17, the State has a lower school dropout rate (12.8 pr cent for Classes VIII to X) and higher pass percentages (97.8 per cent for Class X) compared to the respective national averages.
- The Gross Enrolment Ratio at the Higher Secondary level (77.6 per cent in 2015-16) and at the Higher Education level (43.2 per cent in 2021) is above the national average.
- For people aged between 18 to 23 years, the Gender Parity Index in higher education (the ratio of girls to boys enrolled in higher education institutions) and the college density are both significantly higher than their respective national average as of 2021.
- As of 2020, life expectancy in Kerala at 75 years is higher than the national average of 70 years. Infant mortality at 6 deaths per 1000 live births in 2020 and total fertility rate 1.8 children per woman in 2019-21 are both below their respective national averages. The percentage of fully immunized children (77.8 per cent) is slightly higher than the national average of 76.4 per cent, as of 2019-2.
- As of 2019-21, the household access to sanitation in the State (98.5 percent) is significantly above the national average (69.3 per cent); the access to electricity (99.5 per cent) is slightly above the national average (96.5 per cent); and, access to drinking water (95.9 per cent) is almost at par with the national average (94.9 per cent).

Source: i. Census of India 2011; ii. Unified District Information System for Education (UDISE) 2016-17; iii. All India Survey on Higher Education (AISHE) 2021-22; iv. Sample ⁶ Registration System 2020; v. National Family Health Survey 2019-21.

State of Public Finances and Tax Devolutions

- > As of 2022-23, Kerala's debt-to-GSDP ratio at 38.2 percent in 2022-23, is significantly higher than that of a median State. Its contingent liabilities are also significantly higher those of a median State (30.7 per cent for larger States). The fiscal deficit at 3.6 per cent is at par with that of a median State and primary deficit at 1.2 per cent is lower than that of the median State as of 2022-23. Additionally, Kerala has a revenue deficit of 2.0 percent of GSDP in 2022-23, while a median State has a revenue surplus of 0.4 percent.
- > The State collects less revenue compared to a median State. In 2022-23, Kerala's total Revenue Receipts (Own Tax, Own Non-Tax, and shared by the Centre) were about 7 percentage points lower than what a median State collected, at 12.7 percent of its GSDP. The State's Own Tax and Non-Tax Revenues at 6.9 per cent and 1.5 percent of its GSDP respectively, were both marginally higher than a median State. Transfers from the Centre at 4.3 percent of its GSDP, are lower than that of median State, and constitute 34 percent of its Revenue Receipts.
- > Debt Sustainability Analysis shows that in almost all scenarios, debt to GSDP ratio for the State is not projected to decline anytime soon. If contingent liabilities (which were 4.8% of GSDP in 2021-22) are absorbed 20% each year for the next five years, debt to GSDP ratio will increase by nearly 10% points. Even in the most optimistic scenario of higher growth and lower primary deficit, debt to GSDP ratio is projected to decrease by only a minuscule amount.
- > The State's share in Taxes from the Centre, as per the FC recommendations, decreased from 2.5 percent under 14th Finance Commission to 1.9 percent under 15th FC recommendations. But, State's share in the total grants-in-aid increased by 2.1 percentage points under the 15th FC compared to the 14th FC due to increase in the Revenue Deficit Grants recommended by the 15th Finance Commission.

Source: Reserve Bank of India, State Finances Report 2022-23.

Note: For calculation of median State, variable as a percentage of GSDP was computed for each State, with the median across 22 major States shown (excluding all Union Territories and North Eastern States, except Assam).

Fiscal Rules

- The Kerala Fiscal Responsibility (KFR) Act 2003, enacted in line with the Union Fiscal Responsibility and Budget Management Act, 2003 (FRBM Act), established fiscal targets to eliminate the revenue deficit by 2007 and reduce the fiscal deficit to 2 percent of GSDP by March 2007. Since 2003, the Act has been amended 5 times in 2011, 2012, 2018, 2021, and 2022.
- **Revenue Deficit :** The 2011 Amendment revised the targets to achieve zero revenue deficit by 2014-15. The 2022 Amendment aimed to eliminate the revenue deficit entirely and maintain a revenue surplus of 2.5 percent of GSDP by 2025-26.
- **Fiscal Deficit :** The 2011 Amendment set a target for the fiscal deficit not to exceed 3 percent of GSDP by 2013-14. The 2018 Amendment, aligning with the 14th Finance Commission recommendations, adjusted this target to a maximum fiscal deficit of 3.5 percent of GSDP by 2019-20. The 2021 Amendment provided a one-time additional borrowing allowance of 2 percent of GSDP for 2020-21 beyond the 3 percent limit, with 1 percent linked to specific reforms such as the implementation of One Nation One Ration Card, ease of doing business, urban local body improvements, and power distribution reforms. By 2022, the Amendment sought to anchor the fiscal deficit at no more than 3 percent of GSDP by 2025-26.
- **Debt :**The 2011 Amendment targeted reducing total debt liabilities to below 29.8 percent of GSDP by 2014-15. The 2018 Amendment revised this to 29.67 percent of GSDP by 2019-20. The 2022 Amendment aimed to reduce total debt liabilities to 32 percent of GSDP by 2025-26.
- Fiscal Discipline: As per the State Finances Audit Report of the Comptroller and Auditor General of India (CAG), during the period from 2017-18 to 2021-22, the State could not eliminate its revenue deficit or contain its total outstanding liabilities (as a percent of GSDP) within the targets stipulated in the FRBM Act. And, the State was able to achieve its fiscal deficit target only in one-year 2019-20 during this five-year period.

2. Demography and Employment

- Population data covers the Census period 1951 2011;
- Population Projections cover the period 2012 2023;
- Employment data covers the period 2017-18 to 2022-23.

Table 1: Area and Demography of Kerala

Indicator	Most Recent Value	As of Year	Decadal Change (b/w 2011 and 2021)	India's estimates for benchmark (iii)	
Area (i)	38,852 sq. km.	2011	-	1.2% of national total	
Forest Cover	21,253 sq. km	2021	+ 0.5% points	3.0% of national total	
Total Population	35.8 million persons	2023*	-	2.6% of national total	
Population Growth Rate	0.4%	2023*	- 0.3% points (b/w 2011 and 2021)	0.9% (India)	
Population Density (ii)	913 persons per sq. km.	2021*	-	415 persons per sq. km. (India)	
Dependency Ratio	58.5%	2021*	+ 2.2% points	55.7 % (India)	
Sex Ratio	960 females per 1000 males	2011	-	914 females per 1000 males (India)	
Urban Population	75.3 % of State population	2023*	+ 23.3% points	35.1% of total population (India)	
Rural Population	24.7 % of State population	2023*	- 23.3% points	64.9% of total population (India)	
Urbanization Rate	6.9%	2023*	-34.6% (b/w 2011 and 2021)	3.7% (India)	

* Projected

Source: Census, Forest Survey of India, Ministry of Environment, Forest and Climate Change, and "Population Projections for Indian States 2011-2036" by the Technical Group on Population Projections, National Commission on Population Ministry of Health and Family Welfare, Government of India.

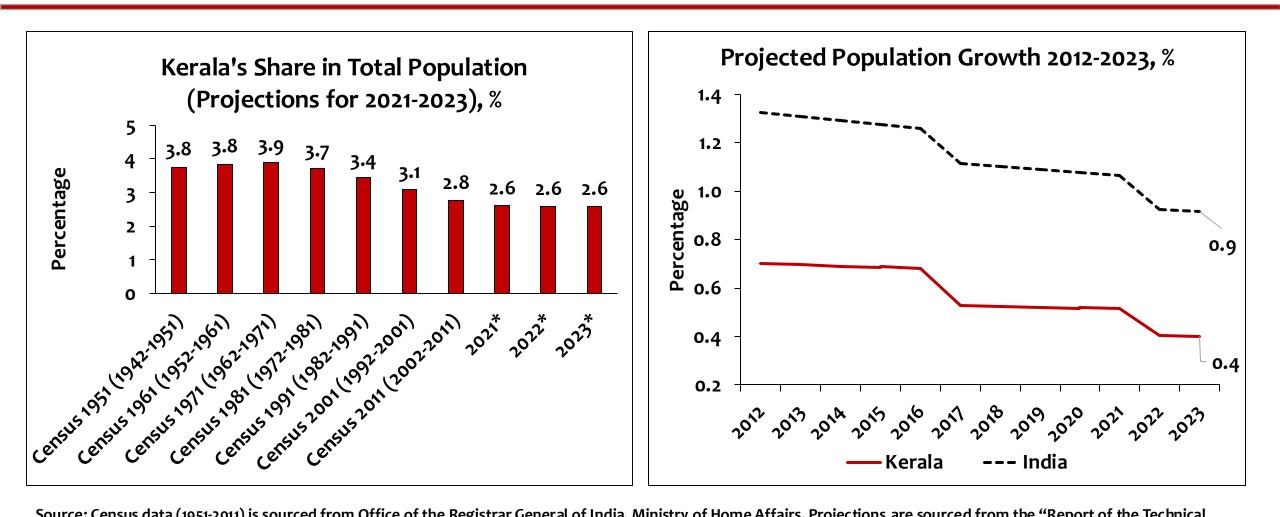
Note:

i. Area figure for India (national total) includes the area under unlawful occupation of Pakistan and China. The area includes 78,114 Sq.km under illegal occupation of Pakistan, 5180 Sq.km illegally handed over by Pakistan to China and 37,555 Sq.km under illegal occupation of China.

ii. For working out the density of India, the entire area and population of those portions of Jammu & Kashmir which are under illegal occupation of Pakistan and China have not been taken into account, except for 2011 census.

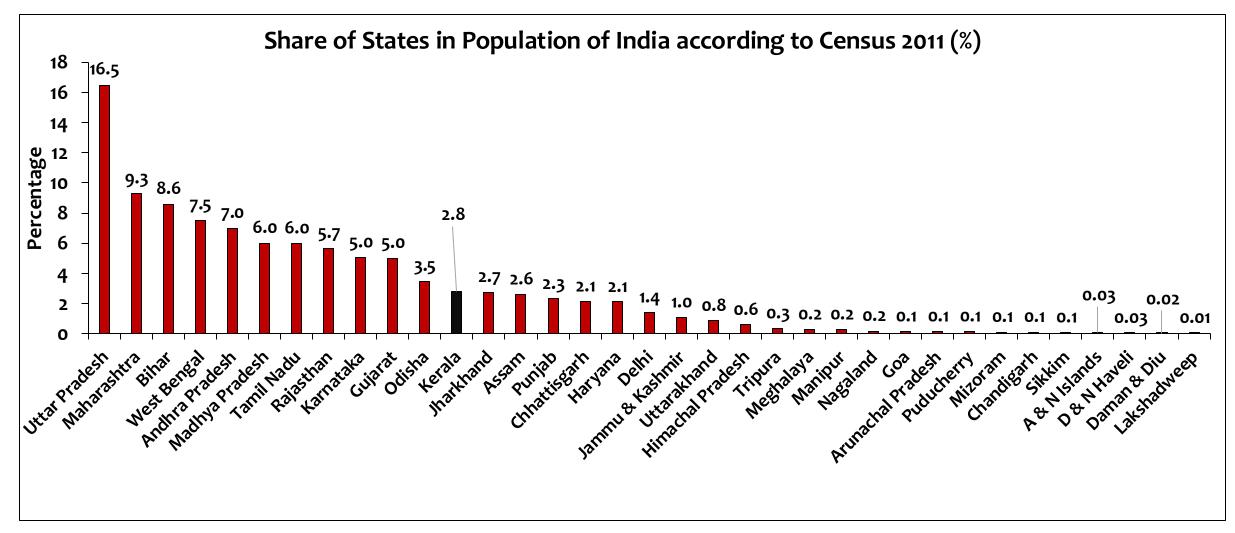
iii. India's estimates for benchmark pertain to the actual data for India (except for Area, Forest Cover, and Total Population where the State's share in India's estimates have been shown).

Kerala has a share of 2.8 percent of national population and its population growth rate is lower than the national average



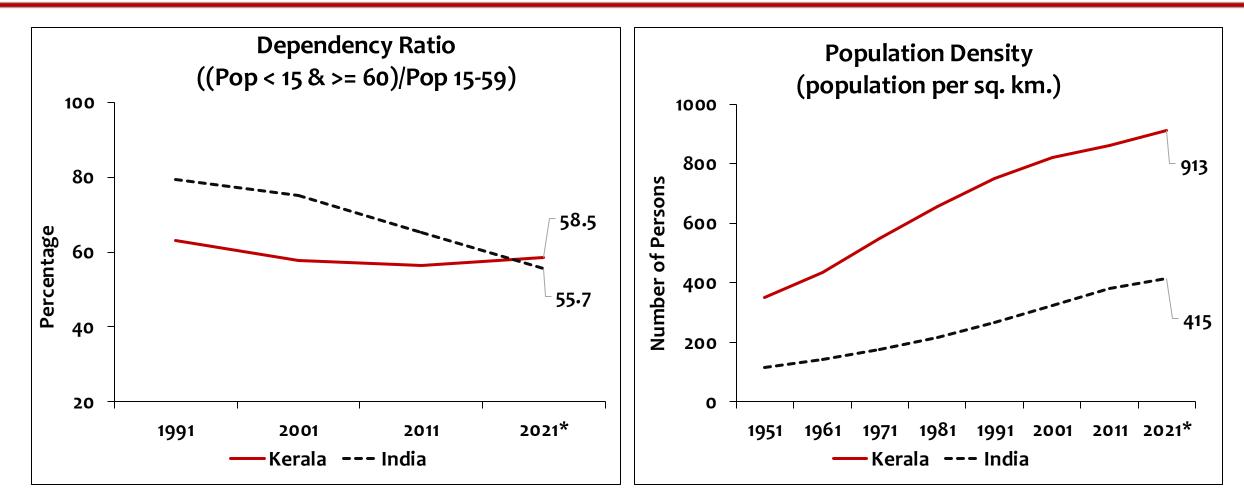
Source: Census data (1951-2011) is sourced from Office of the Registrar General of India, Ministry of Home Affairs. Projections are sourced from the "Report of the Technical group on Population Projections 2011 - 2036", (July 2020) by National Commission on Population and Ministry of Health and Family Welfare. Note: Census Population Projections are constructed using the Cohort Component Method, where the components of population change (fertility, mortality and net migration) are used to project the base population each year separately for each birth cohort (persons born in a given year). The detailed methodology can be found in Chapter 2, Population Projection Report 2011-2036.

As per the Census of 2011, Kerala ranked as the twelfth-largest State in terms of its share in the total population



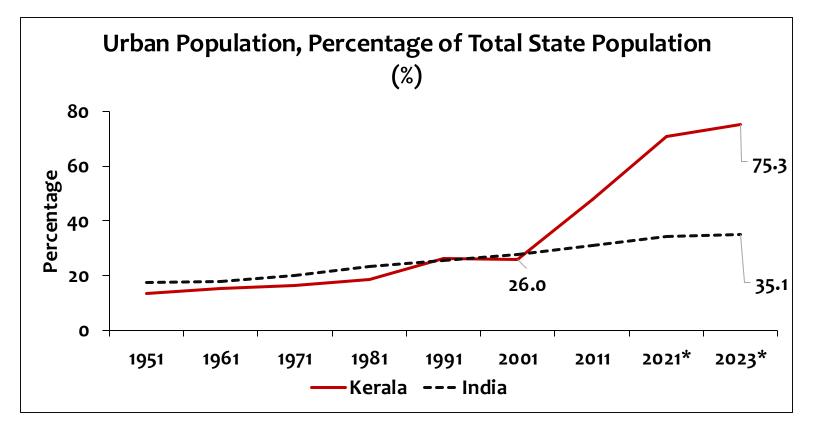
Source: Census data (1951-2011) is sourced from Office of the Registrar General of India, Ministry of Home Affairs.

Dependency Ratio in Kerala has consistently remained below the national estimates until 2011 but it is projected to surpass the national estimate in 2021. Population Density has increased over the decades and consistently stayed above the national estimates



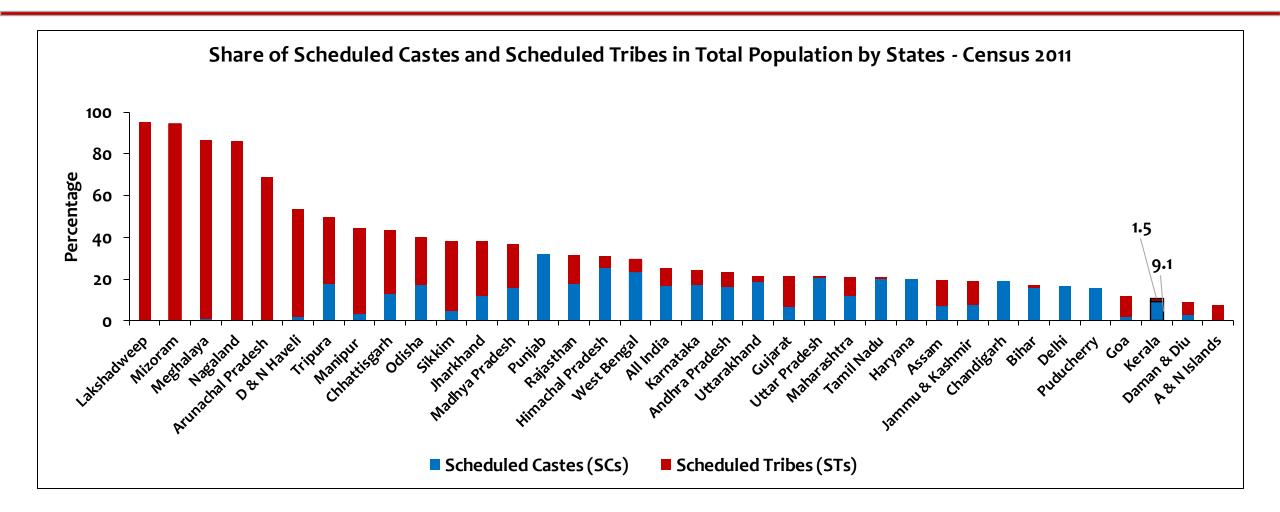
Source: Census data and "Population Projections for Indian States 2011-2036" by the Technical Group on Population Projections, National Commission on Population Ministry of Health and Family Welfare, Government of India.

Urban Population in Kerala, which was earlier close to the national estimates, has consistently stayed above the national estimates after 2001, and the gap between the two has widened particularly over the past two decades



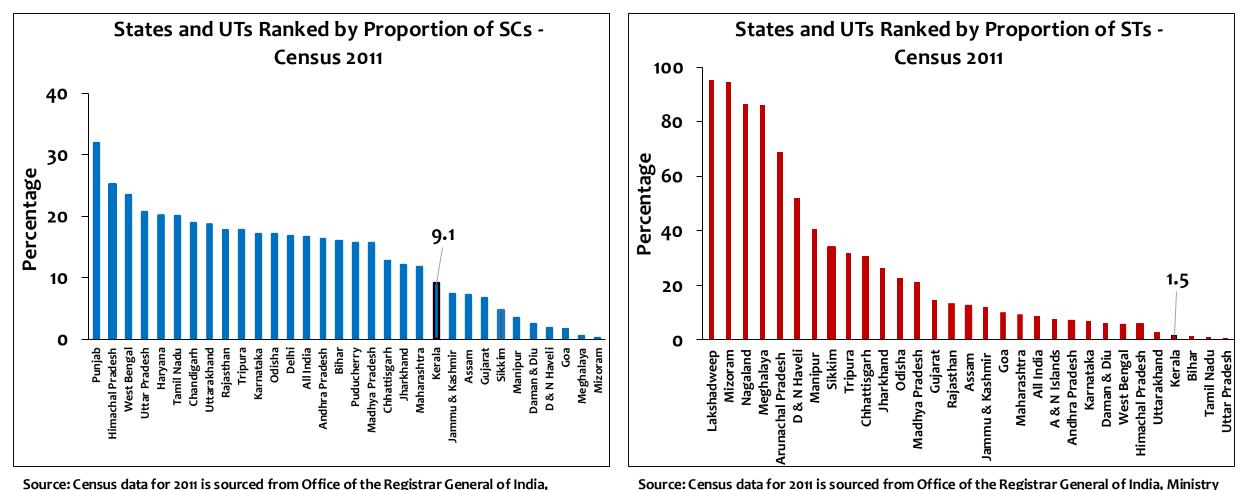
Source: Census data and "Population Projections for Indian States 2011-2036" by the Technical Group on Population Projections, National Commission on Population Ministry of Health and Family Welfare, Government of India.

In Kerala, Scheduled Castes (SCs) constituted 9.1 percent of its total population while Schedule Tribes constituted 1.5 of its total population as per the 2011 Census



Source: Census data for 2011 is sourced from Office of the Registrar General of India, Ministry of Home Affairs.

Kerala ranked as the bottom eleventh State with regard to the percentage of SC population. It is ranked as the fourth bottom State with regard to the percentage of ST population



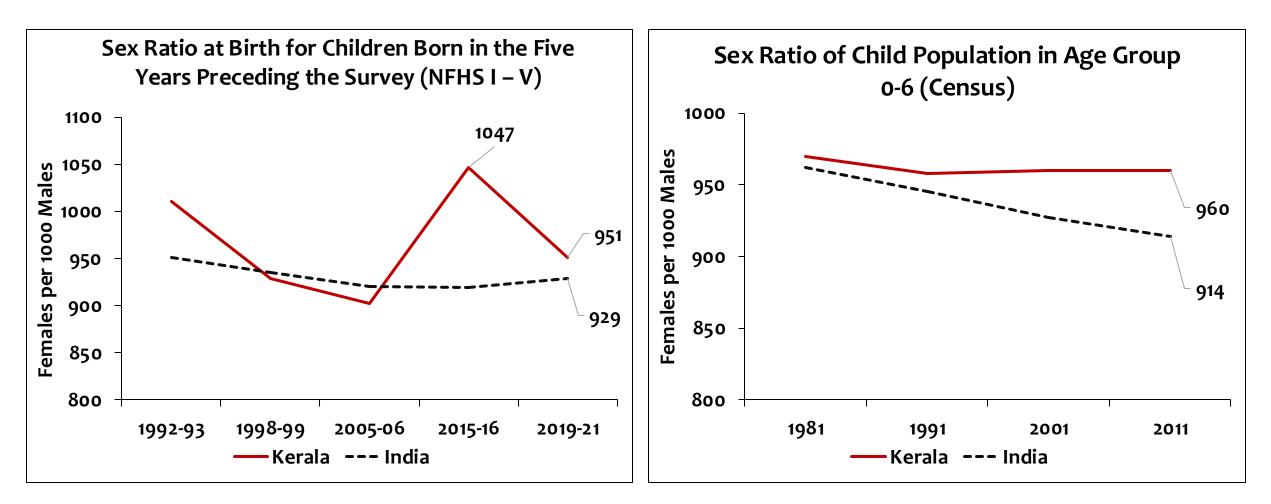
Source: Census data for 2011 is sourced from Office of the Registrar General of India, Ministry of Home Affairs.

Note: As per the census data, Lakshadweep, Nagaland, Arunachal Pradesh, and Andaman & Nicobar Islands do not report any SC Population.

of Home Affairs.

Note: As per the census data, Punjab, Haryana, Chandigarh, Delhi, and Puducherry do not report any ST population.

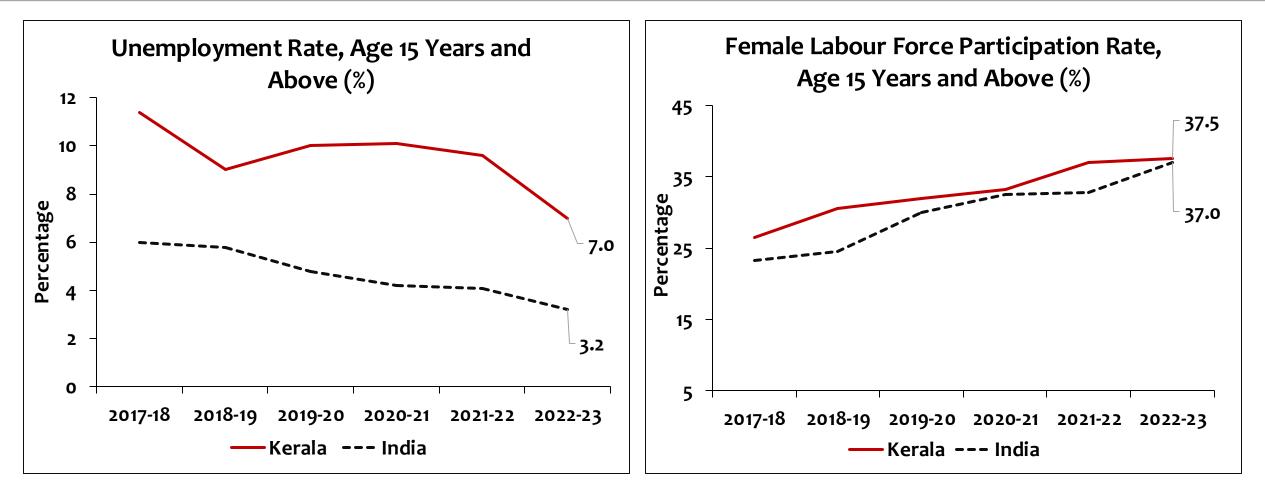
Sex Ratio at Birth (female births per 1000 male births in a given population) as per the National Family Health Survey (NFHS) surpassed the national estimate in 2015-16. As per Census estimates, Sex Ratio of population in 0-6 age group has remained above the national estimates since 1981



Source: NFHS I – V

Source: Census of India

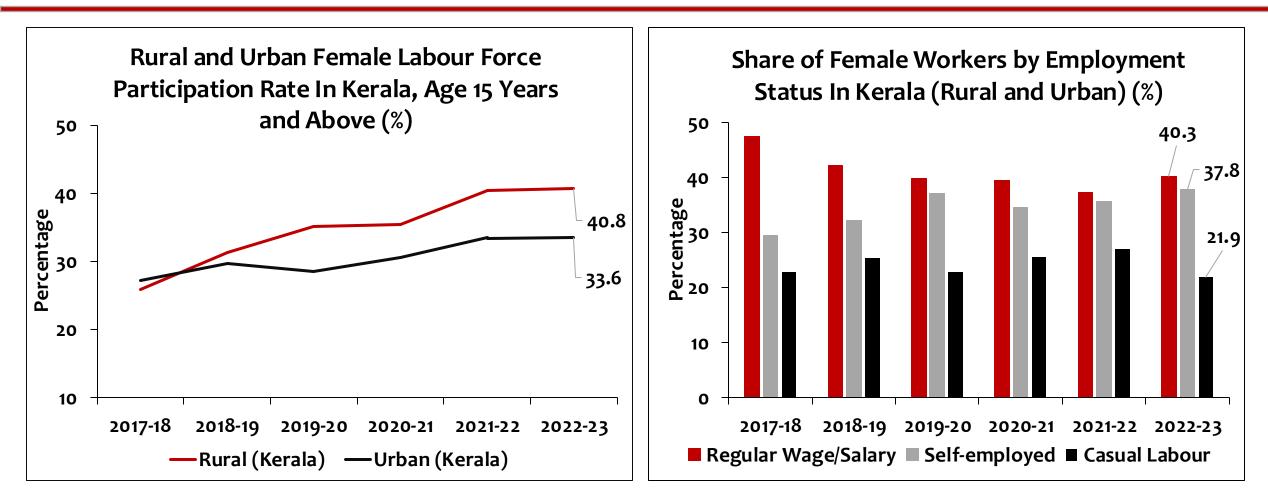
Annual Unemployment Rate for Kerala decelerated to 7 percent in 2022-23 but it has consistently remained significantly above the national estimates. Female Labour Force Participation has improved and consistently remained slightly above the national estimates



Source: Periodic Labour Force Survey (PLFS) Annual Report 2022-2023.

Note: Number for India has been taken directly from the source. The Unemployment Rate and Female Labour Force Participation Rate (FLFPR), is as per the Usual Status (PS+SS) approach, considering both Rural and Urban labour force for the age group 15 years and above. The PLFS uses two reference periods for measuring employment status, the last 7 days (Periodic Status or PS) and the last 365 days (Usual Status or SS). The PS+SS category combines information from both reference 18 periods to determine the usual status of employment.

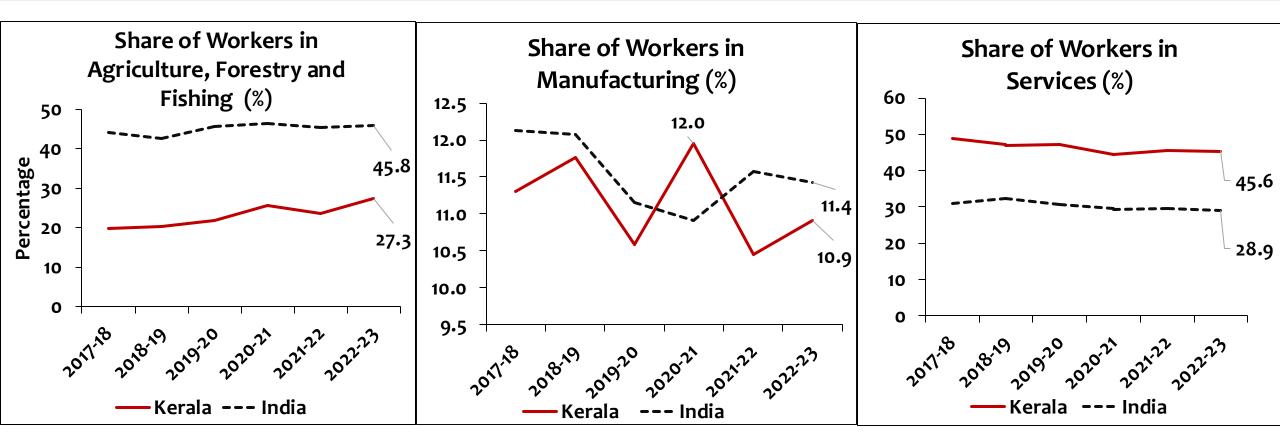
In Kerala, Female Labour Force Participation is predominantly higher in rural areas. Additionally, majority of the female workforce comprises of Regular Wage or Salary Workers



Source: Periodic Labour Force Survey (PLFS) Annual Report 2022-2023.

Note: The Rural and Urban Female Labour Force Participation Rate (FLFPR) and Distribution of Female Workers by Employment Status, is as per the Usual Status (PS+SS) approach, considering both Rural and Urban labour force for the age group 15 years and above. The PLFS uses two reference periods for measuring employment status, the last 7 days (Principal Status or PS) and the last 365 days (Subsidiary Status or SS). The PS+SS category combines information from both reference periods to 19 determine the usual status of employment.

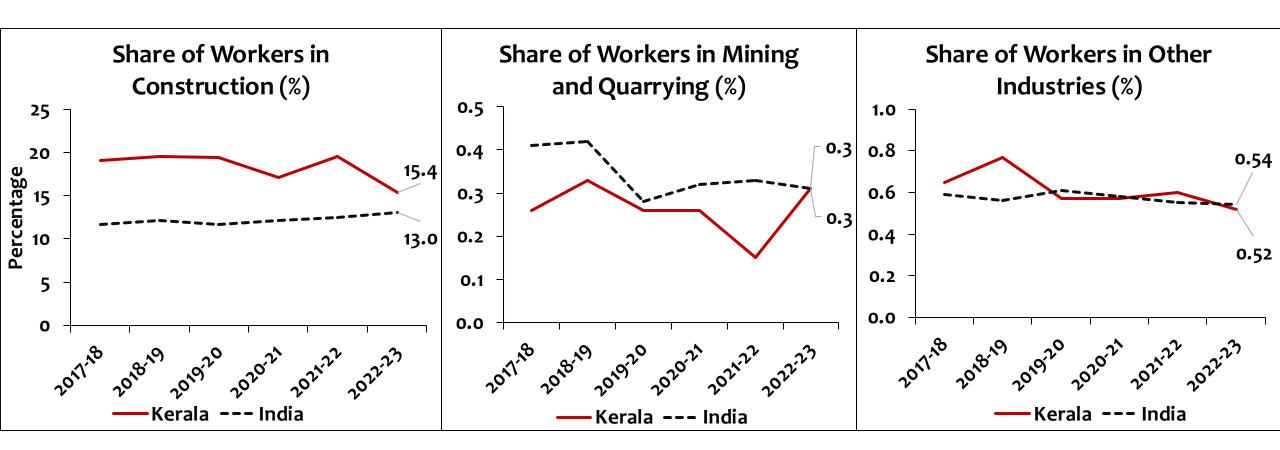
Working population in Kerala is predominantly concentrated in Services; Agriculture, Forestry, and Fishing; and, Construction sectors. Manufacturing constituted 10.9 percent of the total share of workers in 2022-23. The proportion of workers engaged in Mining and Quarrying and in Other Industries remain close to the national estimates



Source: Periodic Labour Force Survey (PLFS) Annual Report 2022-2023.

Note: i. Number for India has been taken directly from the source; ii. Services includes Transportation and Storage; Accommodation and Food Service Activities; Information and Communication; Financial and Insurance Activities; Real Estate Activities; Professional, Scientific and Technical Activities; Administrative and Support Service Activities; Public Administration and Defense; Compulsory Social Security; Education; Human Health and Social Work Activities; Arts, Entertainment and Recreation; Activities of Households as Employers; Undifferentiated Goods and Services Producing Activities of Households for Own Use; Activities of Extraterritorial Organizations and Bodies; Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles; and other Services.

Working population in Kerala is predominantly concentrated in Services; Agriculture, Forestry, and Fishing; and, Construction sectors. Manufacturing constituted 10.9 percent of the total share of workers in 2022-23. The proportion of workers engaged in Mining and Quarrying and in Other Industries remain close to the national estimates



Source: Periodic Labour Force Survey (PLFS) Annual Report 2022-2023.

Note: i. Number for India has been taken directly from the source; ii. Other industries include, Electricity, Gas, Steam and Air Conditioning Supply; and Water Supply, Sewerage, Waste Management and Remediation Activities.

3. Economic Structure (Growth and Sectoral Composition)

• Income data covers the fiscal period 1990-91 to 2022-23

Table 2A: State Domestic Product, Per Capita Income, Sectoral Shares, Inflation, FDI inflow and Exports for Kerala

Indicator	Most Recent Value	States' Average	Decadal Change, % (b/w 2012-13 and 2021-22)	Source
Nominal Gross State Domestic Product (GSDP)	Rs. 93,246,996 (Lakh) (FY 2021-22)	Rs. 2,347,101,174 (Lakh; India) (FY 2021-22)	+126.2% growth	MoSPI; EPWRF
Nominal GSDP share in India's Nominal GDP, %	4.0% (FY 2021-22)	-	-0.2% points	MoSPI; EPWRF
Real GSDP Growth Rate, %	4.8% (Decadal avg. b/w 2012-13 and 2021-22)	5.6% (Decadal avg. b/w 2012- 13 and 2021-22 for India)	+5.4% points	MoSPI; EPWRF
Nominal Per Capita GSDP	Rs. 264,971 (FY 2021-2022)	Rs. 171,498 (India) (FY 2021-22)	+116.4% growth	MoSPI; EPWRF
Nominal Per Capita GSDP in India's Nominal Per Capita GSDP (Ratio)	1.5 (FY 2021-22)	-	o.o points	MoSPI; EPWRF
Share of Agricultural Sector to Total Gross State Value Added (GSVA) (Nominal), %	10.8% (FY 2021-22)	19.7% (FY 2021-22)	-2.4% points	MoSPI; EPWRF
Share of Industry Sector to Total GSVA (Nominal), %	24.9% (FY 2021-2022)	29.3% (FY 2021-22)	-2.4% points	MoSPI; EPWRF
Within Industry: Share of Manufacturing Sector to Total GSVA (Nominal), %	9.3% (FY 2021-22)	14.8% (FY 2021-22)	-1.3% points	MoSPI; EPWRF
Within Industry: Share of Construction Sector to Total GSVA (Nominal), %	13.6% (FY 2021-22)	7.7% (FY 2021-22)	-0.9% points	MoSPI; EPWRF
Share of Services Sector to Total GSVA (Nominal), %	64.2% (FY 2021-2022)	51.0% (FY 2021-22)	+4.7% points	MoSPI; EPWRF
Within Services: Share of Trade and Hospitality Sector to Total GSVA (Nominal), %	18.1% (FY 2021-22)	11.3% (FY 2021-22)	+1.1% points	MoSPI; EPWRF
Within Services: Share of Real Estate and Business Services Sector to Total GSVA (Nominal), %	16.9% (FY 2021-2022)	11.4% (FY 2021-22)	+3.2% points	MoSPI; EPWRF

Source: Data is taken from MOSPI, as of August 2023.

Note: i. States' Average for shares are simple averages of each State's/UT's share for that year; ii. States' average growth rates are calculated as the simple average of each State/UT's growth rate for that year.

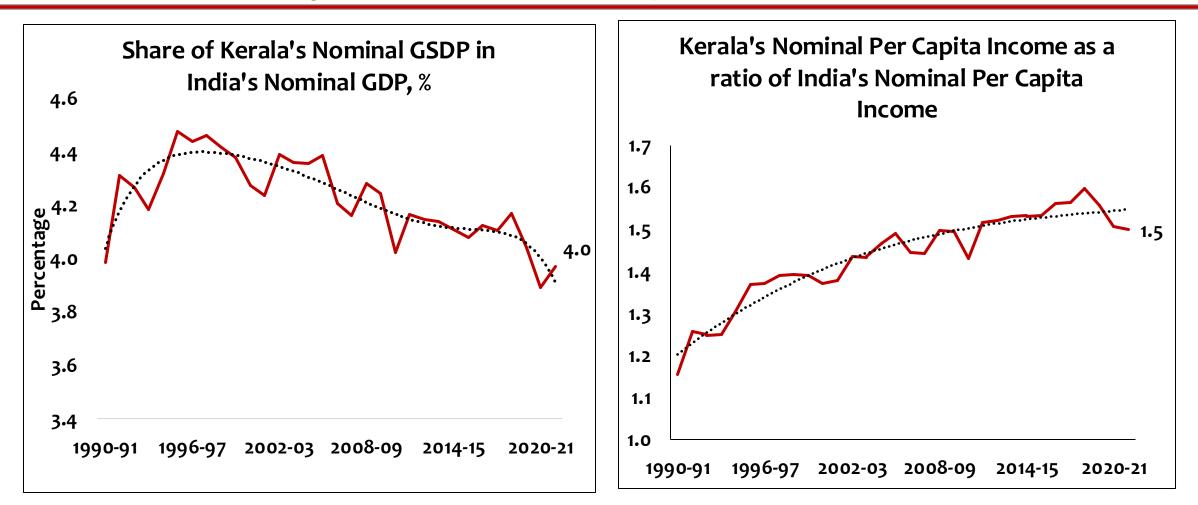
Table 2B: State Domestic Product, Per Capita Income, Sectoral Shares, Inflation, FDI inflow and Exports for Kerala

Indicator	Most Recent Value	States' Average	Decadal Change, % (b/w 2013-14 to 2022-23)	Source
Share of Agricultural Sector to Total GSDP (Nominal), %	9.2% (FY 2022-23)	15.8% (FY 2022-23)	-0.6% points	MoSPI, EPWRF
Share of Industry Sector to Total GSDP (Nominal), %	22.5% (FY 2022-23)	25.3% (FY 2022-23)	+0.4% points	MoSPI, EPWRF
Within Industry: Share of Manufacturing Sector to Total GSDP (Nominal), %	8.4% (FY 2022-23)	13.1% (FY 2022-23)	o.2% points	MoSPI, EPWRF
Share of Services Sector to Total GSDP (Nominal), %	56.7% (FY 2022-23)	42.6% (FY 2022-23)	-0.2% points	MoSPI, EPWRF
Inflation Rate	+5.4% (FY 2022-23)	+ 5.5 % (FY 2022-23)	-2.4% points	MoSPI, EPWRF
FDI Inflow	0.4 % of India FDI Inflow (2023-24)	3% of India FDI Inflow	0.1% of India FDI Inflow (b/w 2020- 21 and 2023-24)	DPIIT
Exports	4374 Million \$ (2022-23)	15,346 Million \$	89 Million \$ (b/w 2013-14 and 2022- 23)	Multiple Sources*

Source: i. Data on sectoral shares to GSDP is taken from MOSPI, as of March 2024; ii. (*)Multiple sources for exports are various Issues of Economic Survey, Department of Economic Affairs, (data.gov.in); Various Issues of Bulletin on Foreign Trade Statistics, Directorate General of Foreign Trade (DGFT); iii. FDI data is available State-wise in a cumulative format with the starting date as December 2019 till the month and year of the DPIIT publication.

Note: i. The State average for FDI has been calculated as the sum of all States/region divided by the number of States/regions, and this is divided by India's FDI inflow, multiplied by 100; ii. Benchmark number for exports is an average of all States/UT number.

Kerala's share in India's Nominal GDP has declined after 1995-96 and returned to its 1990-91 level of 4 percent in 2022. However, Kerala's Nominal Per Capita Income as a ratio to India's Nominal Per Capita Income has consistently increased since 1990-91



Source: Ministry of Statistics and Programme Implementation (MoSPI), as of August 2023. Back series with 2011-12 base has been taken from Economic and Political Weekly Research Foundation (EPWRF).

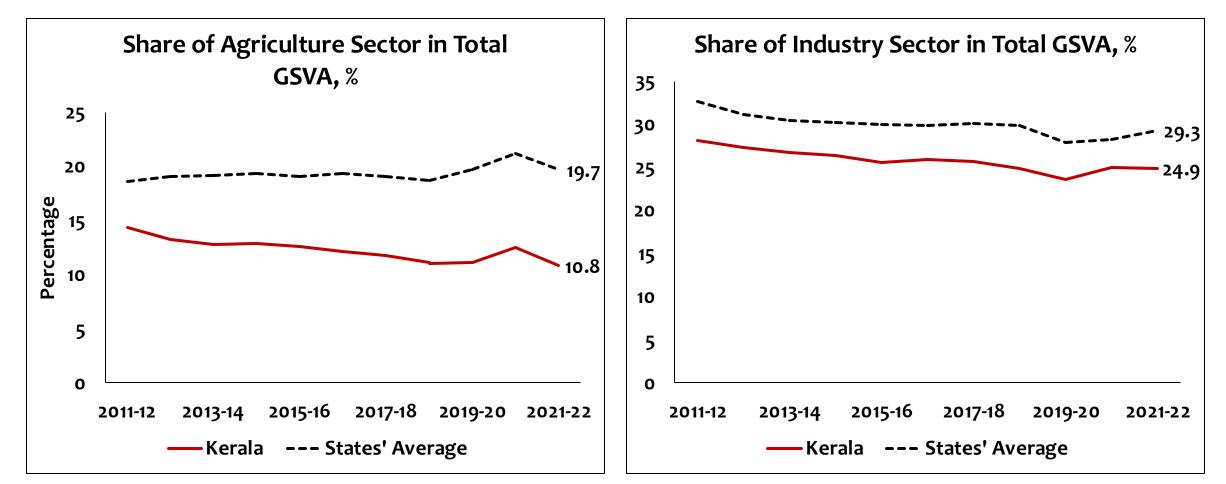
Note: i. GSDP refers to Gross State Domestic Product at current market prices; ii. As per EPWRF, this series is spliced with earlier GSDP series to generate the long time series; iii. National GDP is the National Gross Domestic Product of India at current market prices; iv. This series has been spliced with earlier GDP series to generate the long time series.

Sectoral Gross State Value Added (GSVA): Kerala vis-à-vis rest of India (FY2021-22)

- According to official estimates for FY 2021-22, Kerala commands a 64.2 percent share of its GSVA from the Services sector, while the States' average stands at 51 percent. The Services sector contributes the largest share to Kerala's GSVA, with the largest contributors within the sector being Trade, Hotels, and Restaurants (18.1 percent) and Real Estate, Ownership of Dwellings and Business Services (16.9 percent).
- The Industry sector commands a 24.9 percent share of Kerala's GSVA, whereas the share of an average State stands higher at 29.3 percent. This sector is driven primarily by Construction (13.6 percent of total GSA) and Manufacturing (9.3 percent of t otal GSVA) with minor contributions from Electricity (1.7 percent of total GSVA) and Mining (0.3 percent pf total GSVA).
- Kerala's Agriculture sector contributes 10.84 percent to its GSVA, which is much lower than the States' average of 19.7 percent.
- Kerala ranks 5th out of 33 States and UTs in its share of GSVA in the Services sector (64.2percent) but ranks 18th in its share of GSDP in the Industry Sector (24.9 percent).

Note: Gross State Value Added (GSVA) is defined as the sum of the value added by each of the sectors under agriculture, industry, and services. This series currently is available at basic prices with 2011-12 base and it can be spliced with the earlier GSVA series to obtain the long time series for this variable.

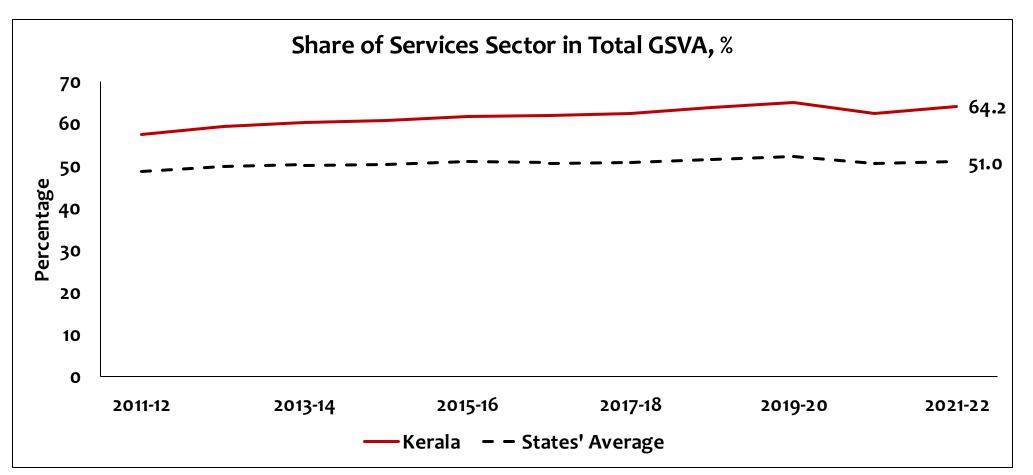
Kerala's share of Agriculture and Industry sectors in GSVA has decreased since 2011-12 and has remained below the average shares of all States for both these sectors



Source: MoSPI, as of August 2023.

Note: i. States' average refers to a simple average of the shares of 33 States and UTs; ii. Nominal variables have been used to calculate the shares; iii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iv. Industry includes Mining & Quarrying, Manufacturing, Construction, and Supply of Electricity & Water.

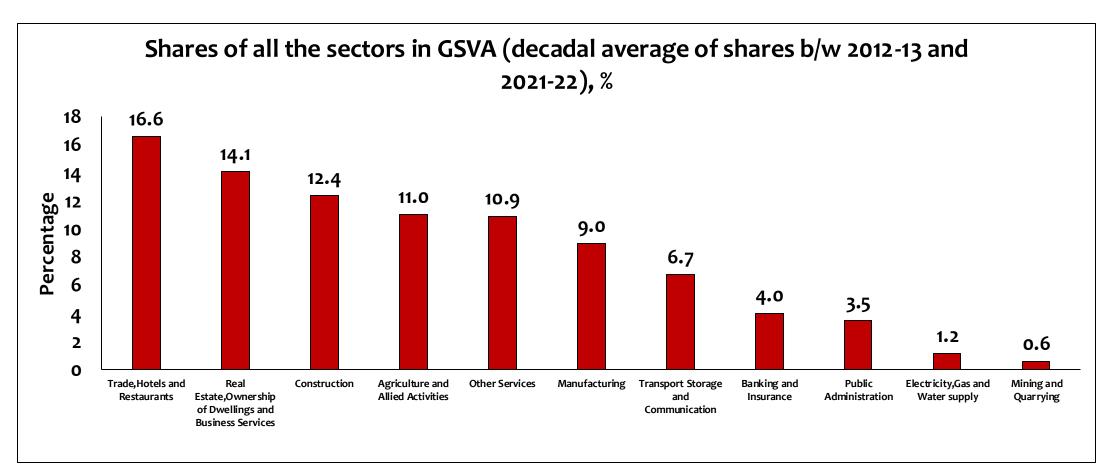
In Kerala, Services sector accounts for nearly two-thirds of total GSVA and its share has consistently been higher than the States' average



Source: MoSPI, as of August 2023.

Note: i. States' average refers to a simple average of the shares of 33 States and UTs; ii. Nominal variables have been used to calculate the shares; iii. Services include Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

Among all major sectors, the Trade and Hospitality sector have the largest share in GSVA over the last 10 years

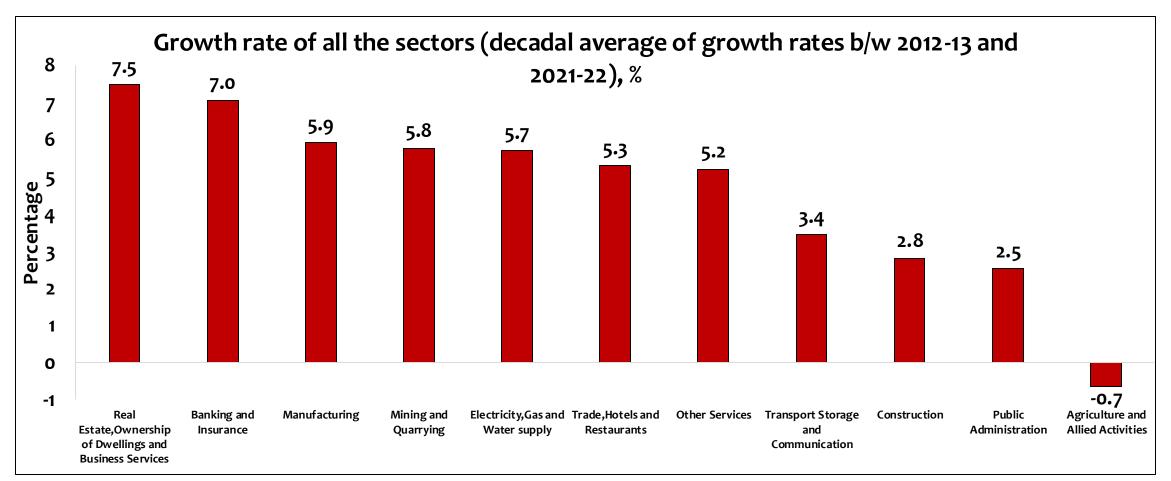


Source: MoSPI, as of August 2023.

Note: i. Nominal variables have been used to calculate the shares; ii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iii. Industry includes Mining & Quarrying, Manufacturing, Construction, and Supply of Electricity & Water; iv. Services includes Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

29

Among all major sectors, the Real Estate, Ownership of Dwellings and Business Services sector has shown the highest growth in Gross State Value Added over the years



Source: MoSPI, as of August 2023.

Note: i. Mining and quarrying have been excluded from the chart because the data is erratic over the decade, resulting in very high decadal change; ii. Real variables have been used to calculate the shares; iii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iv. Industry includes Mining & Quarrying, Manufacturing, Construction, and Supply of Electricity & Water; v. Services include Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

Sector	Latest Annual Growth Rate (2019-20)	Decadal Average of Growth rates (b/w 2010-11 and 2019-20)	Decadal Average of Growth rates for India (b/w 2010-11 and 2019- 20)
Agriculture	-2.6%	-1.5%	4%
Industry	1.0%	5.4%	5%
Manufacturing	-1.0%	7.3%	6%
Services	4.5%	6.3%	8%
GVA	2.9%	5.2%	6.4%
GDP	0.9%	5.7%	6.6%

Source: MoSPI, as of August 2023. Back series with 2011-12 base has been taken from EPWRF.

Note: i. Real variables have been used to calculate the growth rate; ii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iii. Industry includes Mining & Quarrying, Manufacturing, Construction, and Supply of Electricity & Water; iv. Services include Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

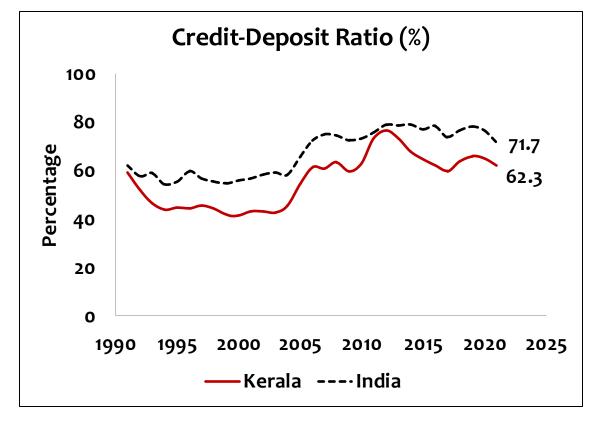
Sector	Latest Annual Growth Rate (2022-23)	Average of Growth rates (b/w 2018-19 and 2022-23)	Decadal Average of Growth rates (b/w 2013-14 and 2022- 23)	Decadal Average of Growth rate for India (b/w 2013-14 and 2022-23)
Agriculture	0.9%	0.5%	-0.7%	4.1%
Industry	7.8%	3.0%	4.8%	5.2%
Manufacturing	9.0%	2.8%	6.5%	5.5%
Services	6.3%	3.8%	4.8%	6.6%
GSVA	6.2%	3.2%	4.2%	5.7%
GSDP	6.6%	3.9%	4.9%	5.8%

Source: MoSPI as of March 2024. Back series with 2011-12 base has been taken from EPWRF.

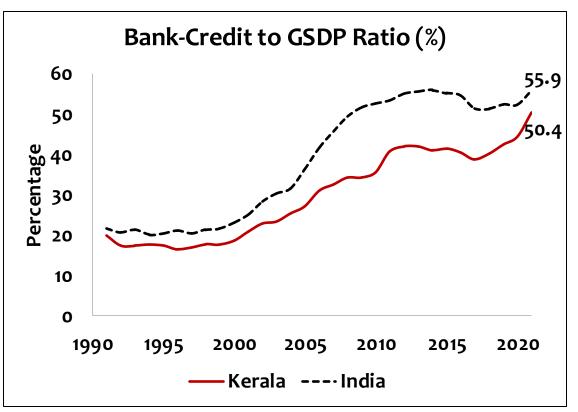
Note: i. India's GVA has been calculated taking a simple sum of the three sectors. Real variables have been used to calculate the growth rate; ii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iii. Industry includes Mining & Quarrying, Manufacturing Construction, and Supply of Electricity & Water; iv. Services includes Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

Kerala's Credit-Deposit Ratio is 9 percent point below the all India figure as of 2021. Credit to GSDP ratio has increased over time but has remained below the all-India figure, with the gap between the two narrowing as of 2021

Indicators	Most Recent Value	Year	Decadal Change (b/w 2020-21 & 2011-12)	India
Credit - Deposit Ratio (%)	67.9%	2020-21	+11.3 % points	71.7%
Credit - GSDP Ratio (%)	50.4%	2020-21	+8.3 % points	55.9%



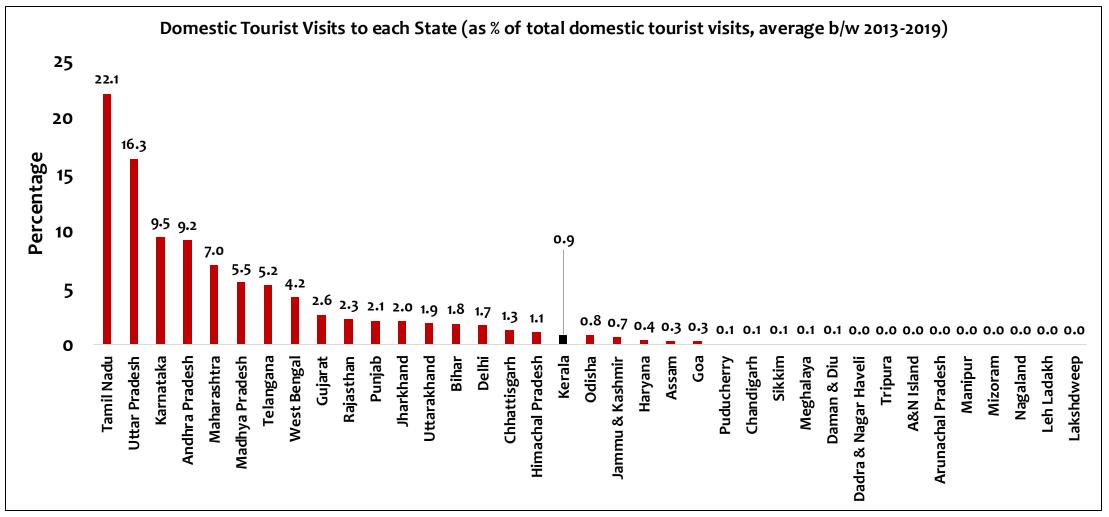
Source: Basic Statistical Returns (BSR) of Scheduled Commercial Banks, RBI (2020-21). Note: India's numbers have been taken directly from the source.



Source: i. Bank-Credit: Basic Statistical Returns (BSR) of Scheduled Commercial Banks, RBI (2020-21); ii. GSDP: MOSPI (2020-21). Back series with 2011-12 base has been taken from EPWRF.

Note: The Credit variable used is Credit Outstanding as per Sanction.

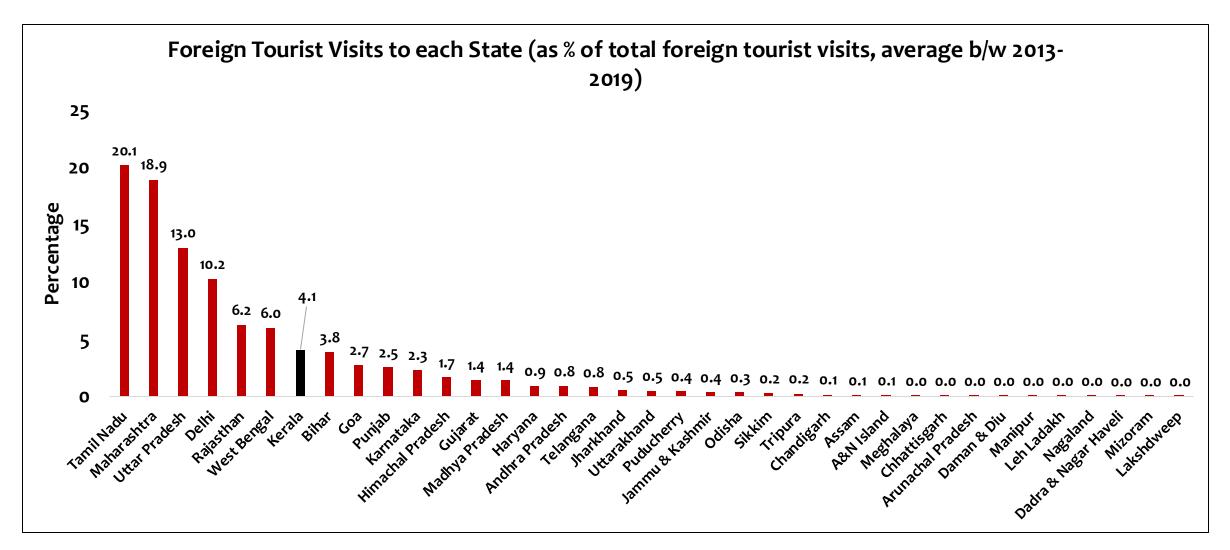
Kerala holds an average 0.9 percent share of Total Domestic Tourist Visits between 2013 - 2019



Source: Data on tourist visits have been compiled from multiple issues of India Tourism Statistics published by the Ministry of Tourism 34 (2013 – 2019).

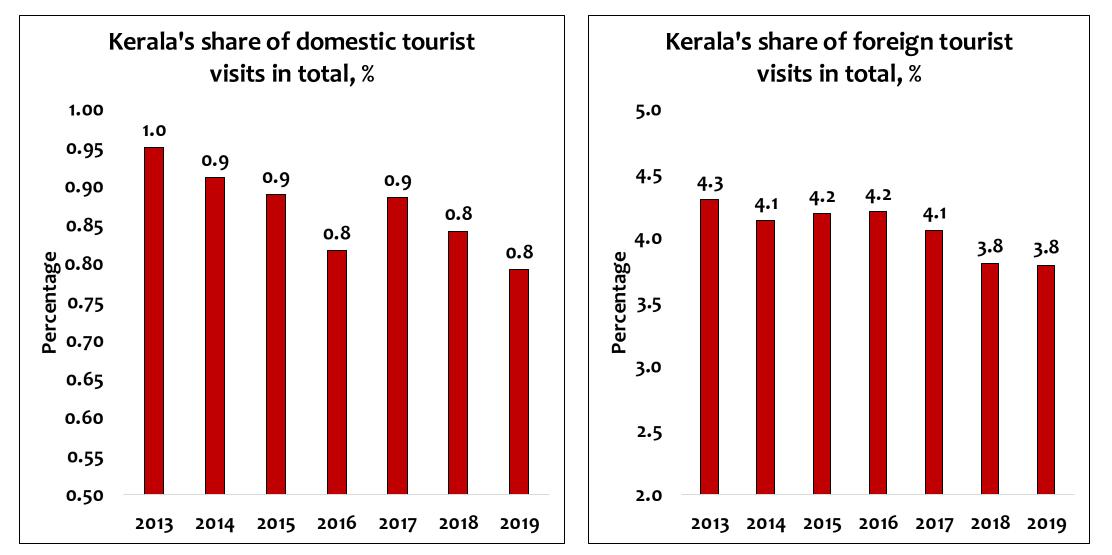
Kerala holds an average 4.1 percent share of Total Foreign Tourist Visits between 2013

- 2019



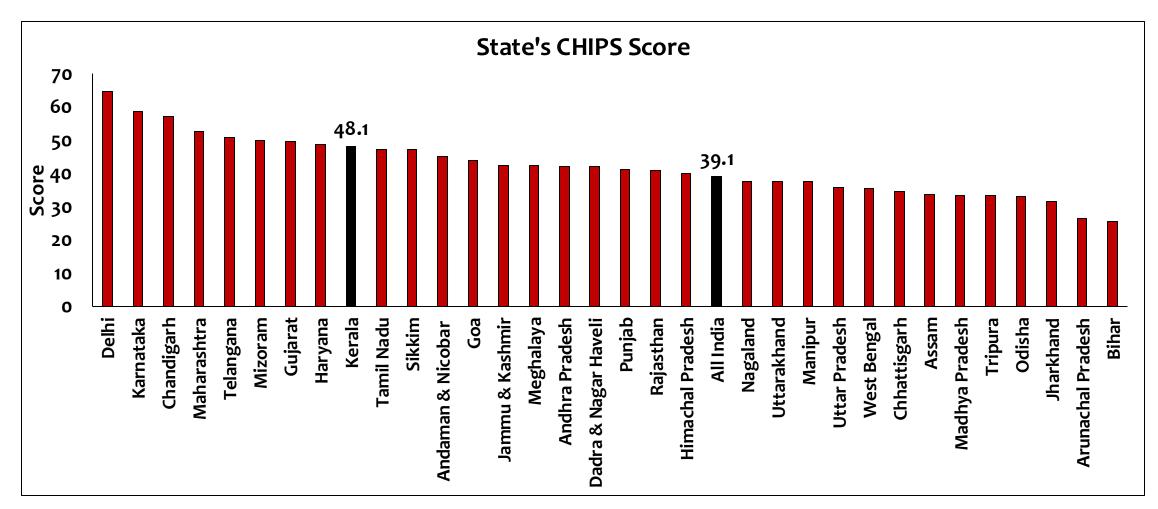
Source: Data on Tourist Visits have been compiled from multiple issues of India Tourism Statistics published by the Ministry of Tourism (2013 – 2019).

Domestic and Foreign Tourist Visits over the years in Kerala



Source: Data on tourist visits have been compiled from multiple issues of India Tourism Statistics published by the Ministry of Tourism (2013 – 2019).

Kerala's CHIPS (Connect, Harness, Innovate, Protect and Sustain) score ranks among the top nine States



Source: The State of India's Digital Economy Report 2024 by Indian Council for Research on International Economic Relations (ICRIER). Note: 50 indicators have been used to measure the CHIPS score.

4. Socio-Economic Indicators (Education and Health)

- School Education data covers the period 2012-13 to 2016-17;
 - Higher Education data covers the period 2012 to 2021;
- Health data covers the period 2011 2020 (SRS) and 1992-93 to 2019-21 (NFHS)

Table 3A: Education Indicators for Kerala

Indicator	Most Recent Value	India Value	ndia Value Decadal Change (% points)	
Literacy Rate	94.0% (2011)	73.0%	+3.1% points (b/w 2001 & 2011)	Census of India
Drop-Out Rates (Class X)	24.0% (2016-17)	35.2%	+1.4% points (b/w 2013-14 & 2016-17)	U-DISE
Drop-Out Rates (Class VIII-X)	12.8% (2016-17)	21.1%	+3.3% points (b/w 2013-14 & 2016-17)	U-DISE
Students passing Board Examinations (Class X)	97.8% (2016-17)	86.1%	+1.0% points (b/w 2012-13 & 2016-17)	U-DISE
Student passing Board Examinations (Class XII)	87.3% (2016-17)	87.3%	+2.2% points (b/w 2012-13 & 2016-17)	U-DISE
Gross Enrolment Ratio (Higher Secondary)	77.6% (2015-16)	56.2%	+10.4% points (b/w 2012-13 & 2015-16) U-D	
Gross Enrolment Ratio (Higher Education)	43.2% (2021)	27.3%	+21.4% points (b/w 2012 & 2021)	AISHE
Gender Parity Index (Higher Education)	1.52 (2021)	1.05	+0.08 points (b/w 2012 & 2021)	AISHE
Colleges per 100,000 population	50 (2021)	31	+17.4 points (b/w 2012 & 2021)	AISHE

Note: i. Indicators for Higher Education are based on the population of the age group 18-23 years; ii. India number has been taken directly from the source; iii. Decadal changes are across a period of 10 years unless data is available for a lesser period. 39

Table 3B: Health Indicators for Kerala

Indicator	Most Recent Value	India Value	Decadal Change (% points)	Source
Infant Mortality Rate	6 deaths per 1000 live births (2020)	28 deaths per 1000 live births	12 deaths per 1000 live births (2011)	Sample Registration System
Total Fertility Rate	1.8 children per woman (2019-21)	2.0 children per woman	1.9 children per woman (2005-06)	NFHS
Life Expectancy	75 years (2020)	70 years	+0.6 years	Sample Registration System
Children Fully Immunized	77.8% (2019-21)	76.4%	+2.5% points	NFHS
Households with Access to Improved Drinking Water Source	94.9% (2019-21)	95.9%	+25.8% points	NFHS
Households with Access to Electricity	99.5% (2019-21)	96.5%	+8.5% points	NFHS
Households with Access to Sanitation Facilities	98.5% (2019-21)	69.3%	+8.0% points	NFHS

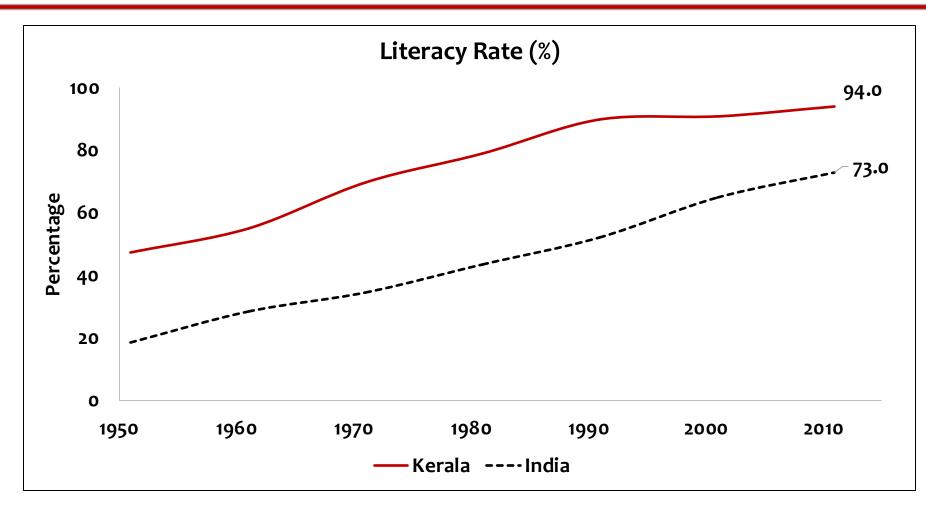
Note: i. Decadal change for NFHS variables taken from NFHS-V (2019-21) to NFHS-III (2005-06); ii. The number for India has been taken directly from the source; iii. All years represent corresponding survey years.

Table 3C: Other Socio-Economic Indicators for Kerala

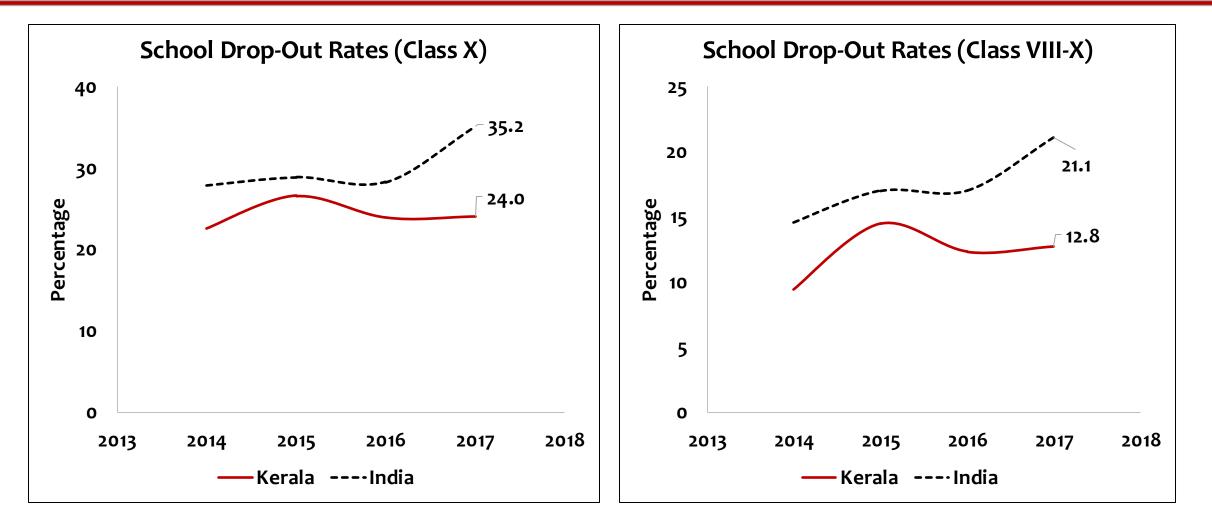
Indicator	Most Recent Value	India Value	Decadal Change	Source
Pupil-Teacher Ratio: Elementary	17 (2016-17)	25	-8 points (b/w 2006-07 & 2016-17)	U-DISE
Pupil-Teacher Ratio: Higher Secondary	17 (2016-17)	31	-6 points (b/w 2012-13 & 2016-17)	U-DISE
Pupil-Teacher Ratio: Higher Education	14 (2018-19)	24	+1 points (b/w 2008-09 & 2018-19)	AISHE
Underweight Children	19.7 % (2019-21)	32.1%	-3.2 % points (b/w 2005-06 and 2019-21)	NFHS
Stunting Among Children	23.4 % (2019-21)	35.5%	-1.1 % points (b/w 2005-06 and 2019-21)	NFHS
Anaemia Among Children	39.4 % (2019-21)	67.1%	-5.1 % points (b/w 2005-06 and 2019-21)	NFHS
Anaemia Among Women	36.3 % (2019-21)	57.0%	3.5 % points (b/w 2005-06 and 2019-21)	NFHS
Under 5 Mortality Rate	5.2 deaths per 1000 live births	41.9 deaths per 1000 live births	-11.1 deaths per 1000 live births (b/w 2005-06 and 2019-21)	NFHS
Infant Mortality Rate	4.4 deaths per 1000 live births	35.2 deaths per 1000 live births	-10.9 deaths per 1000 live births (b/w 2005-06 and 2019-21)	NFHS
Multidimensional Poverty Index (MPI)	0.002 (2019-21)	0.07	-0.001 points (b/w 2015-16 & 2019-21)	NFHS
Sustainable Development Goals (SDG) Index	79 (2023-24)	71	+10 points (b/w 2018-19 & 2023-24)	NITI Aayog

Note: i. Indicators for Higher Education are based on the population of the age group 18-23 years; ii. India number has been taken directly from the source; iii. Decadal change for NFHS variables taken from NFHS-III (2005-06) to NFHS-V (2019-21); iv. Infant Mortality Rate in Table 3B was defined using the SRS data and the Infant Mortality Rate defined here is based on the NFHS data; v. All years represent corresponding survey years.

Kerala's Literacy Rate has increased rapidly over the decades and remains notably above the national estimate



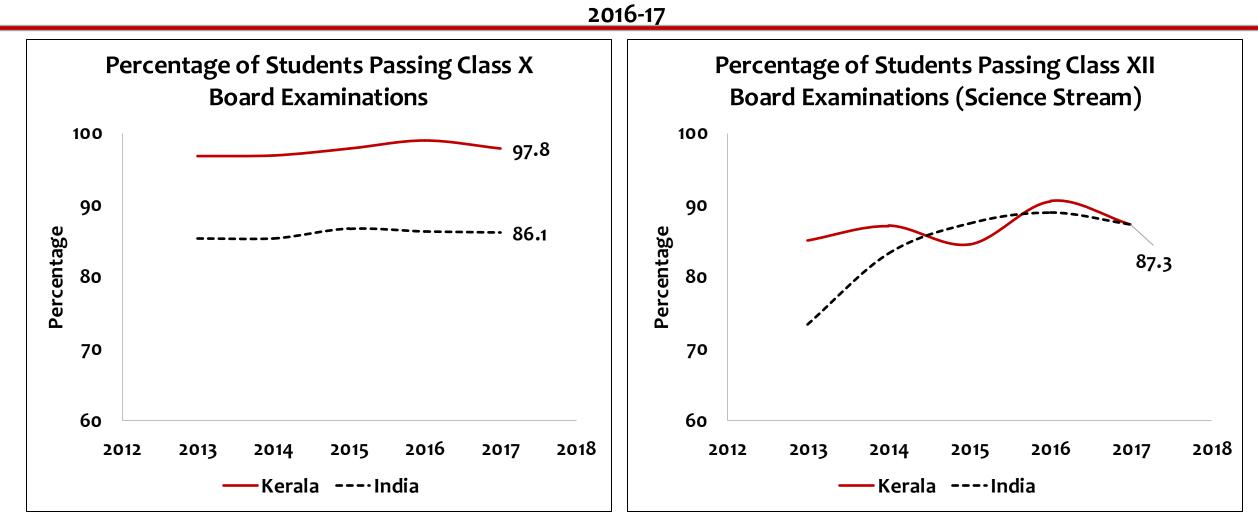
Source: Office of the Registrar General and Census Commissioner, Ministry of Home Affairs (1951 – 2011). Note: i. India number has been taken directly from the source; ii. The Census Literacy Rate relates to population aged seven years and above from 1981. Kerala's School Drop-Out Rates for Class X and the Secondary (Class VIII-X) Level are lower than the national figures for the period from 2013-14 to 2016-17



Source: Unified District Information System for Education (U-DISE), 2015-16.

Note: i. Drop-Out Rate is defined as the proportion of pupils from a cohort enrolled in a given stage in a school year who are no longer enrolled in the following school year; ii. India number has been taken directly from the source.

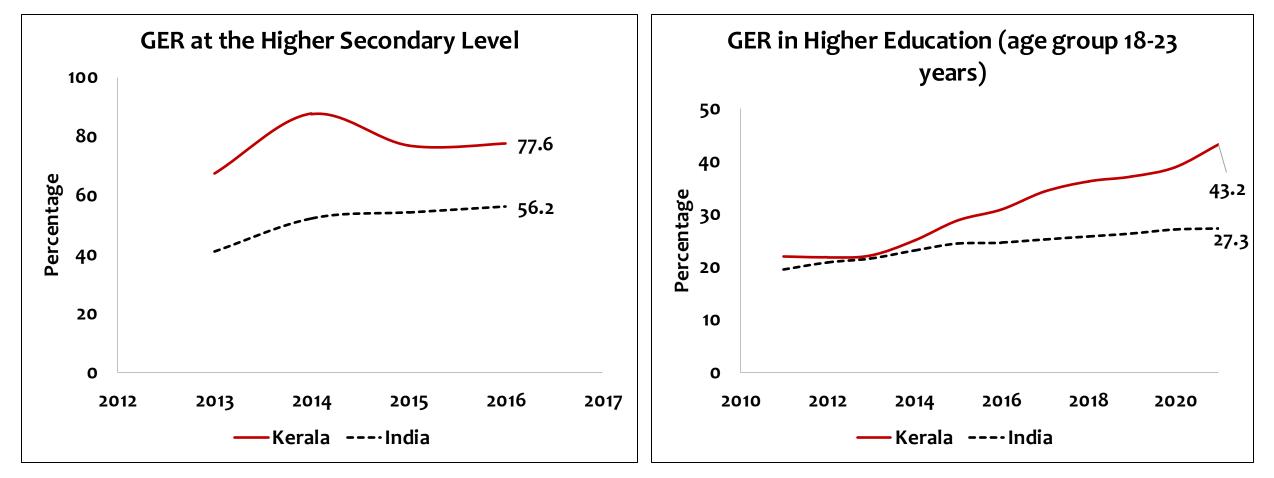
Share of students who pass the Secondary (Class X) Level Examinations in Kerala has been above the national average for the period from 2012-13 to 2016-17 and stood at 97.8 percent in 2016-17. Share of students who pass the Higher Secondary (Class XII) Level Examinations is at 87.3 percent which is close to the national average in



Source: Unified District Information System for Education (U-DISE), 2015-16.

Note: i. Percentages are a simple average of the pass percentages for boys and girls as reported separately; ii. India number has been taken directly from the source; iii. Pass percentages for Higher Secondary Level are reported separately by Stream (Science, Arts, Humanities, Vocational, Others).

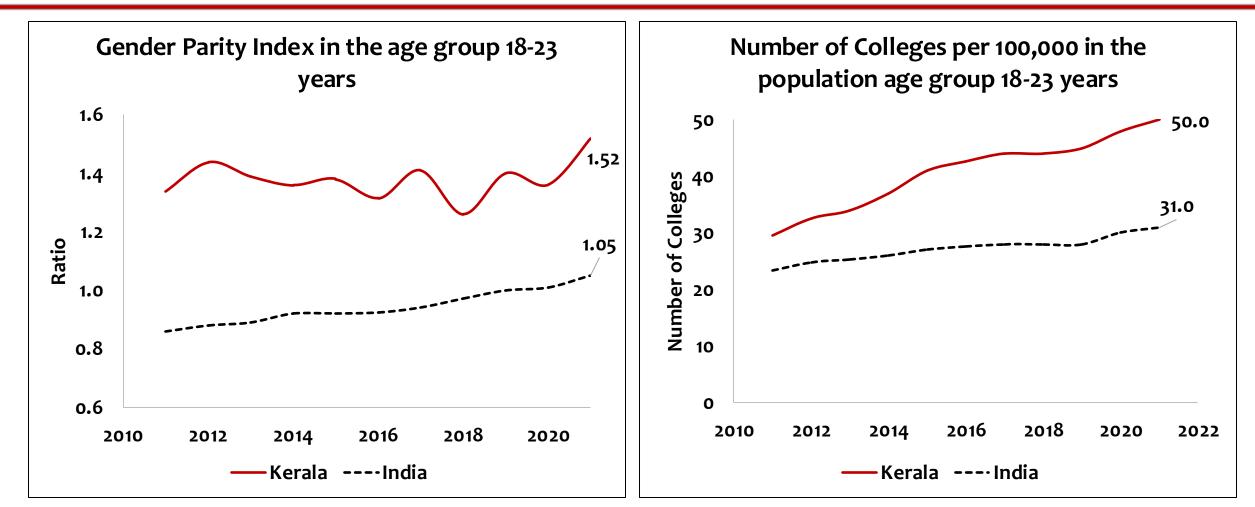
Kerala's Gross Enrolment Ratio (GER) at the Higher Secondary (Class XII) and Higher Education (in the age group 18-23 years) Levels has remained above the all-India numbers over their respective periods



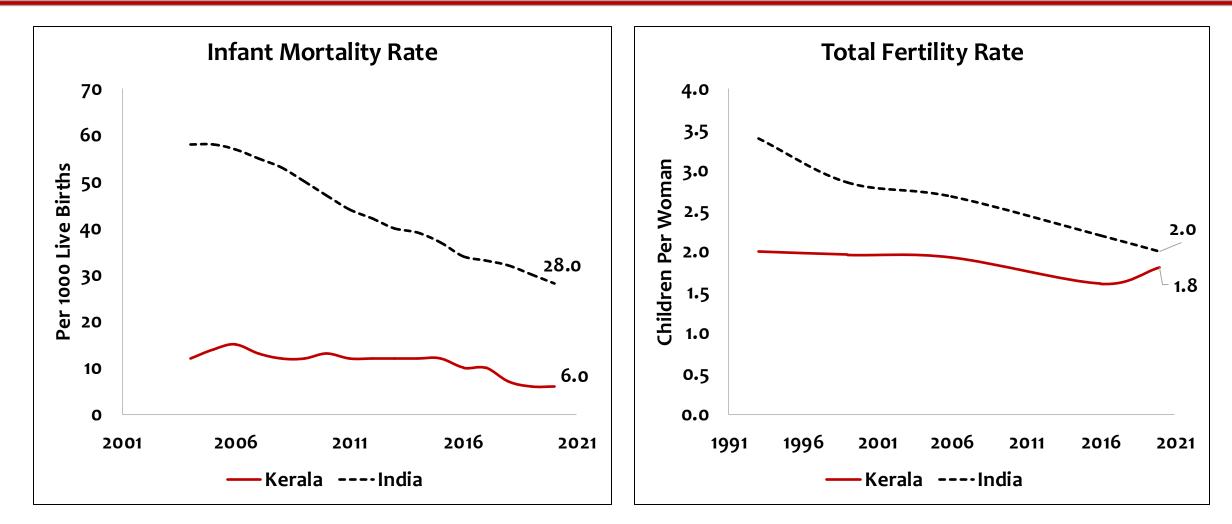
Source: i. Unified District Information System for Education (U-DISE), 2015-16; ii. All India Survey on Higher Education (AISHE), 2020-21.

Note: i. GER is the total enrolment in a particular stage of education, regardless of age, expressed as a percentage of the official age-group of the population which corresponds to the given stage of education in a given year. It is the general level of participation per stage of education; ii. The Higher Education GER represents share of enrollees to the total population in the age group 18-23 years; iii. India number has been taken directly from the source.

In terms of Gender Parity Index (the share of girls to boys enrolled at Higher Education institutions in the age group 18-23 years), Kerala is placed above the national benchmark. Kerala has 50 colleges per 100,000 people in the age-group 18-23 years which is significantly above the all-India number



Source: All India Survey on Higher Education (AISHE), 2020-21 Note: The number for India has been taken directly from the source. Kerala has seen a decline in Infant Mortality and Total Fertility Rates over the last decade and has always been in a significantly better position compared to the national estimate

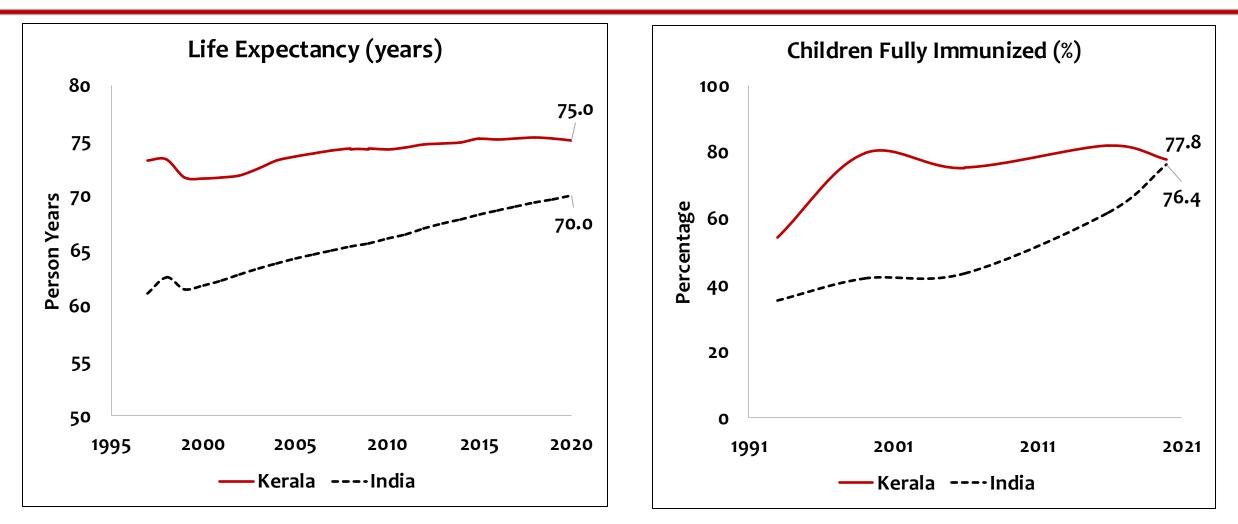


Source: Sample Registration System (SRS) Bulletin, Ministry of Home Affairs, 2020.

Note: India Number has been taken directly from the source

Source: NFHS I - V Note: India Number has been taken directly from the source

Life Expectancy in Kerala has always been higher than the national average. As of 2020, Kerala is placed above the national average in terms of full immunization of children (12-23 months)

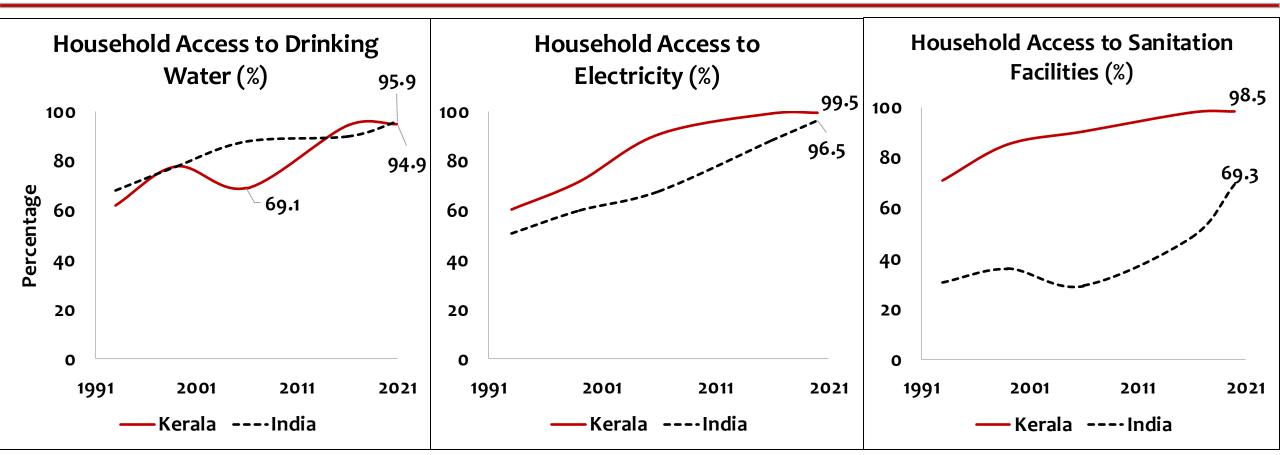


Source: Sample Registration System Bulletin, Ministry of Home Affairs, 2020.

Note: India number has been taken directly from the source.

Source: NFHS (I – V). Note: India number has been taken directly from the source. $_{48}$

Kerala has made significant improvements in basic 'quality of life' indicators. The percentage of households with access to electricity and sanitation facilities in Kerala has been above the national averages since 1991. The household access to drinking water has also improved significantly since 1996 and the ratio is close to the national estimates



Source: NFHS (I – V).

Note: i. India number has been taken directly from the source; ii. Drinking water and sanitation refers to improved sources and facilities respectively as defined in NFHS; iii. As per NSSO 2012, Kerala was the worst performer in terms of availability of improved drinking water source (56.8%) which could explain the fall in 2006 (Reference Link).

5. Fiscal Indicators

- Fiscal Data covers the fiscal period 1990-91 to 2022-23
- Benchmark includes all 29 States (all Union Territories are excluded)

Table 4A : Deficits, Revenue, Expenditure, and Debt for Kerala

Indicators	Most Recent Value (% of GSDP)	For Year	Decadal Change (b/w 2013-14 & 2022-23)	States' Median (All States)	States' Median (Larger States)	All States/UT's (% of National GDP)
Fiscal Deficit, % of GSDP	3.6%	2022-23	-0.1% points	3.8%	3.6%	3.4%
Primary Deficit, % of GSDP	1.2%	2022-23	-0.7% points	1.9%	1.6%	1.7%
Revenue Surplus (+)/Deficit (-), % of GSDP	-1.9%	2022-23	+0.5% points	0.3%	-0.4%	0.5%
Total Revenue Receipts, % of GSDP	12.6%	2022-23	+2.1% points	20.3%	16.1%	14.5%
Own Tax Revenue, % of GSDP	6.9%	2022-23	-0.02% points	6.3%	6.4%	6.7%
Own Non Tax Revenue, % of GSDP	1.5%	2022-23	+0.3% points	1.2%	1.1%	1.1%
Total Expenditure, % of GSDP	16.3%	2022-23	+2.0% points	24.3%	20.0%	18.0%
Revenue Expenditure, % of GSDP	14.6%	2022-23	+1.6% points	18.6%	16.8%	15.0%
Capital Expenditure, % of GSDP	1.7%	2022-23	+0.5% points	4.1%	3.4%	3.0%
Capital Expenditure, % of Total Expenditure	10.5%	2022-23	+1.8% points	17.6%	16.1%	16.7%
Total Public Debt, % of GSDP	38.2%	2022-23	+11.0% points	32.3%	30.7%	27.8%
Contingent Liabilities, % of GSDP	4.8%	2021-22	+2.6% points	2.2%	2.8%	3.8%

Source: Data is taken from State Finances Report (SFR), Reserve Bank of India (RBI), as of December 2023.

Note: i. Median of All States includes all 29 States (all Union Territories are excluded); ii. Median of 22 States excludes the North Eastern States, except Assam; iii. All States/UTs shows the sum of 29 States, Delhi and Puducherry, expressed as a % of national gross domestic product; iv. Most Recent Values are the Revised Estimates for 2022-23 (except for Contingent Liabilities, for which the most recent value is for 2021-22.

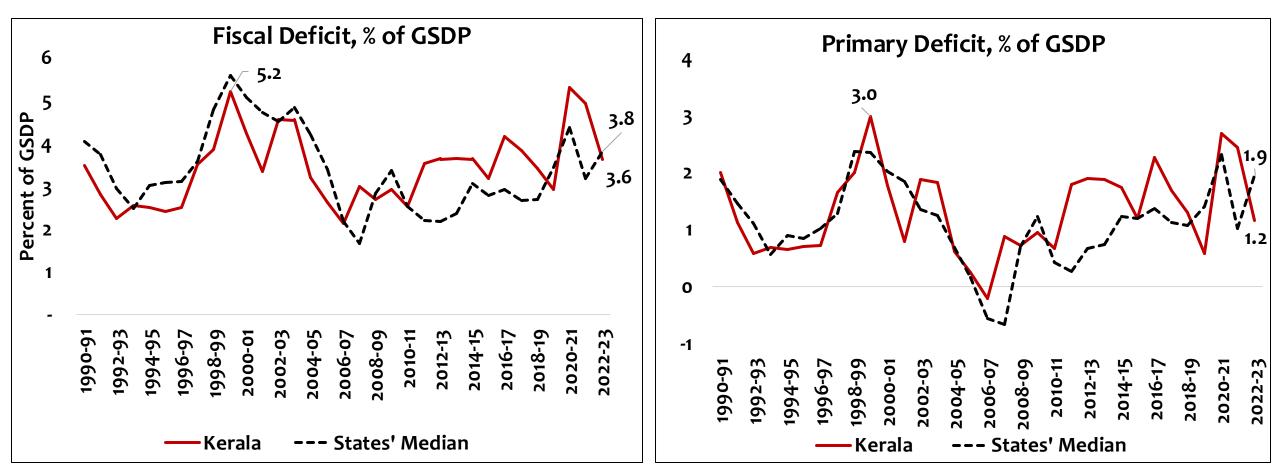
Most Recent Value Decadal Change (b/w States' Median States' Median All States/UT's Indicators For Year (% of GSDP) (% of National GDP) 2013-14 & 2022-23) (All States) (Larger States) **Committed Expenditure, % of GSDP** 8.9% +0.8% points 9.2% 8.1% 6.9% 2022-23 **Committed Expenditure, % of Total** 54.9% 2022-23 -2.3% points 42.4% 40.9% 38.6% Expenditure +0.02% points Subsidies, % of GSDP 0.2% 1.0% 1.1% 1.5% 2022-23 (b/w 2018-19 & 2022-23) +0.1% points Subsidies, % of Total Expenditure 1.4% 3.7% 5.8% 8.2% 2022-23 (b/w 2018-19 & 2022-23) **Off-Budget Borrowings, % of GSDP** 0.7% 2022-23 0.2% 0.2% 0.1% Per Capita Social Expenditure Rs. 16,116 +Rs. 9,033 Rs. 18,949 Rs. 2,606 Rs. 6,514 2022-23 Per Capita Health Expenditure Rs. 2,658 +Rs. 1,583 Rs. 17,385 Rs. 2,494 Rs. 5,669 2022-23 Per Capita Education Expenditure Rs. 6,438 Rs. 17,585 Rs. 2,421 Rs. 5,700 2022-23 +Rs. 2,916 Social Expenditure, % of Total 34.2% +2.0% points 43.9% 45.6% 45.3% 2022-23 Expenditure Health Expenditure, % of Total 6.2% 5.6% +0.1% points 6.3% 6.3% 2022-23 Expenditure **Education Expenditure, % of Total** 13.7% 2022-23 -4.3% points 14.6% 14.8% 14.7% Expenditure **Buoyancy for Revenue Expenditure** 1.8% 0.2% -0.9% points 1.7% 1.5% 2022-23 with GSDP - ratio

Table 4B : Deficits, Revenue, Expenditure, and Debt for Kerala

Source: i. Subsidies, Wage and Salaries, Pension, Social sector expenditure, Medical and Public Health, Family Welfare, Education expenditure, Total Expenditure data are from the RBI's State Finances Reports, as of December 2023; ii. Off-Budget Borrowing data is from Ministry of Expenditure (2021-22); iii. Data for Population and GSDP are taken from MoSPI.

Note: i. Median of All States includes all 29 States (all Union Territories are excluded); ii. Median of 22 States excludes the North Eastern States, except Assam; iii. All States/UTs shows the sum of 29 States, Delhi and Puducherry, expressed as a % of national gross domestic product; iv. Committed Expenditure is calculated as the sum of Wage, Salaries, and Pension; v. Health Expenditure is calculated as the sum of Medical and Public Health, Family Welfare; vi. Social, Health, and Education Expenditures are calculated as per capita values by dividing the respective expenditure by the population; vii. Total Expenditure is calculated as the sum of Revenue Expenditure (RevEx), Capital Outlay, ⁵² and Loans and Advances; viii. The Buoyancy of RevEx is calculated as the ratio between the year-on-year growth rate of Revenue Expenditure and that of GSDP.

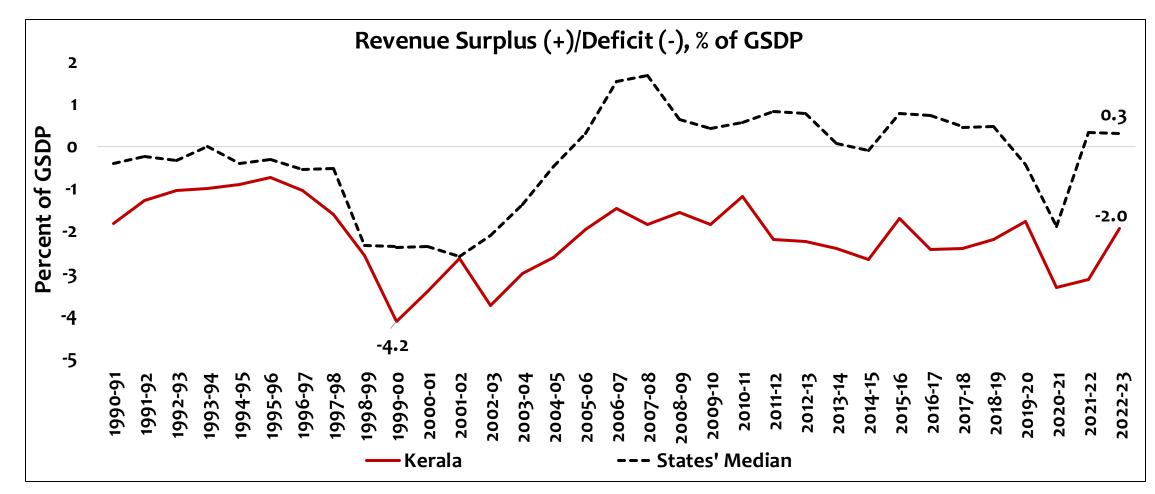
In 2022-23, Kerala ran a Fiscal Deficit of 3.6 percent of its GSDP and Primary Deficit of 1.2 percent of its GSDP. At these levels fiscal deficit is close to that of a median State, but primary deficit is lower than that of a median State



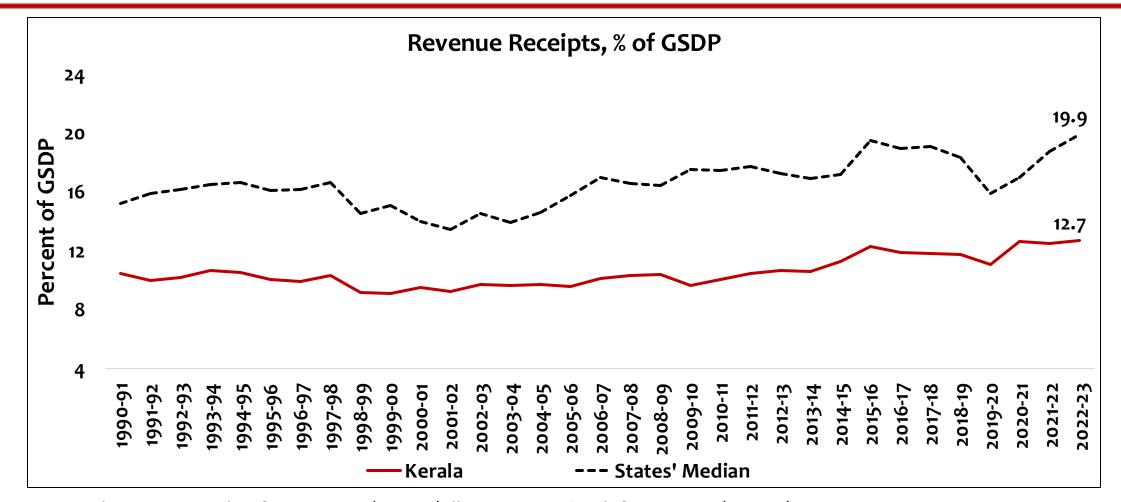
Source: i. Fiscal Deficit (FD) is from RBI State Finances Report (SFR, 2022-23); ii. State GSDP data is from MoSPI (2022-23).

Note: i. Primary Deficit (PD) is calculated as Fiscal Deficit minus Interest Payments. Interest Payments is sourced from RBI SFR; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded). 53

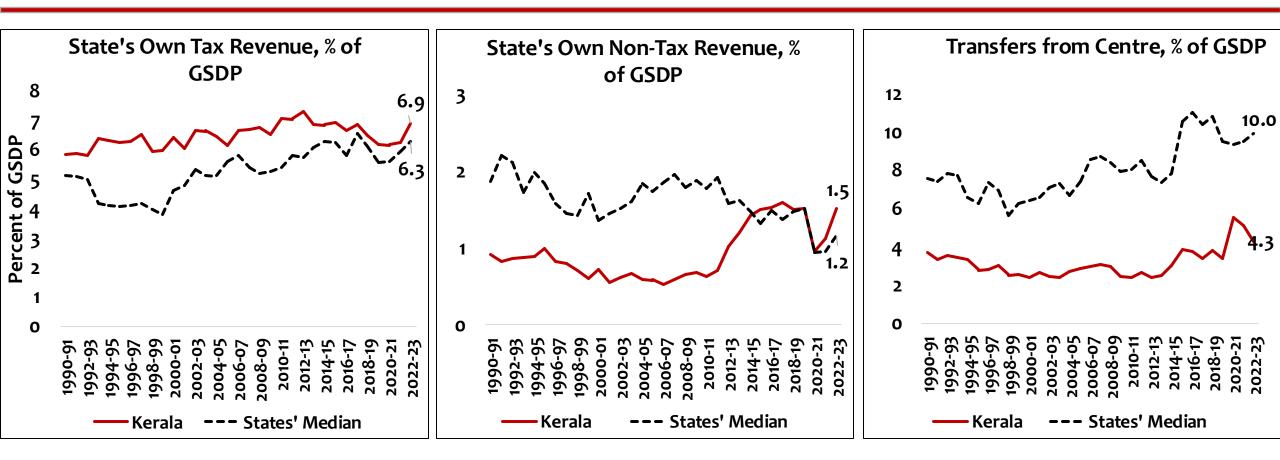
Kerala ran a Revenue Deficit 2 percent of its GSDP in 2022-23, while a median State ran a Revenue Surplus 0.3 percent of its GSDP in the same year



Source: i. Revenue Deficit is from RBI State Finances Report (SFR, 2022-23); ii. State GSDP data is from MoSPI (2022-23). Note: The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded). In 2022-23, Kerala's total Revenue Receipts (Own Tax, Own Non-Tax, and shared by the Centre) were about 7 percentage points lower than what a median State collected, at 12.7 percent of its GSDP

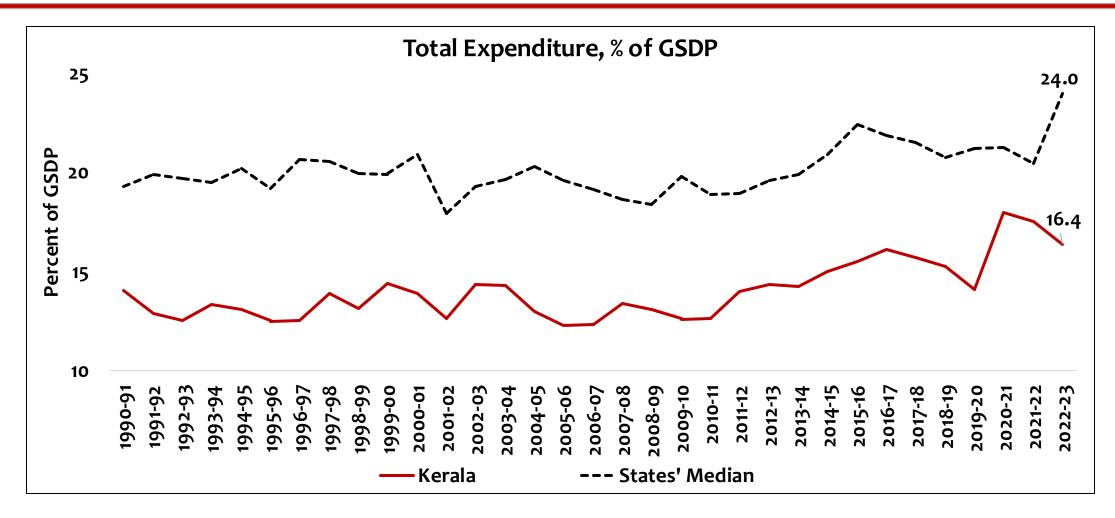


Source: i. Revenue Receipts from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23). Note: The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded). Kerala's Own Tax and Own Non-Tax Revenue at 6.9 and 1.5 percent of its GSDP respectively, were both marginally higher than a median State. Transfers from Centre to Kerala at 4.3 percent of its GSDP, are lower than that of median State, and constitute 34 percent of its Revenue Receipts



Source: i. Own-Tax Revenue, Own Non-Tax Revenue, and Transfers from the Centre from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23). Note: i. The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded); ii. Transfers from the Centre include both Tax and Non-Tax transfers.

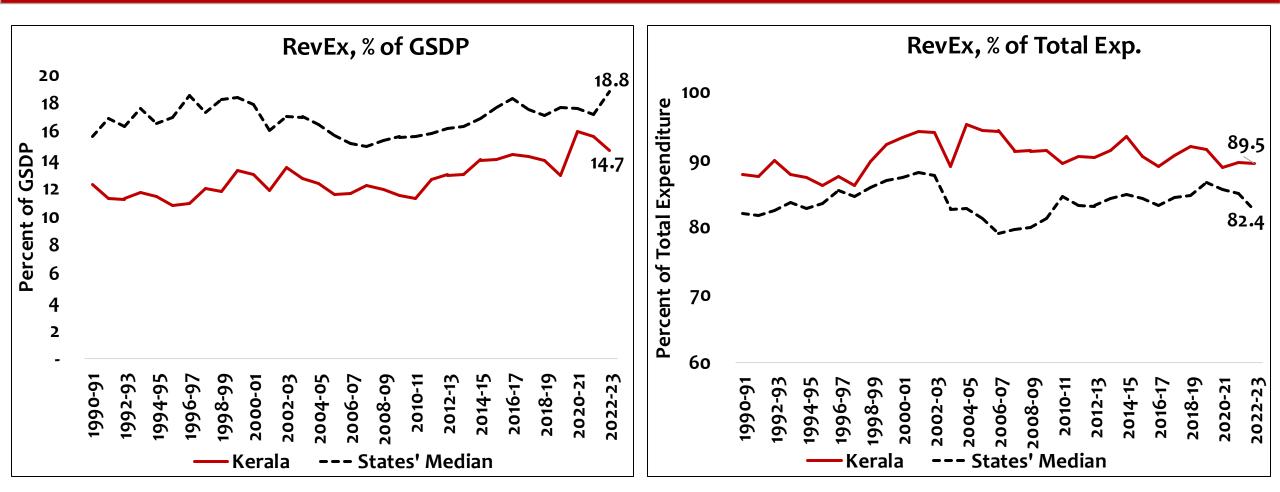
In 2022-23, Kerala's Expenditure at 16.4 percent of its GSDP, was about 7.6 percentage points lesser than a median State



Source: i. Total Expenditure is from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23).

Note: i. Total Expenditure is calculated as Revenue Expenditure (RevEx) plus Capital Expenditure (CapEx); ii. The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

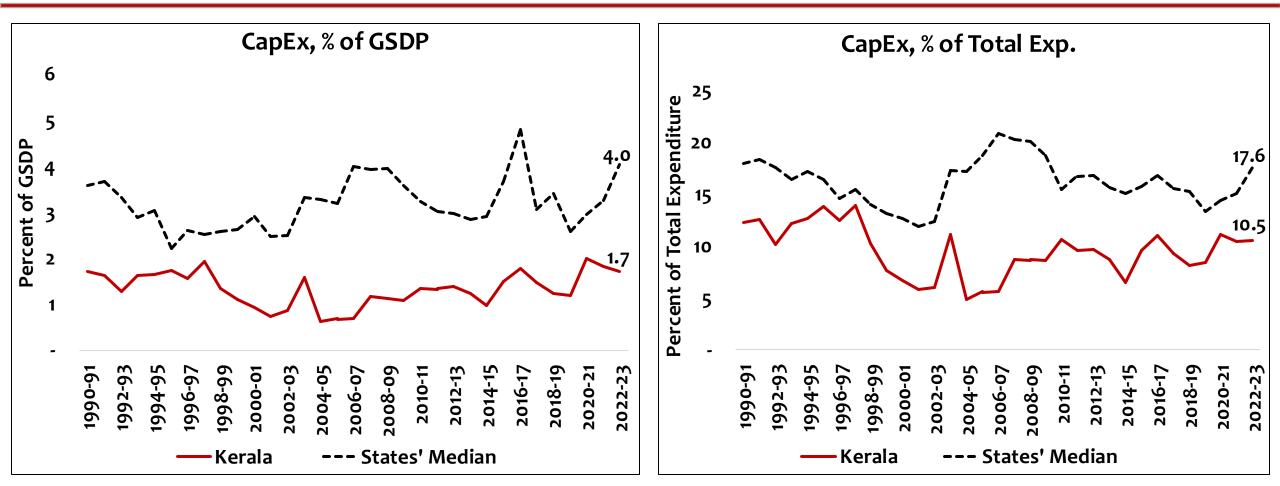
Kerala's RevEx at 14.7 percent of its GSDP was about 4 percentage points lower than that of a median State. However, RevEx as percent of the Total Expenditure was 7 percentage points higher than that of a median State in 2022-23



Source: i. Revenue Expenditure is from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx + CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

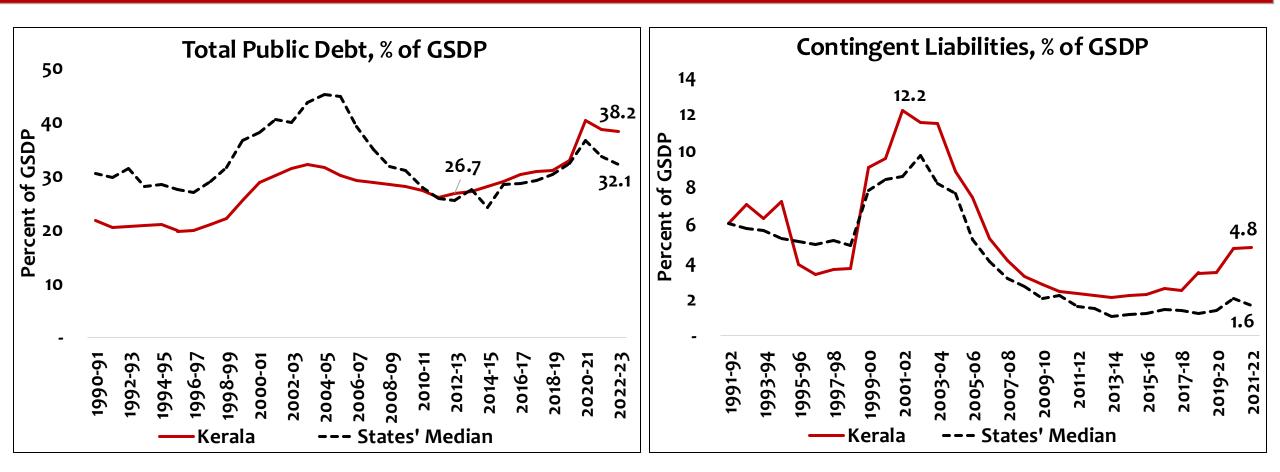
In 2022-23, Kerala's CapEx at 1.7 percent of its GSDP, was about 2.3 percentage points lower than what a median State spent on CapEx and as percentage of Total expenditure it was 7.1 percentage points lower than what median State spent on CapEx



Source: i. CapEx is calculated as Capital Outlay + Loans and Advances given by the State government and the data for both is taken from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

Kerala's Public Debt has steadily increased since 2011-12, reaching 38.2 percent of its GSDP in 2022-23, which was 6 percentage points higher than that of a median State. Its contingent liabilities have declined since 2001-02 but as of 2021-22 these were 3.2 percentage points higher than that of a median State



Source: i. Public Debt and State-wise contingent liabilities data has been taken from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23). Note: The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

Debt Sustainability Assessment

- Extrapolations of the debt-to-GSDP ratio are used as a way of thinking about debt sustainability, using the equation: $\Delta b_t = \frac{b_{t-1}(r_t g_t)}{1 + g_t} + pd_t^*$
- A baseline scenario assumes real GDP growth, the real effective interest rate and primary deficit will be at the same levels for the next five years as their respective averages from 2012-13 to 2021-22.
- Second scenario assumes faster GDP growth to the tune of half a standard deviation over the average growth between 2012-13 to 2021-22.
- Third scenario assumes a favorable change of half a standard deviation to the primary deficit over the average deficit between 2012-13 to 2021-22.
- Fourth scenario assumes baseline plus outstanding contingent liabilities in 2021-22 will be absorbed (by 20 percent) each year in the next five years.
- A fifth scenario, by combining scenarios two and three.

Note: i. b_t is the debt-to-GSDP ratio, pd_t is the primary-deficit-to-GSDP ratio (deficit net of interest payment), g_t is growth of real GSDP, and r_t is the real effective interest rate on public debt; all in year t; ii. Δb_t is the change in debt-to-GSDP ratio between t and t-1; iii. The exercise is based on the assumption that g, r, and pd are exogenous, that is, they are not impacted by the level of debt.

Kerala's Debt Evolution (2012-13 to 2021-22)

Averages and standard deviations of key parameters

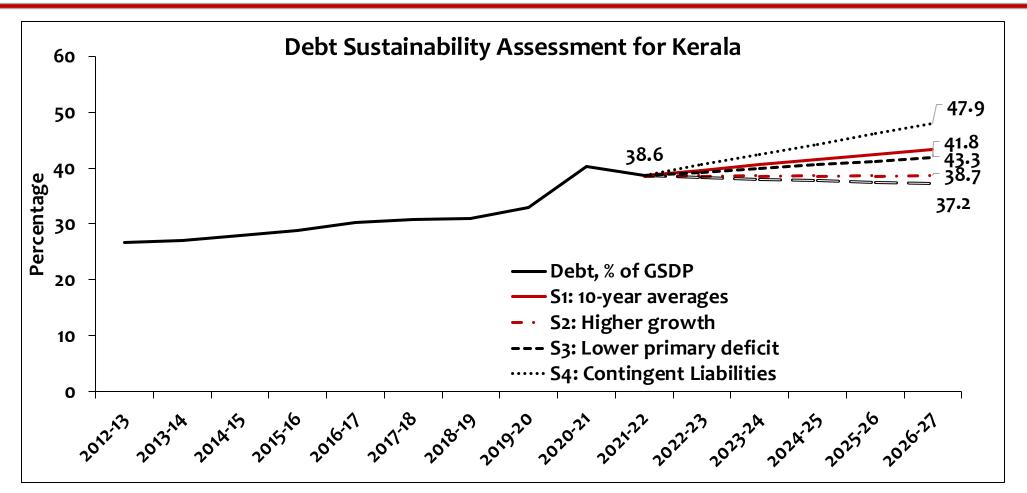
	-	erage and std. 012-13 to 2021-22)	Five-year average and std. deviations (2017-18 to 2021-22)		
	Mean	Std dev	Mean	Std dev	
Nominal GDP growth (γ)	10.1	6.9	8.4	9.8	
Deflator growth (π)	5.0	2.2	4.5	2.1	
Real GDP growth (g)	4.8	5.5	3.6	7.8	
Effective interest rate (e)	7.7	0.2	7.7	0.2	
Real effective interest rate (ê)	2.7	2.3	3.2	2.3	
Primary deficit (pd)	1.8	0.6	1.7	0.9	
Growth-effective interest differential (g-ê)	2.1	6.6	0.4	9.4	
Contingent Liabilities (CL) as % of GSDP in 2021-22	4.8	-	-	-	
Percentage points of CL absorbed each year for 5 years	0.95	-	_	_	

Different scenarios for conducting debt sustainability assessments

Scenarios	Debt level in 2021-22 (bt-1)	Primary Deficit (pd)	Real GDP growth (g)	Real Effective Interest Rate (ê)	Change in Debt in first year (2022-23)	Cumulative change in Debt in next five years
Baseline (Scenario 1): 10-year averages (2012-13 to 2021-22)	38.6	1.8	4.8	2.7	0.98	4.70
Scenario 2: Higher growth (increasing growth by half a standard deviation over baseline)	38.6	1.8	7.5	2.7	0.01	0.06
Scenario 3: Lower Primary Deficit (reducing primary deficit by half a standard deviation over baseline)	38.6	1.4	4.8	2.7	0.66	3.19
Scenario 4: Contingent Liabilities in 2021-22 are absorbed 20% in each	38.6	1.8	4.8	2.7	1.93	9.27
year Scenario 5: Lower Primary Deficit and Higher Growth	38.6	1.4	7.5	2.7	-0.30	-1.37

Note: In Scenario 2, half a standard deviation of 10-year average of real GDP growth rate is added as a positive growth shock. In Scenario 3, half a standard deviation of 10-year average of primary deficit is removed as a positive fiscal shock. In Scenario 4, 0.95 percentage points of Contingent Liabilities are assumed to be taken on by the government in each fiscal year.

In almost all scenarios, debt to GSDP ratio for Kerala is not projected to decline anytime soon. If contingent liabilities (which were 4.8 percent of GSDP in 2021-22) are absorbed 20 percent each year for the next five years, debt to GSDP ratio will increase by nearly 10 percent points. Even in the most optimistic scenario of higher growth and lower primary deficit, debt to GSDP ratio is projected to decrease by only a minuscule amount



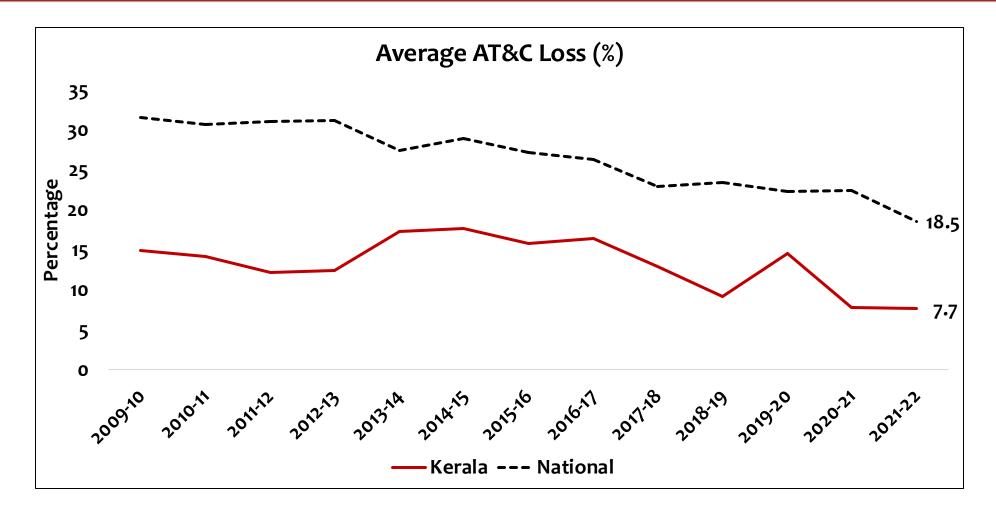
Note: Projection period is from 2022-23 till 2026-27. In Scenario 2, half a standard deviation of 10-year average of real GDP growth rate is added as a positive growth shock. In Scenario 3, half a standard deviation of 10-year average of primary deficit is removed as a positive fiscal shock. In Scenario 4, 0.95 percentage points of Contingent Liabilities are assumed to be taken on by the government in each fiscal year 64

Kerala: Power Sector

- The State has one public (government-operated) distribution utility/company (DISCOM) Kerala State Electricity Board Limited (KSEBL).
- Their Aggregate Technical & Commercial Losses (AT&C) Loss has been declining consistently since 2013-14, and is at about 8 percent as of 2021-22. The low losses can be attributed to a corresponding increase in their billing and collection efficiency.
- Under the Ujwal DISCOM Assurance Yojana (UDAY) scheme launched by the GoI, the State did not opt for take-over of DISCOM debt by the Government of Kerala considering their debt, financial and AT&C losses were relatively low when compared to other DISCOMs in the country [refer to CAG Report on the Performance of KSEBL pre and post UDAY, GoK, Pg. 10].
- While the State has met some of the operational targets under UDAY, some components such as rural DT (Distribution Transformers) Metering, smart metering, and feeder segregation have had little progress since the implementation of UDAY.
- KSEBL could not reap the full benefit of the Scheme by deciding to opt out of financial turnaround package and signing up for improvement of operational parameters only. As a result, the operations of KSEBL resulted in continuous losses in all financial years during 2015-21.

Source: Report of the CAG on Performance of Kerala State Electricity Board Limited During Pre and Post Ujwal DISCOM Assurance Yojana, GoK, 2022.

AT&C Losses of the DISCOM is much lower than the national average, standing at 7.7 percent in 2021-22



Source: PFC Report on Performance of State Power Utilities (2009-10 to 2021-22). Note: i. The figure shows the AT&C Loss in Kerala's DISCOM, KSEBL; ii. The National average is across all DISCOMs in the 29 States and 2 Union Territories (Delhi & Puducherry).

6. Devolution to Kerala from Centre in the 14th and 15th Finance Commission (FC)

Tax Devolution Criteria of 14th and 15th Finance Commissions to all States

- The Net Proceeds of all taxes¹ collected by the Union are shareable with the States, and constitute the divisible pool of taxes.
- The 14th FC placed the States' share of tax devolution to 42 percent of the divisible pool, and the 15th FC adjusted it to 41 percent of the divisible pool due to the changed status of Jammu & Kashmir into the Union Territories of Ladakh and Jammu & Kashmir.
- Below table highlights the tax devolution matrix used by the two FCs, and the corresponding weights for each criteria.

Criteria	14th FC (2015-20)	15th FC (2021-26)
Income Distance	50	45
Area	15	15
Population (1971)	17.5	0
Population (2011) ²	10	15
Demographic Performance	0	12.5
Forest Cover	7.5	0
Forest and Ecology	0	10
Tax and fiscal efforts ³	0	2.5
Total	100	100

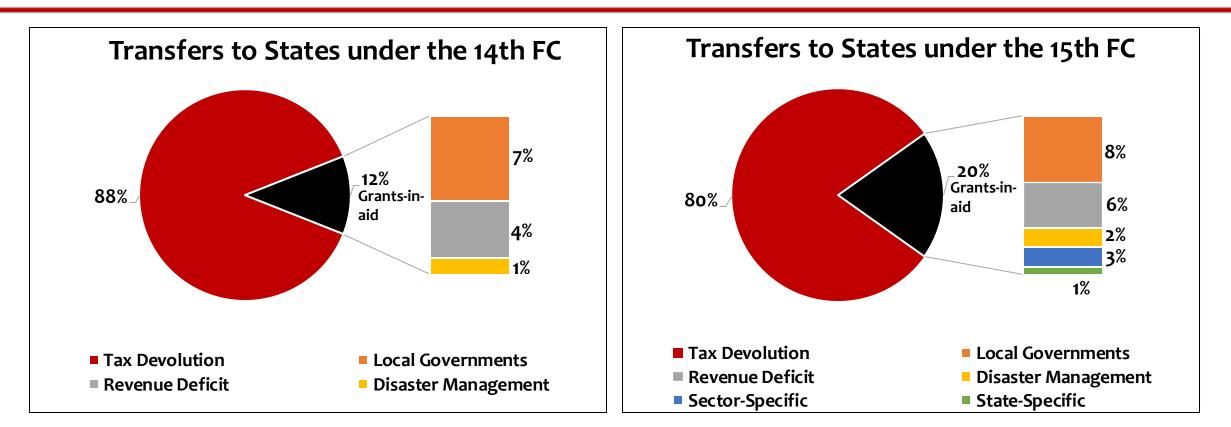
Source: 14th and 15th Finance Commission Reports.

Note: i. Per Articles 270 and 279, Net Proceeds of taxes is defined as all the taxes, except cess and surcharges, reduced by the cost of collection; ii. 14th FC used the term "demographic change" which was defined as Population in 2011; iii. The 15th FC reintroduced the "tax and fiscal efforts" criteria. The definitions of all criteria can be referred to from the <u>15th FC Report</u>.

Grants-in-Aid

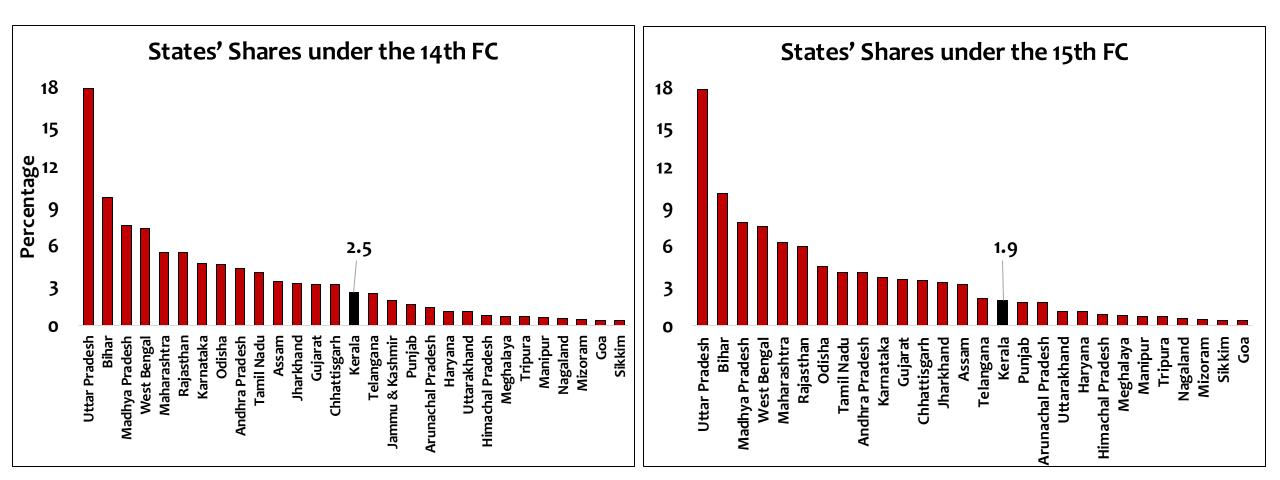
- There were three types of grants recommended by the 14th FC revenue deficit grants, grants for local governments, and grants for disaster management. The 15th FC, in addition to the three, also recommended sector-specific and State-specific grants.
 - 1. **Revenue-deficit grants:** Post tax devolution, those States which remain in a state of revenue deficit, are allocated this grant in the magnitude of their deficit (estimated for the award period based on the projected revenues and tax devolution).
 - 2. Grants for Local Governments: These are distributed between the rural and urban local bodies (65:35 ratio per the 15th FC). The States' shares are calculated with 90 percent weightage given to population and 10 percent to area.
 - **3. Grants for Disaster Management:** The corpus of the State Disaster Response Fund (envisaged under the Disaster Management Act, 2005, which covers both natural and man-made disasters) is recommended by the FC per Article 275 (1) of the Constitution. Under the 14th FC, it was recommended that Centre contribute 90 percent of the SDRF and States provide the remaining 10 percent. The 15th FC reinstated the previous sharing arrangement, wherein Centre's contribution to SDRF for General Category States is 75 percent contribution and it remains 90 percent for the North-Eastern and Himalayan States.
 - **4. Sector-Specific Grants:** The 15th FC reinstated recommendations for social sectors like health and education, rural economy (encouraging agricultural reforms and grants for the Pradhan Mantri Gram Sadak Yojana), administrative and governance reforms (for judiciary, improved statistics, and incentivizing aspirational districts and blocks).
 - 5. State-specific Grants: To help States address special needs and overcome cost disabilities, State-specific grants were recommended by the 15th Finance Commission. These span six broad areas: a) social needs, b) administrative governance and related infrastructure, c) conservation and sustainable use of water, drainage and sanitation, d) preserving culture and historical monuments, e) high-cost physical infrastructure, and f) tourism.

Proposed transfers from the Centre to all States: 15th Finance Commission reinstated recommendations on sector-specific and State-specific grants, which 14th Finance Commission had excluded from the Grants-in-Aid to States, thus increasing the share of grants in the total transfers recommended from Centre to States to 20 percent



- Sector-Specific Grants are further divided into three categories:
 - Social Sector health and education
 - Rural Economy agriculture reforms, self reliance, export & sustainability, and PMGSY roads
 - Governance and Administrative Reforms judiciary, statistics, aspirational districts and blocks

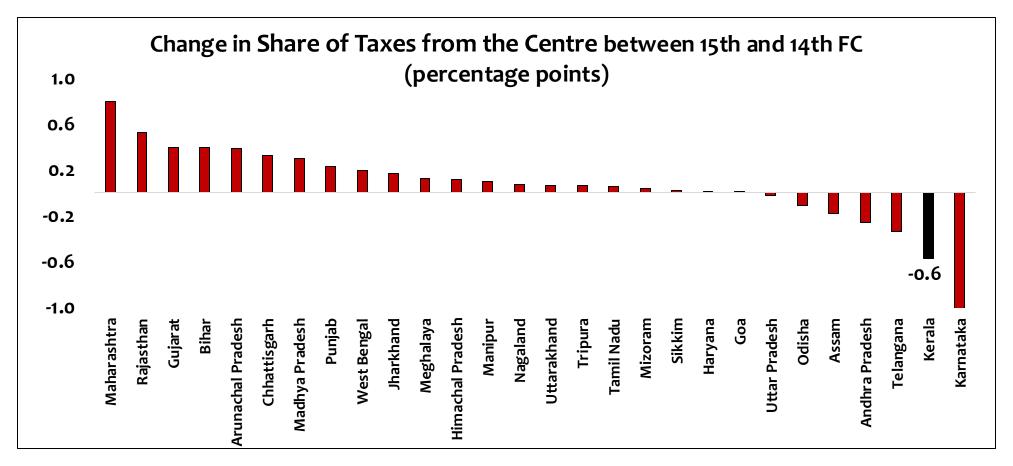
Kerala's share in Taxes from Centre, as per the FC recommendations, decreased from 2.5 percent under 14th Finance Commission to 1.9 percent under 15th FC recommendations



Source: 14th and 15th Finance Commission Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of taxes from the Centre. 71

Kerala had a 0.6 percentage point decrease in Tax Devolution shares between 14th and 15th Finance Commission recommendations



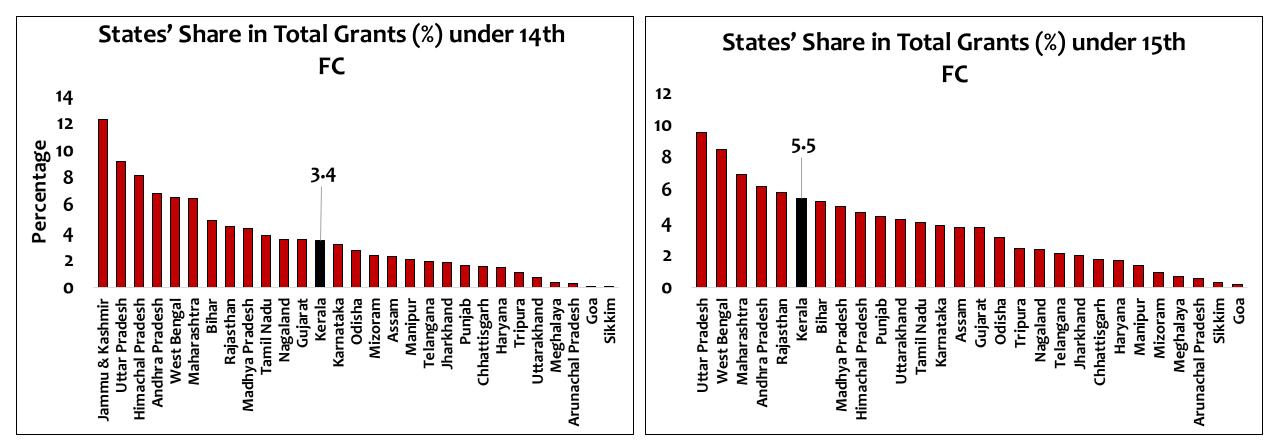
Source: 14th and 15th Finance Commission Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of taxes from the Centre, and it has been excluded from this chart.

Grants-in-Aid: Kerala

- There were three types of grants recommended by the 14th FC revenue deficit grants, grants for local governments, and grants for disaster management. The 15th FC, in addition to the three, also recommended sector-specific and State-specific grants.
- Total: The State's share in the total grants-in-aid increased by 2.1 percentage points under the 15th FC, compared to the 14th FC, at 5.5 percent.
 - 1. Revenue-deficit grants: Kerala has received revenue deficit grants under both the 14th and 15th FC, and saw an increase of 8 percentage points in its share between the two. As per their 15th Finance Commission, the State was allocated 12.8 percent of the total post-tax devolution revenue deficit grants, making it the second highest recipient of the same. This grant led to an increase in the State's share in total grants-in-aid between the last two Commissions.
 - 2. Grants for Local Governments: Its shares in the grants for local governments has remained consistent between the 14th and 15th FC, standing at 2.9 percent under the 15th FC recommendations.
 - **3.** Grants for Disaster Management: Kerala received 1.4 percent of the total grants for disaster management under the 15th FC recommendations, a decline of 0.3 percentage points from the 14th FC recommendations.
 - **4. Sector-Specific Grants:** As per the 15th FC recommendations, it receives **2 percent of the total sectoral grants.** Among the sector specific grants, the largest component being grants for judiciary (3.9 percent of total), followed by agriculture at 2.4 percent. Other sector-specific grants and the State's shares in each include health & education grant (2.1 percent), maintenance of PMGSY roads (0.4 percent), and grants for improving statistical data collection and dissemination (1.7 percent).
 - 5. State-specific Grants: Kerala received Rs. 1,100 crore in State-specific grants (2.2 percent of the total), distributed among forest conservation (Rs. 500 crore), waste disposal and cleaning of water bodies (Rs. 450 crore), and replanting of coconut (Rs 150 crore).

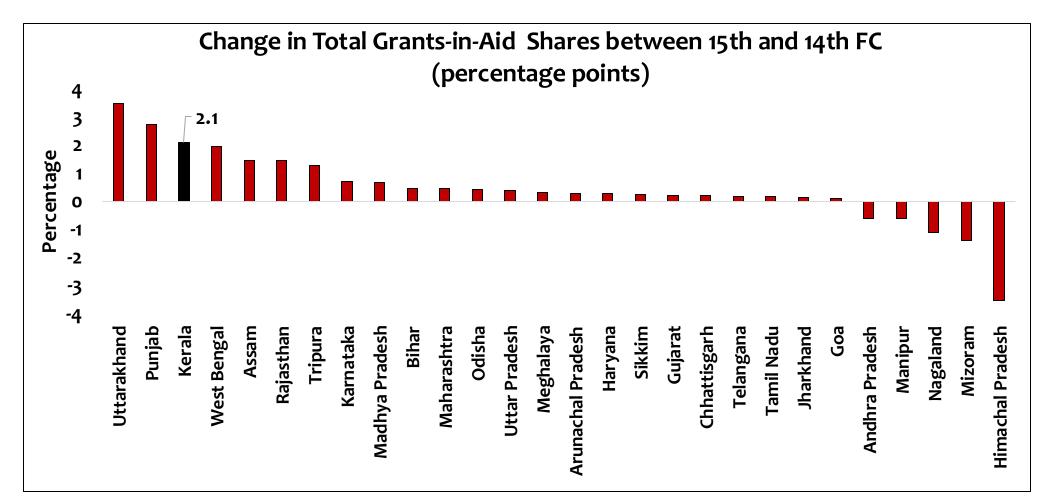
Kerala noted an increase of 2.1 percentage points in its share of the Total Grants-in-aid recommended between 14th and 15th Finance Commissions



Source: 14th and 15th Finance Commission Reports.

Note: i. Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of grants-in-aid from the Centre; ii. An amount of Rs. 16,400 crore is not included in the total Grants-in-Aid figure for the 15th FC. This comprises of three grants (a) School Education (Rs. 4,800 crore), (b) Grants for aspirational districts and blocks (Rs. 3,150 crore) and (c) Local Bodies grants for (i) Incubation of new Cities (Rs. 8,000 Crore) and (ii) National Data Centre (Rs. 450 Crore). These were not included in the table which reports the State-wise shares in the 15th FC Report.

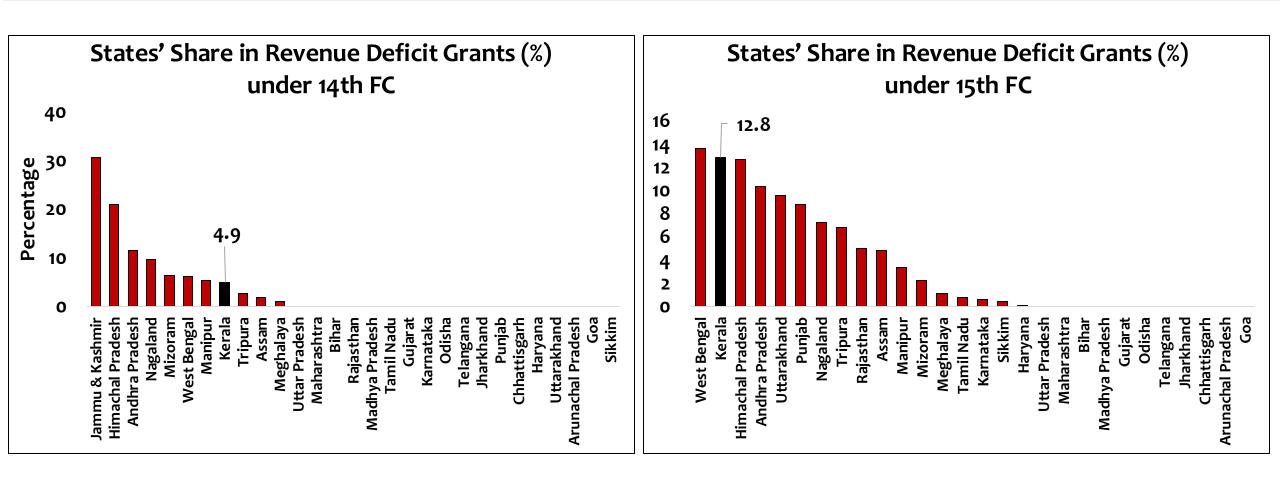
Kerala has a 2.1 percentage point increase in shares of Total Grants-in-Aid between the 14th and 15th FC recommendations



Source: 14th and 15th Finance Commission Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of grants-in-aid from the Centre, and it has been excluded from this chart.

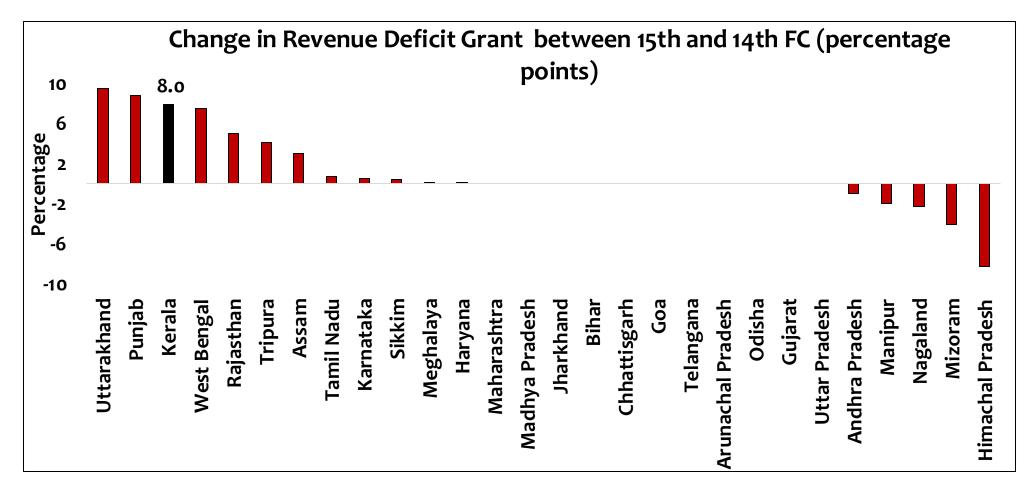
An 8 percentage point increase in Kerala's share of the Revenue Deficit Grants recommended between 14th and 15th Finance Commissions led to an increase in its share in total Grants-in-Aid



Source: 14th and 15th Finance Commission Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of Revenue Deficit Grants from the Centre.

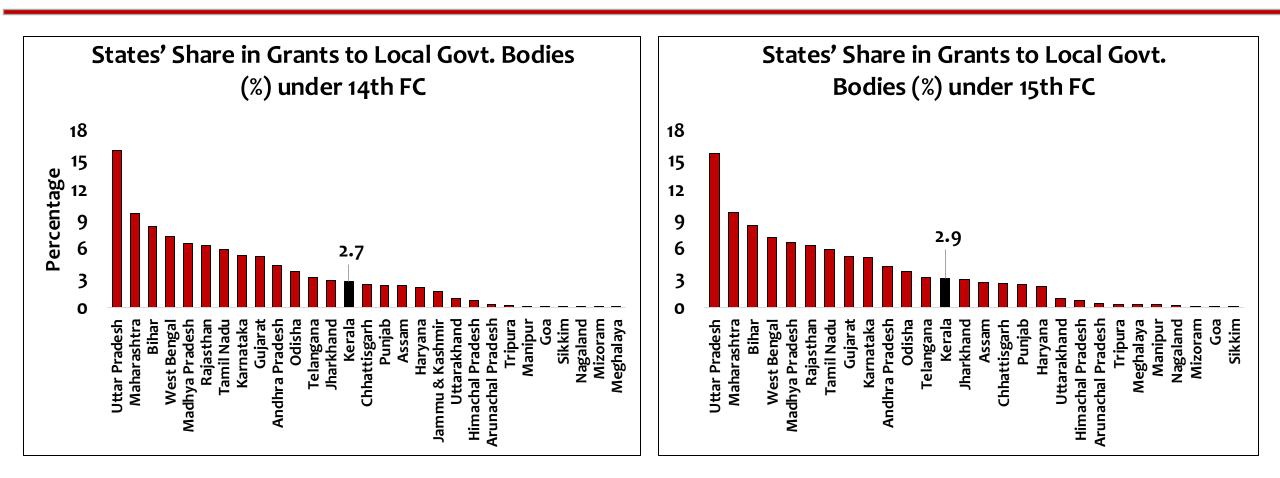
Kerala had an 8 percentage point rise in Revenue Deficit Grants between the 14th and 15th FC recommendations



Source: 14th and 15th Finance Commission Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of Revenue Deficit Grants from the Centre, and it has been excluded from this chart.

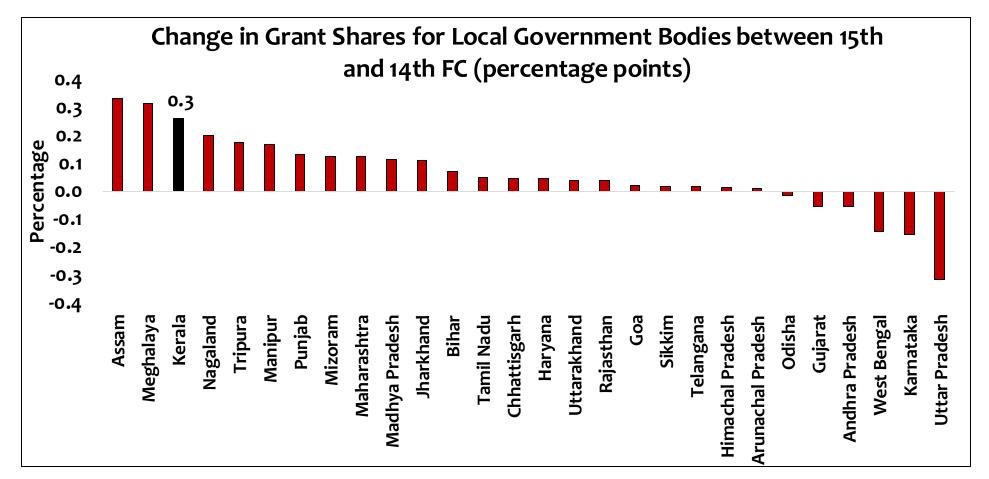
Kerala's share in Grants to Local Government Bodies from the Centre increased marginally from 2.7 to 2.9 percent between 14th and 15th Finance Commissions



Source: 14th and 15th Finance Commission Reports.

Note: An amount of Rs. 8,450 crore is not included in the grants for Local Bodies, these include (a) Incubation of new Cities (Rs. 8,000 Crore) and (b) National Data Centre (Rs. 450 Crore). These were not included in the table which reports the State-wise shares in the 15th FC Report.

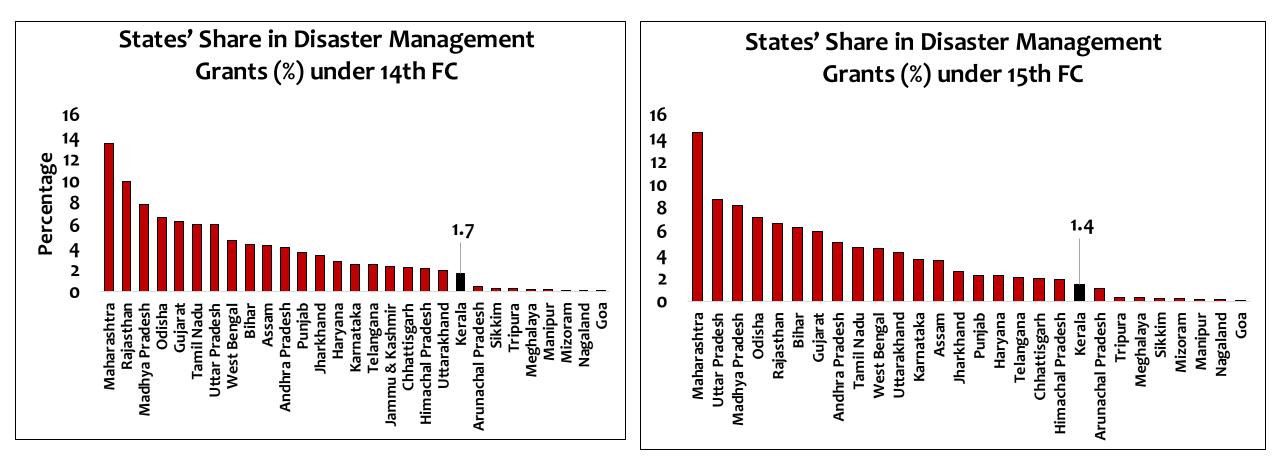
Kerala had 0.3 percentage point rise in Local Government Bodies' Grants between the 14th and 15th FC recommendations



Source: 14th and 15th Finance Commission Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of Local Government Bodies' Grants from the Centre, and it has been excluded from this chart.

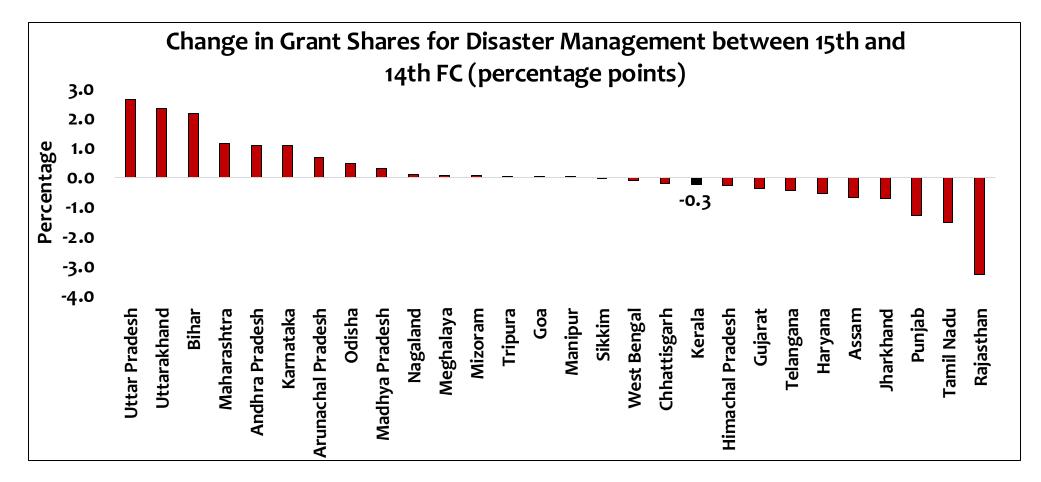
Kerala's recommended share in the Grants for Disaster Management from the Centre decreased from 1.7 percent by 14th FC to 1.4 percent by 15th FC



Source: 14th and 15th Finance Commission Reports.

Note: A Disaster Risk Index is calculated for all States, taking into consideration the natural calamities different States are prone to, poverty, and other factors. This index is then weighed by a factor accounting for the aggregate expenditure of States on disaster management, area and population, to calculate the States' shares in disaster management grants.

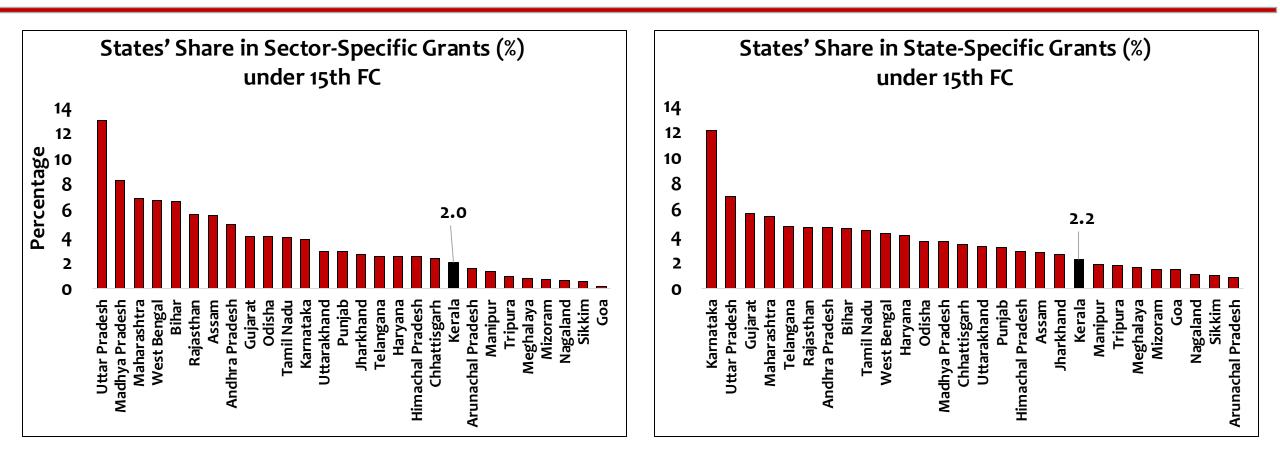
Kerala had a 0.3 percentage point decrease in Grants for Disaster Management between the 14th and 15th FC recommendations



Source: 14th and 15th Finance Commission Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of Disaster Management Grants from the Centre, and it has been excluded from this chart.

Kerala's share in Sector-Specific Grants is 2 percent of the total. Among the sector specific grants, the largest component are grants for judiciary (3.9 percent of total), followed by agriculture performance incentive grants (2.4 percent of the total) A total of Rs. 1,100 crore was recommended in State-Specific grants for three purposes - forest conservation; waste disposal and cleaning of water bodies; and, replanting of coconut



Source: 14th and 15th Finance Commission Reports.

Note: i. Other sector-specific grants and the State's shares in each include health & education grant (2.1 percent), maintenance of PMGSY roads (0.4 percent), and grants for statistics (1.7 percent); ii. Kerala received Rs. 1,100 crore in State-specific grants (2.2 percent of the total), distributed among forest conservation (Rs. 500 crore), waste disposal and cleaning of water bodies (Rs. 450 crore), and replanting of coconut (Rs 150 crore).

Climate Change under the FC

Looking at the last two decades, there has been a shift in how the issue of climate change has been addressed by different Finance Commissions.

12th and 13th FCs

- The 12th FC recommended grants worth Rs. 1,000 crore to be shared by States for the Maintenance of Forests, in addition to what the States were spending through their respective forest departments. The amount was distributed among the States based on their forest area, and it was to be spent for preservation of forest wealth. [refer to Chapter 10, pg. 175, 184-185]
- Expanding on the same, the <u>13th FC</u> recommended Environment Grants worth Rs. 15,000 crore to States, which covered three areas: protection of forests, renewable energy, and water sector management (Rs. 5,000 crore each). [refer pg. 205 (table 12.1), pg. 210-217]

▶ <u>14th and 15th FCs</u>

- The <u>14th FC</u> approached climate change and sustainable economic development from a fiscal perspective, and with the view that tax devolution should be the primary route of transfer of resources to States, increased the States' share in the divisible pool to 42 percent (from 32 percent under the 13th FC). [refer pg. 31 (point 2.33), pg. 103, 107 (point 8.27), pg. 180 (point 12.34-12.35]
- Forest cover was introduced as a criteria for tax devolution by the 14th FC, to continue accounting for concerns related to climate change and to encourage States to maintain higher forest covers. They assigned 7.5 percent weight to forest cover in the tax devolution matrix.
- The 15th FC maintained this recommendation, and assigned a higher weight of 10 percent to forest and ecology in the tax devolution matrix.
- The 15th FC also made State-specific grant recommendations (based on specific requests from States). Very few of them are categorized under climate-change, and some others align with one or more of the three environment goals specified by the 13th FC: Arunachal Pradesh (Rs. 355 crore, renewable energy), Goa (Rs 500 crore, alternative power sources, waste management), Jharkhand (Rs. 700 crore, renewable energy), Kerala (Rs. 500 crore, forest conservation), Maharashtra (Rs. 500 crore, forest conservation), Punjab (Rs. 390 crore, includes support for reduction in environment pollution caused by stubble burning), Rajasthan (Rs. 400 crore, integrated water management), Tamil Nadu (Rs. 200 crore, revamping water bodies to adapt to climate change). [refer Annex 10.9, pg. 803-810 (summary), Annex 10.10, pg. 811-837]

Source: Reports from the 12^{th} to 14^{th} FCs.

7. Kerala Fiscal Responsibility Act, 2003

- ➢ In pursuance of recommendations of the Twelfth Finance Commission, the Kerala Government enacted the Kerala Fiscal Responsibility Act, 2003 (KFR Act) in line with the Union Fiscal Responsibility and Budget Management Act, 2003 (FRBM Act).
- > The KFR Act, 2003 prescribed the following fiscal targets for the State Government:
- 1. Revenue Deficit: Eliminate revenue deficit by 31st March 2007 and maintain a surplus thereafter
- 2. Fiscal Deficit: Reduce fiscal deficit to 2 percent of the GSDP by 31st March 2007
- > The KFR Act, 2003 required the State Government to present before both the Houses of the Legislature, the following Statements of fiscal policy along with the budget:
 - The Macroeconomic Framework Statement
 - The Medium Term Fiscal Policy Statement
 - Fiscal Policy Statement

 \succ In 2011, the State's fiscal targets were amended as follows:

- **Revenue deficit:** Reduce revenue deficit (as percent of GSDP) in the years 2011-12, 2012-13, 2013-14, and 2014-15 in the order of 1.4 percent, 0.9 percent, 0.5 percent, and zero percent, such that revenue deficit is eliminated by 31st March 2015, and a revenue surplus is maintained thereafter
- Fiscal deficit: Reduce fiscal deficit to 3 percent of GSDP by 31st March 2014 by maintaining fiscal deficit (as percent of GSDP) at a level not exceeding at 3.5 percent, 3.5 percent and 3 percent in the years 2011-12, 2012-13 and 2013-14, respectively.
- Total Debt Liabilities: Reduce total debt liabilities (as percent of GSDP) to 29.8 percent within a period of four years from 2011-12 to 2014-15 by reducing total debt liability in the years 2011-12, 2012-13, 2013-14, and 2014-15 to 32.3 percent, 31.7 percent, 30.7 percent, and 29.8 percent, respectively.

Source: The Kerala Government Gazette, State Finances Audit Reports of the CAG .

- In 2018, the fiscal targets stated within the Act were amended in accordance with the Fourteenth Finance Commission's recommendations as follows:
 - Fiscal Deficit:
 - (I) Fiscal deficit of the State would be anchored to an annual limit of 3 percent of GSDP. The State would be eligible for flexibility of 0.25 percent over and above this for any given year if the debt-GSDP Ratio is less than or equal to 25 percent in the preceding year.
 - (II) The State would be further eligible for an additional borrowing limit of 0.25 percent of GSDP in a given year if the interest payments are less than or equal to 10 percent of the revenue receipts in the preceding year.
 - (III) The two options under these flexibility provisions could be availed by the State either separately, if any of the above criterion was fulfilled, or simultaneously if both the above stated criterion were fulfilled. Thus, **the State could have a maximum fiscal deficit- GSDP limit of 3.5 percent in any given year**.
 - (IV) The flexibility for availing the additional limit under either of the two options or both would be available to the **State only if there was no revenue deficit** in the year in which borrowing limits were to be fixed and the immediately preceding year.
 - (V) In case a State was not able to fully utilise its sanctioned borrowing limit of 3 per cent of GSDP in any particular year during the first four years of the Fourteenth Finance Commission's award period (2015-16 to 2018-19), it would have the option of availing this un-utilised borrowing amount (calculated in rupees) in the succeeding year but within the Fourteenth Finance Commission's award period.
 - Total Debt Liabilities: Reduce total debt liabilities (as percent of GSDP) of the State for the years 2017-18, 2018-19, and 2019-20 to 30.40 percent, 30.01 percent, and 29.67 percent, respectively.

Source: The Kerala Government Gazette, State Finances Audit Reports of the CAG .

- In 2021, Kerala became eligible for an additional borrowing of Rs. 1471 crore as a onetime special dispensation in the financial year 2019-20 beyond the fiscal deficit limit of 3 percent of GSDP. This additional borrowing would be eligible for utilization during 2019-20 only.
- The amendment further stated that the State would be eligible for additional borrowing of 2 percent beyond the fiscal deficit limit of 3 percent of GSDP in 2020-21. A 0.50 percent of the additional fiscal space would be provided to the State unconditionally. However, 1 percent of GSDP would be conditional on the implementation of reforms by the State in the following areas (weight of 0.25 percent of GSDP for each reform):

(i) one nation one ration card,

(ii) ease of doing business,

(iii) urban local body/ utility, and

(iv) power distribution.

The remaining 0.50 percent of GSDP would be conditional on three out of four reforms being achieved.

Source: The Kerala Government Gazette, State Finances Audit Reports of the CAG.

▶ In 2022, the Act was amended taking into account the recommendations of the 15th Finance Commission:

- **Revenue Deficit:** Eliminate revenue deficit and maintain revenue surplus such that revenue surplus (as percent of GSDP) of the State would be 0.5 percent, 0.8 percent, 1.2 percent, 1.7 percent, and 2.5 percent in 202122, 2022-23, 2023-24, 2024-25, 2025-26, respectively.
- **Fiscal Deficit**: Fiscal deficit of the State would be anchored to 3 percent of GSDP during 2021-22 to 2025-26 by maintaining a fiscal deficit (as percent of GSDP) not exceeding 4.5 percent, 4 percent, 3.5 percent, 3.6 percent, and 3 percent in 2021-22, 2022-23, 2023-24, 2024-25, 2025-26, respectively. The fiscal deficit limit is further subject to following:

(i) The above upper limit of fiscal deficit is inclusive of 0.5 percent capital expenditure linked borrowing space and an additional borrowing space of 0.5 percent of Gross State Domestic Product linked to performance in power sector during 2021-2022 to 2024-2025.

(ii) The State shall be eligible for capital expenditure linked borrowing, if the State achieves the targeted capital expenditure fixed for the State. In order to become the State eligible for additional borrowing linked to the performance in power sector, all the entry level conditions and performance evaluation criteria stipulated for each year need to be fulfilled.

(iii) If the State is not able to fully utilise its sanctioned borrowing limit (excluding power sector borrowing), in any particular year during the first four years of Finance Commission award period (from 2021-2022 to 2024-2025), it will have the option of availing the unutilised borrowing amount in any of the subsequent years within the Finance Commission award period.

• Total Debt Liabilities: Targets for reducing total debt liabilities (as percent of GSDP) of the State for the years 2021-22, 2022-23, 2023-24, 2024-25, and 2025-26 would be 34.7 percent, 34.5 percent, 33.7 percent, 32.8 percent, and 32 percent, respectively.

Source: The Kerala Government Gazette, State Finances Audit Reports of the CAG.

State Finances Audit Report of the Comptroller and Auditor General of India (CAG) for Kerala

SI. No.	Fiscal Parameters	Fiscal Targets	Compliance				
			2017-18	2018-19	2019-20	2020-21	2021-22
1.	Revenue Deficit	Zero	Х	х	х	х	Х
2.	Fiscal Deficit (as percentage of GSDP)	3 percent (up to 2019- 20); 5 percent in 2020-21; 4 percent in 2021-22	х	х	V	х	Х
3.	Ratio of total outstanding debt to GSDP (in percent)	30.40 percent in 2017- 18, 30.01 percent 2018- 19, 29.67 percent in 2019-20 and 2020-21, and 30.47 percent in 2021-22	х	х	х	х	Х

Source: State Finances Audit Reports of the CAG from 2021-22.

- During the period 2017-18 to
 2021-22, Kerala could not
 eliminate its revenue deficit or
 contain its total outstanding
 liabilities (as a percent of
 GSDP) within the targets
 stipulated in the FRBM Act.
- The State was able to achieve its fiscal deficit target only in 2019-20 in this five year period.

> The CAG has recommended that the Government of Kerala:

- Needs to strive for a balanced growth by taking measures to improve the Agriculture and Manufacturing Sector.
- Should adopt a fiscal consolidation path so that the targets fixed for revenue and fiscal deficits in the Kerala Fiscal Responsibility Act could be achieved.
- The Government may take measures to improve its own tax revenue.
- The Government may take measures to improve its capital expenditure to augment its growth and development. The State Government should rationalize its investments so as to maximise the return on investment.

Source: State Finances Audit Report of the CAG for Kerala (for the year ending in March 2021), published in 2022.

- The 2023-24 Budget estimates a revenue deficit of Rs. 23,942 crore (2.1 percent of GSDP). As per the revised estimates, the revenue surplus is estimated at 2 percent of GSDP in 2022-23.
- Fiscal deficit as percent of GSDP is estimated at 3.5 percent of GSDP in 2023-24. The 2022-23 revised estimate for fiscal deficit is projected to be 3.6 percent of GSDP which is lower than the budget estimate of 3.9 percent
- ➢ At the end of 2023-24, the outstanding liabilities of the State are estimated to be 36.9 percent of the GSDP.
- Outstanding guarantees (as percent of GSDP) are estimated to increase to 4.9 percent in 2021-22 from 3.4 percent in in 2019-20.

Source: https://prsindia.org/budgets/States/kerala-budget-analysis-2023-24

Fiscal Parameters set in the Act Fiscal Parameters 2003 2018 2011 Eliminate revenue deficit or generate revenue surplus thereafter Reduce revenue deficit in each Eliminate revenue deficit or **Revenue Deficit** Reduce revenue deficit (as percent financial year so as to eliminate it generate revenue surplus by 31 March 2007 and generate of GSDP) in the years 2011-12, 2012-(Rs crore) thereafter revenue surplus thereafter 13, 2013-14, and 2014-15 in the order of 1.4 percent, 0.9 percent, 0.5 percent, and zero percent Reduce fiscal deficit to 3 percent of GSDP by 31st march 2014 by Reduce fiscal deficit in each maintaining the fiscal deficit (as The State can have a maximum **Fiscal Deficit** financial year so as to bring it down percent of GSDP) at a level not fiscal deficit- GSDP limit of 3.5 to not more than 3 percent of exceeding at 3.5 percent, 3.5 percent in any given year, subject (as percentage of GSDP) percent and 3 percent in the years GSDP by 31 March 2009 to conditions. 2011-12, 2012-13 and 2013-14 respectively Reduce total debt liabilities (as percent of GSDP) to 29.8 percent Reduce total debt liabilities (as within a period of four years from percent of GSDP) of the State for **Total Debt Liabilities to GSDP** 2011-12 to 2014-15 by reducing total the years 2017-18, 2018-19, and debt liability in the years 2011-12, 2019-20 to 30.4 percent, 30.01 2012-13, 2013-14, and 2014-15 to 32.3 (per cent) percent, and 29.67 percent, percent, 31.7 percent, 30.7 respectively. percent, and 29.8 percent, respectively

Table 5A: Fiscal Parameters set in the FRBM Act in various years

Source: The Kerala Government Gazette, State Finances Audit Reports of the CAG from 2009-10 to 2021-22.

Fiscal Parameters						
FISCAI Parameters	2021	2022				
Revenue Deficit (Rs crore)	Eliminate revenue deficit or generate revenue surplus thereafter	Eliminate revenue deficit and maintain a revenue surplus such that revenue surplus (as percent of GSDP) of the State shall be 0.5 percent , 0.8 percent, 1.2 percent, 1.7 percent, and 2.5 percent, in 2021-22, 2022-23, 2023-24, 2024-25, 2025-26, respectively.				
Fiscal Deficit (as percentage of GSDP)	Eligible for an additional borrowing of Rs. 1,471 crore as a onetime special dispensation in the financial year 2019-20 beyond the fiscal deficit limit of 3 percent of GSDP. The State can have a maximum fiscal deficit- GSDP limit of 5 percent for 2020-21, subject to conditions.	Fiscal deficit of the State shall be anchored to 3 percent of GSDP during 2021-22 to 2025-26 by maintaining a fiscal deficit (as percent of GSDP) not exceeding 4.5 percent, 4 percent, 3.5 percent, 3.5 percent and 3 percent in 2021-22, 2022-23, 2023-24, 2024-25, 2025-26, respectively, subject to conditions.				
Total Debt Liabilities to GSDP (per cent)	Reduce total debt liabilities to 30.4 percent in 2017-18, 30.01 percent 2018-19, and 29.67 percent in 2019-20 and 2020-21.	Reduce total debt liabilities (as percent of GSDP) of the State for the years 2021-22, 2022-23, 2023- 24, 2024-25, and 2025-26 to 34.7 percent , 34.5 percent, 33.7 percent, 32.8 percent, and 32 percent, respectively.				

Source: The Kerala Government Gazette, State Finances Audit Reports of the CAG from 2009-10 to 2021-22.

8. Extra Slides on Fiscal Variables

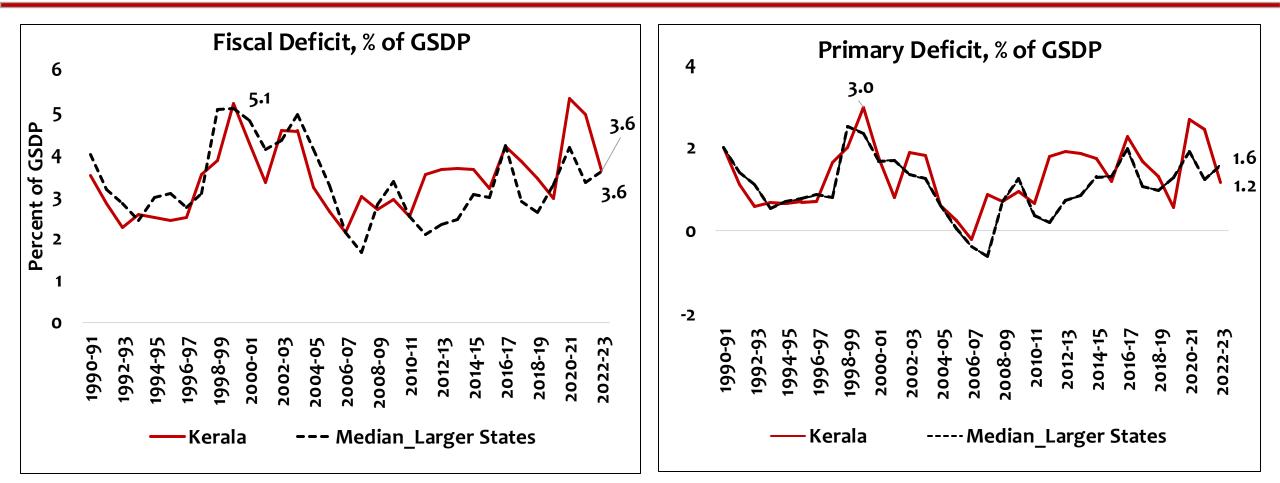
• Fiscal Data covers the fiscal period 1990-91 to 2022-23

Fiscal Indicators

(I) Benchmarked with respect to Median of Larger States

Note: In Section 5, the benchmark was defined as the median of all States. This variable was computed as a percentage of GSDP for each State, and the median was taken across 29 States (excluding all Union Territories).

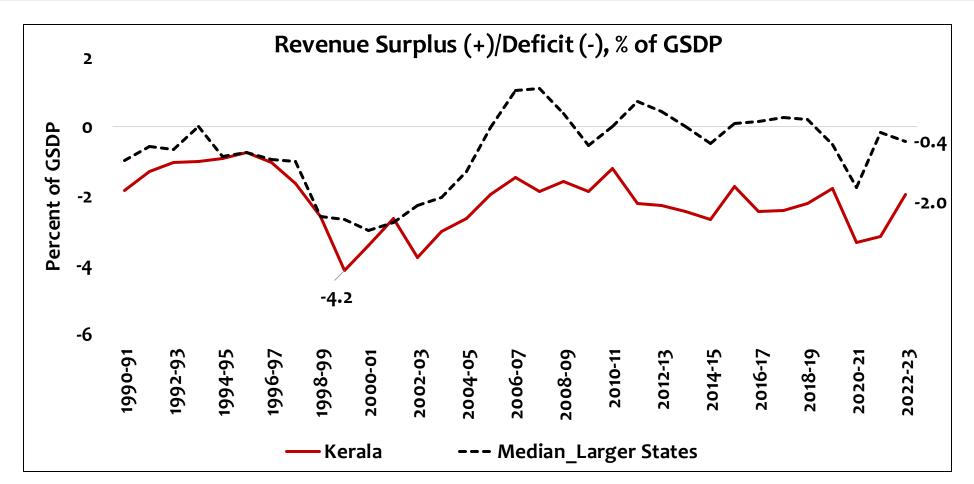
In contrast, the benchmark in this section refers to the median of larger States only. This variable was computed as a percentage of GSDP for each State, and the median was taken across 22 major States (Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand and West Bengal). In 2022-23, Kerala ran a Fiscal Deficit of 3.6 percent of its GSDP which was at par with that of a median State and a Primary Deficit of 1.2 percent of its GSDP which was 0.4 percentage points lower than that of a median State



Source: i. Fiscal Deficit (FD) is from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23).

Note: i. Primary Deficit (PD) is calculated as Fiscal Deficit minus Interest Payments. Interest Payments is sourced from RBI SFR; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

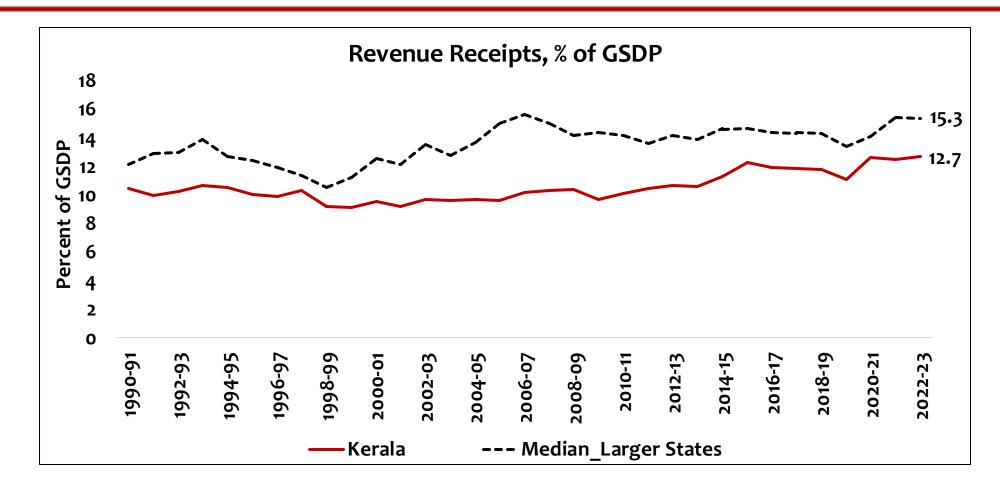
Kerala ran a Revenue Deficit of 2 percent of its GSDP in 2022-23, while a median State ran a Revenue Deficit of 0.4 percent of its GSDP



Source: i. Revenue Deficit - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

Note: The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

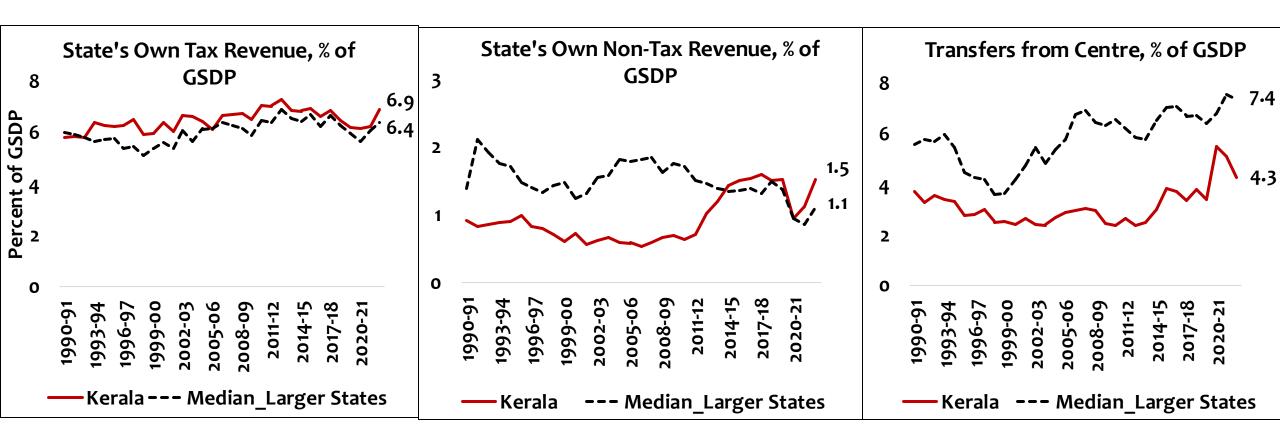
In 2022-23, Kerala's Total Revenue Receipts at 12.7 percent of its GSDP (Own Tax, Own Non-Tax, and shared by the Centre) were about 2.6 percentage points lower than what a median State collected



Source: i. Revenue Receipt - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

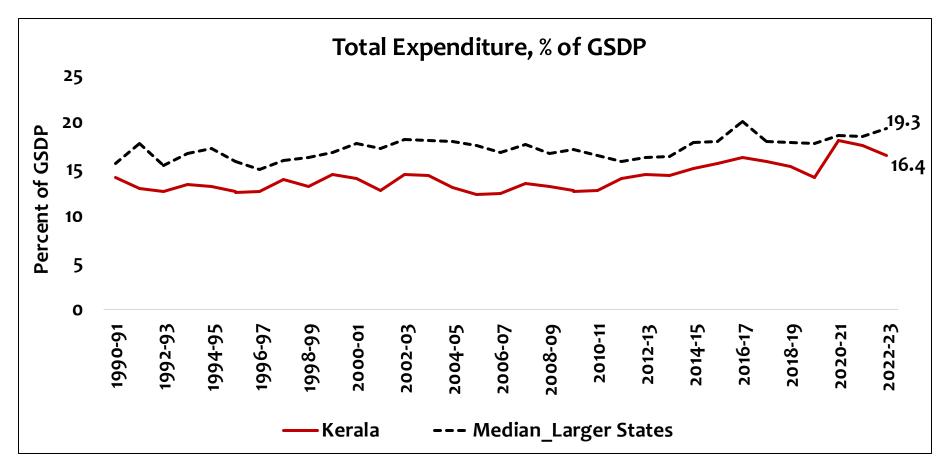
Note: The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

Kerala's Own Tax and Own Non-Tax Revenue at 6.9 and 1.5 percent of its GSDP respectively, were both higher than that of a median State. Transfers from Centre to Kerala at 4.3 percent of its GSDP, were 3.1 percentage points lower than that of a median State, and constitute 34 percent of its Revenue Receipts



Source: i. Own-Tax Revenue, Own Non-Tax Revenue, and Transfers from the Centre - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23). Note: i. The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded); ii. Transfers from the Centre include both Tax and Non-Tax transfers.

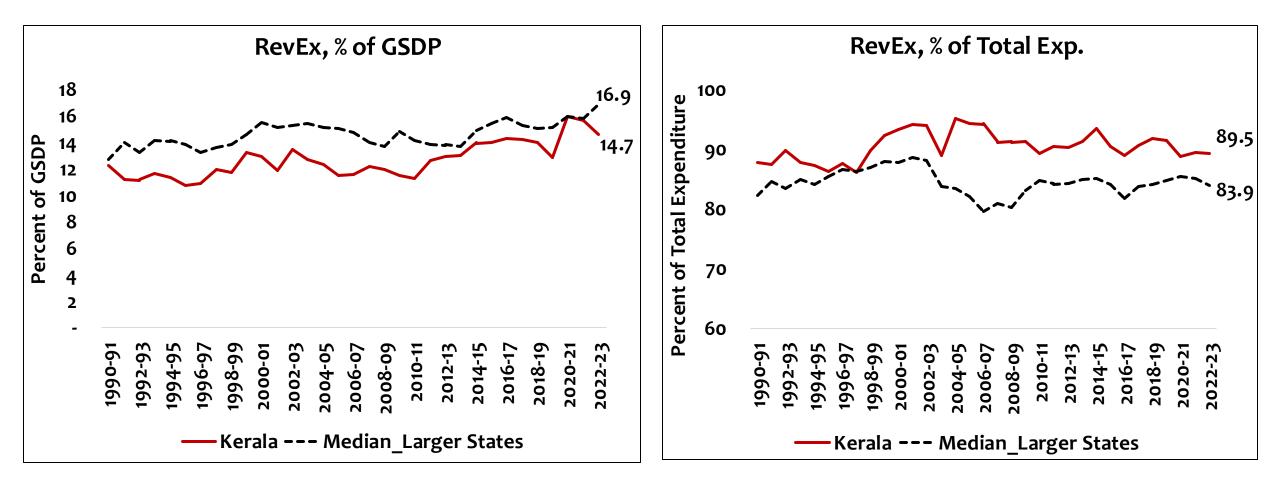
In 2022-23, Kerala's Expenditure at 16.4 percent of its GSDP was about 2.9 percentage points lower than that of a median State



Source: i. Total Expenditure - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

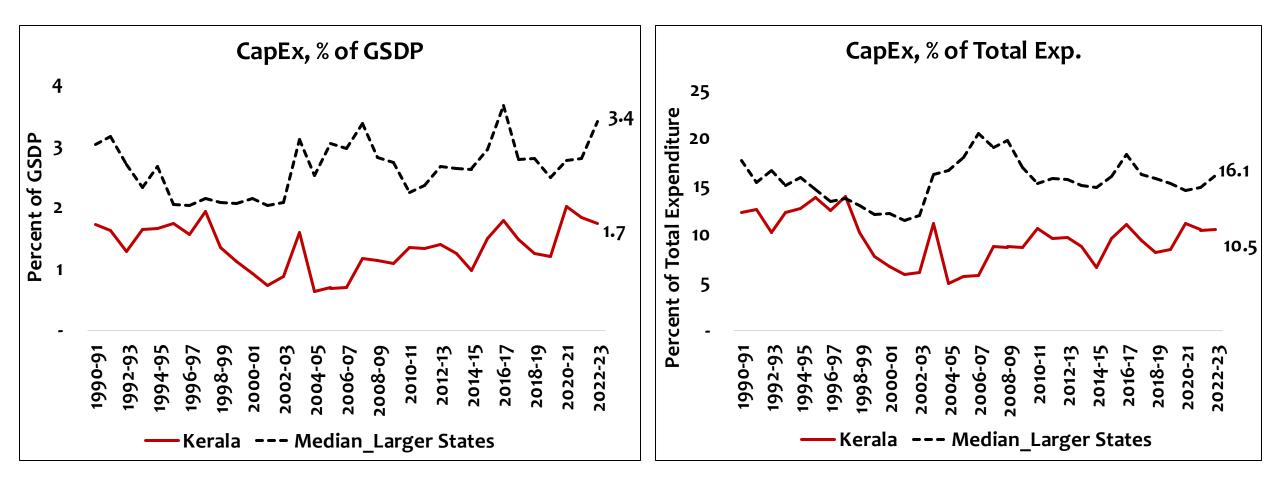
Kerala's RevEx at 14.7 percent of its GSDP, was about 2.2 percentage points lower than that of a median State. However, RevEx as percent of its Total Expenditure was 5.6 percentage points higher than that of a median State in 2022-23



Source: i. RevEx - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

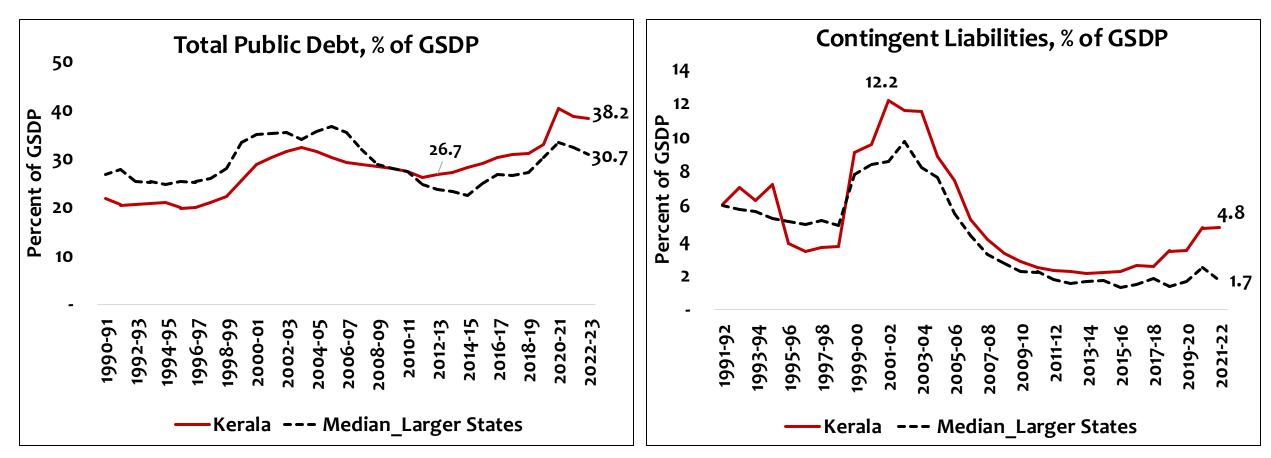
In 2022-23, Kerala's CapEx at 1.7 percent of its GSDP, was about half of what a median State spent on CapEx and as percentage of Total Expenditure it was 5.6 percentage points lower than what median State spent on CapEx



Source: i. CapEx is calculated as Capital Outlay plus Loans and Advances given by the State government and the data for both is taken from RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded). 103

Kerala's Public Debt has steadily increased since 2011-12, reaching 38.2 percent of its GSDP in 2022-23, which was 7.5 percentage points higher than of a median State. Its contingent liabilities have declined since 2001-02 but as of 2021-22 these were 3.1 percentage points higher than that of a median State



Source: i. Public Debt and State-wise contingent liabilities - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

Note: The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

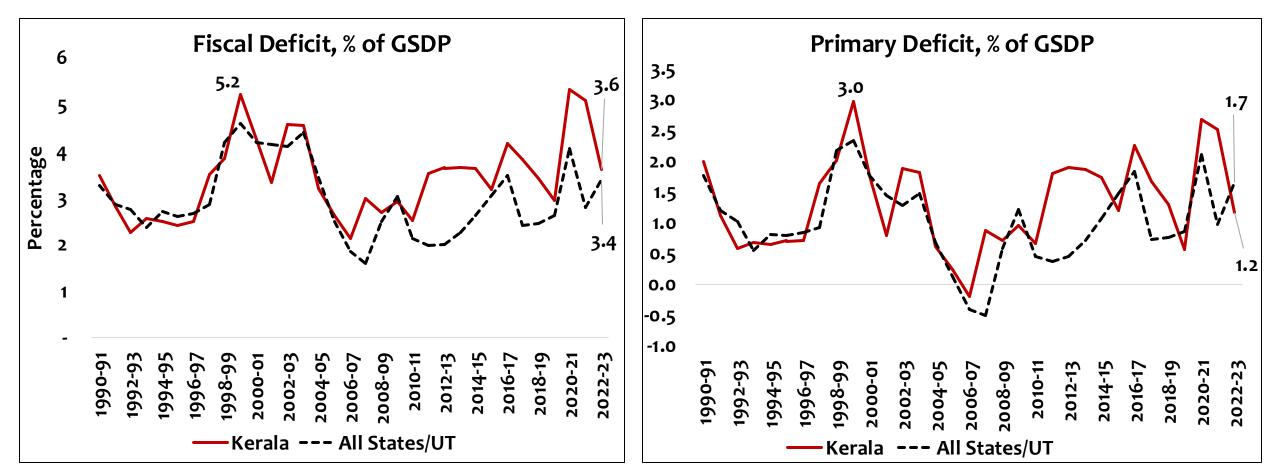
Fiscal Indicators

(II) Benchmarked with respect to All States/UTs

Note: In Section 5, the benchmark was defined as the median of all States. This variable was computed as a percentage of GSDP for each State, and the median was taken across 29 States (excluding all Union Territories).

In contrast, the benchmark in this section refers to the All States/UTs number, taken as available from the source and expressed as a percentage of national Gross Domestic Product.

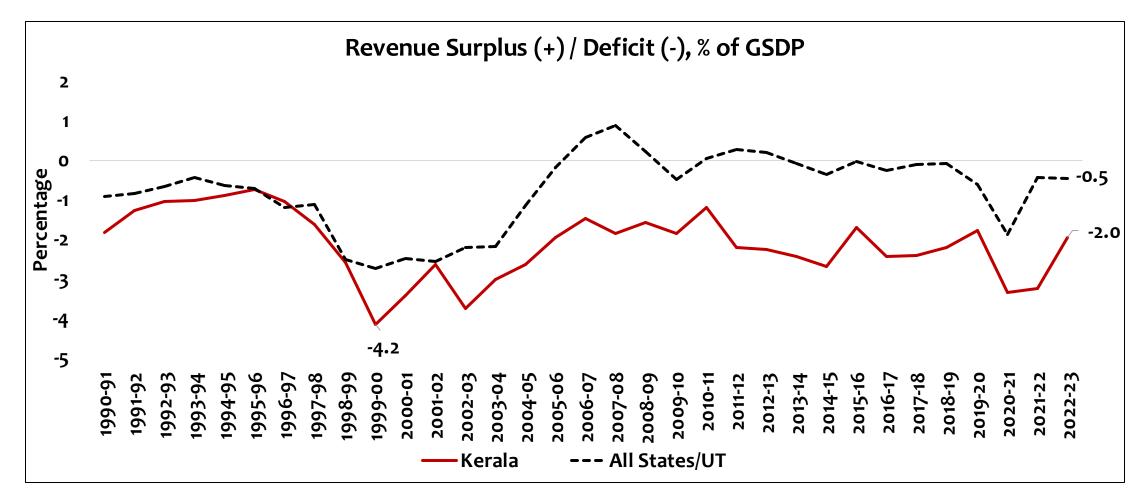
In 2022-23, Kerala ran a Fiscal Deficit of 3.6 percent of its GSDP which was higher than the average of all States. Its Primary Deficit at 1.2 percent of its GSDP was 0.5 percentage point lower than the average of all States in 202-23



Source: i. Fiscal Deficit is from RBI SFR (2022-23); ii. State GSDP and national GDP is from MoSPI.

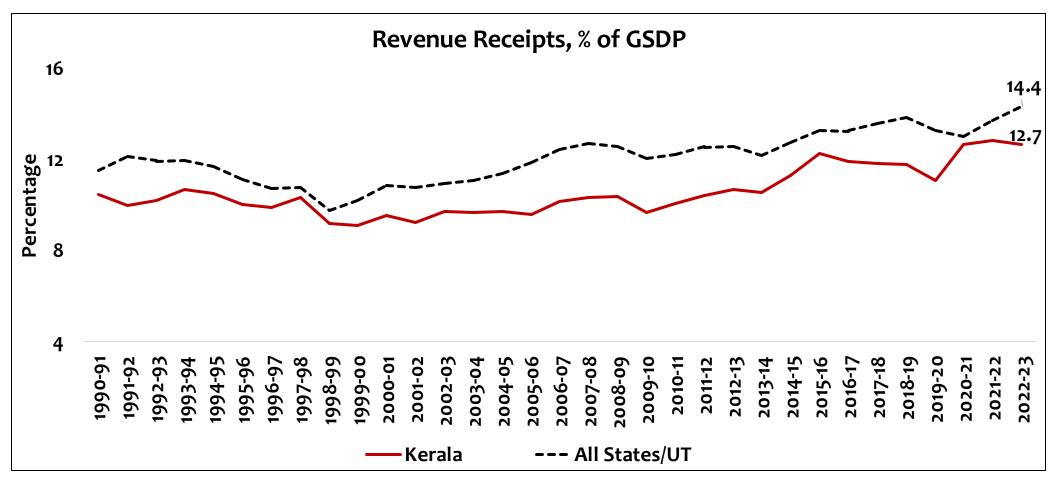
Note: i. Primary Deficit calculated as Fiscal Deficit minus Interest Payments. Interest Payments was sourced from RBI SFR; ii. All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

Kerala's Revenue Deficit at 2 percent of its GSDP was higher than the average revenue deficit of other States in 2022-23



Source: i. Revenue Deficit from RBI SFR (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23). Note: All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

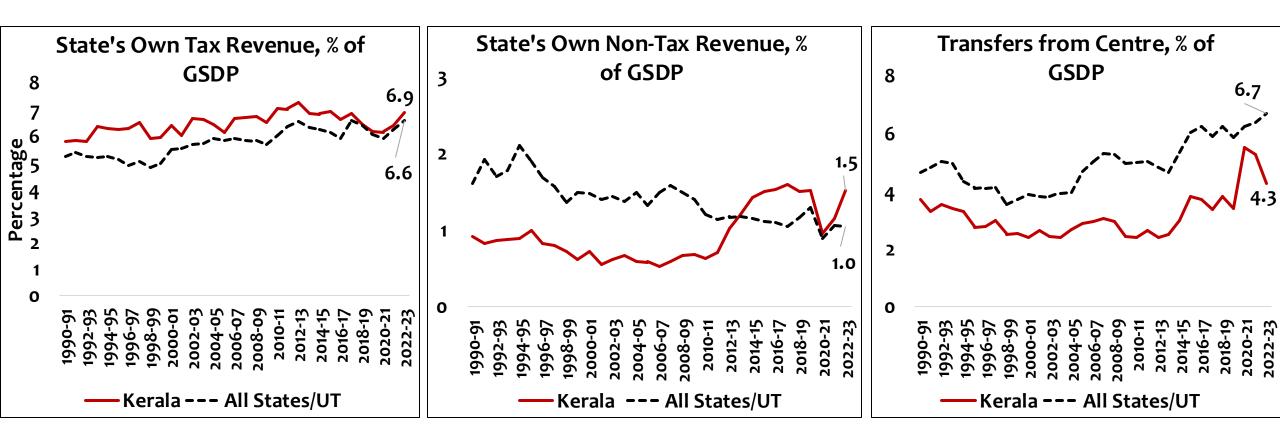
Kerala's Total Revenue Receipts (Own Tax, Own Non-Tax, and shared by the Centre) at 12.7 of its GSDP in 2022-23 were nearly 2 percentage points lower than what an average State collected



Source: i. Revenue Receipts from RBI State Finances Report (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23).

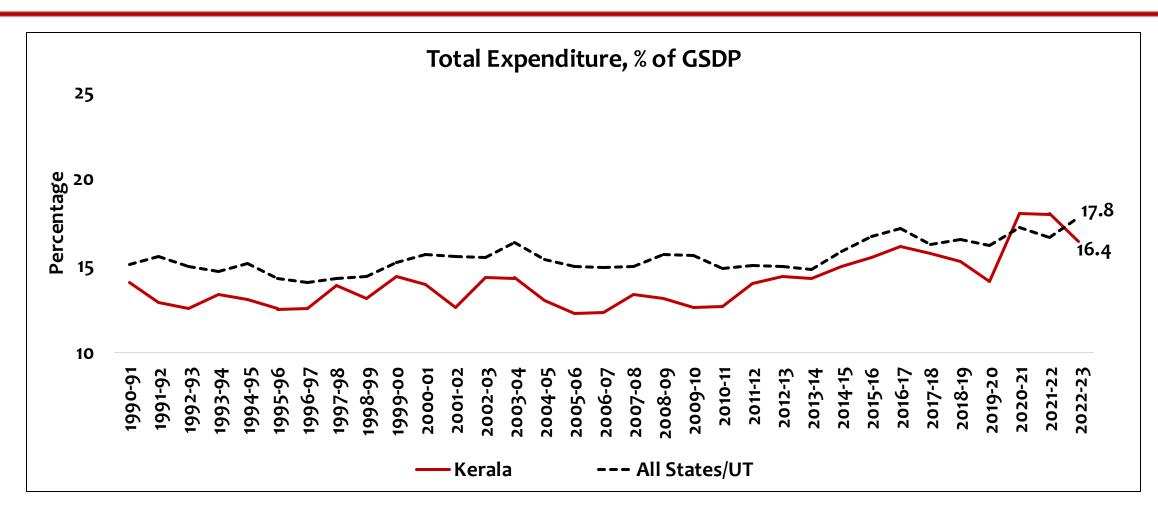
Note: All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

Kerala's Own Tax and Own Non-Tax Revenue at 6.9 and 1.5 percent of its GSDP respectively, were both marginally higher than that of an average State. Transfers from the Centre to Kerala at 4.3 percent of its GSDP, were lower than the average of other States, and constitute 34 percent of its Revenue Receipts

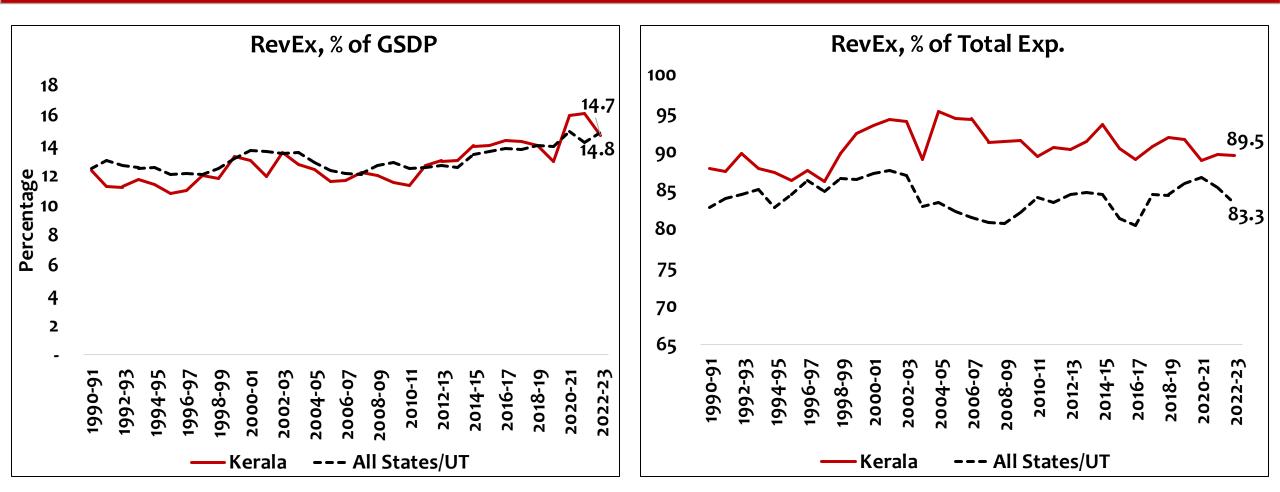


Source: i. Own Tax and Non-Tax Revenue, and Transfers from Centre from RBI SFR (2022-23); ii. The State GSDP and national GDP data is from MoSPI (2022-23). Note: i. Transfers from the Centre include both tax- and non-tax revenue transfers; ii. All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

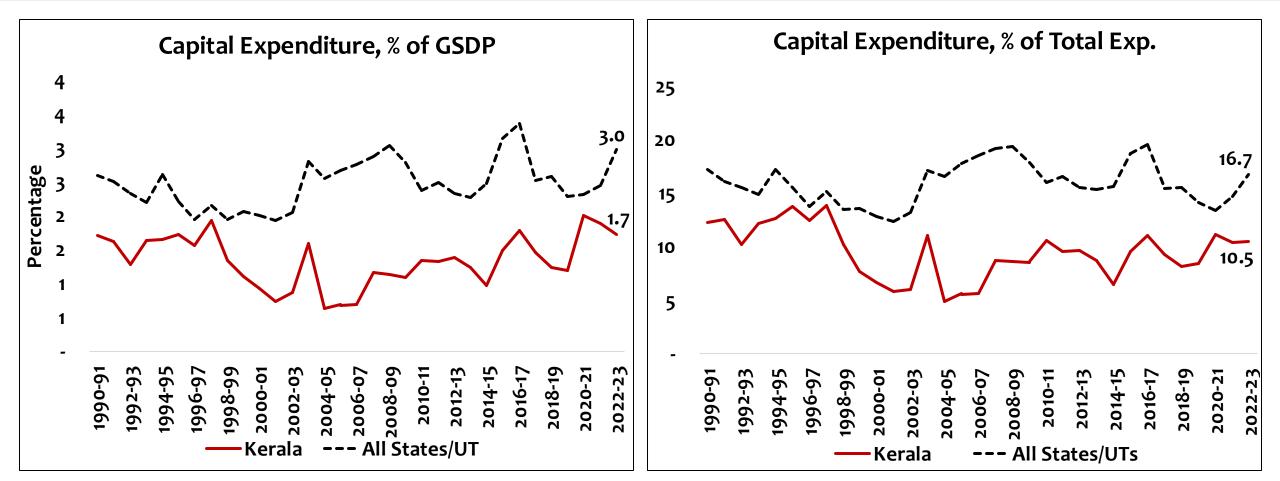
In 2022-23, Kerala's Expenditure at 16.4 percent of its GSDP, was about 1.4 percentage points lower than that of an average State



Source: i. Total Expenditure is from RBI SFR (2022-23); ii. The State GSDP and national GDP data is from MoSPI (2022-23). Note: i. The Total Expenditure is calculated as sum of revenue expenditure (RevEx) and capital expenditure (CapEx); ii. All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product. Kerala's RevEx at 14.7 percent of its GSDP, was at par with the States' average. However, RevEx as percent of its Total Expenditure was 6.2 percentage points higher than that of a median State in 2022-23



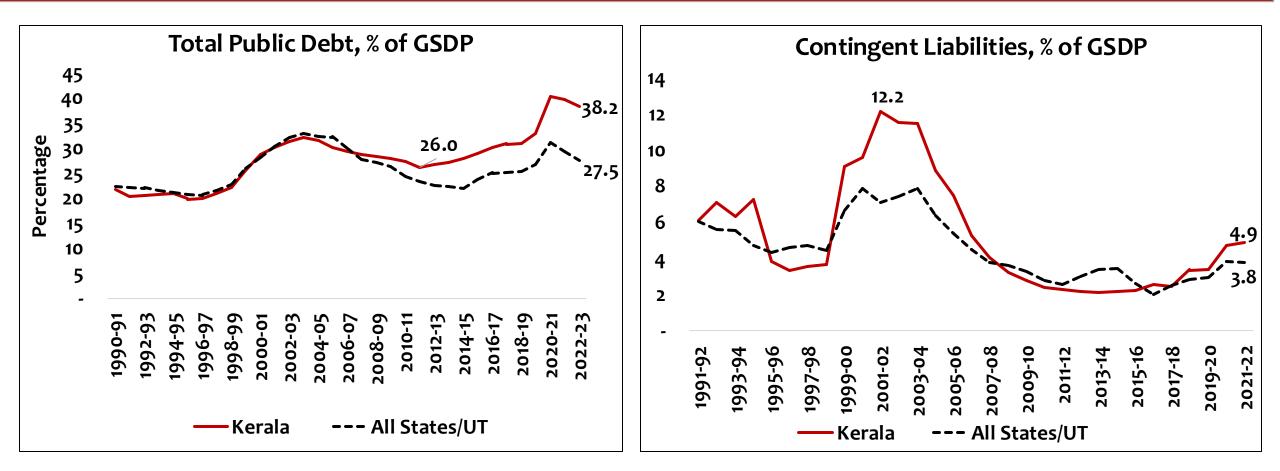
Source: i. Revenue Expenditure is from RBI SFR (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23). Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product. Kerala's CapEx at 1.7 percent of its GSDP, was about half of what an average State spends on CapEx in 2022-23 and as a share of total expenditure it was 6.2 percentage points lower than what an average State spends on CapEx in 2022-23



Source: i. CapEx is calculated as Capital Outlay + Loans and Advances given by the State government and the data for both is taken from RBI SFR (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx + CapEx; ii. All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

Kerala's Public Debt has steadily increased since 2011-12, reaching 38.2 percent of its GSDP in 2022-23, which was 10.7 percentage points higher than of a median State. Its contingent liabilities have declined since 2001-02 but as of 2021-22 these were 1.1 percentage points higher than that of a median State



Source: i. Public Debt and State-wise contingent liabilities data has been taken from RBI SFR (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23).

Note: All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

9. Annexure

Variable	Section	Definition
Dependency Ratio	Demography and Employment	The dependency ratio is the number of dependents—comprising children aged 0-14 years and older adults aged 60 years and above—per 100 individuals in the working-age population (15-59 years).
Sex Ratio	Demography and Employment	The Child Sex Ratio from Census is the number of females per 1,000 males in the age group of 0-6 years. The NFHS Sex Ratio at Birth is the number of female births per 1,000 male births for children born in the last five years preceding the survey.
Unemployment Rate	Demography and Employment	The unemployment rate measures the proportion of unemployed individuals within the labour force, aged 15 years and above, based on the Usual Status (PS+SS) approach. This method integrates data from both the Principal Status (PS) and Subsidiary Status (SS) across rural and urban areas.
Female Labour Force Participation Rate	Demography and Employment	The Female Labour Force Participation Rate (LFPR) refers to the percentage of females aged 15 years and above who are part of the labour force, either working or actively seeking/available for work, relative to the total female population in the same age group. It is measured using the Usual Status (PS+SS) approach, which combines data from the Principal Status (PS) and Subsidiary Status (SS) to account for both rural and urban areas.
Urbanization Rate	Demography and Employment	The urbanization rate is the annual percentage change in the proportion of the population that lives in urban areas.
SDG Index	Demography and Employment	The SDG Index calculates goal-specific scores for the 16 Sustainable Development Goals (SDGs) across 113 indicators set by MoSPI to combine into composite scores, ranging from 0 to 100 representing the overall performance of a State. The higher the score, the closer the State is to meeting the SDG targets.

Variable	Section	Definition
МРІ	Demography and Employment	The National Multidimensional Poverty Index (MPI) is calculated by multiplying the Headcount Ratio (proportion of multidimensionally poor people) and the Intensity of Poverty (the average percentage of deprivations experienced by poor individuals) across 12 indicators of health, education and living standards.
Inflation Rate	Economic Structure	The Inflation Rate is calculated as the annual growth rate of the Consumer Price Index (CPI), which has been calculated by averaging the monthly CPI values for each financial year.
GSDP	Economic Structure	Gross State Domestic Product (GSDP), at current market prices with 2011-12 as the base year, represents the total value of goods and services produced within a State. This series has been spliced with earlier GSDP series to generate the long time series.
GSVA	Economic Structure	Gross State Value Added (GSVA) is the sum of the value added by all sectors—agriculture, industry, and services—at current market prices with 2011-12 as the base year. This series has been spliced with earlier GSDP series to generate the long time series.
Decadal Average of Growth Rates	Economic Structure	The decadal average of growth rates is calculated using real variables to determine the shares of sectors. It represents the simple average of the annual growth rates over a ten-year period, from 2013-14 to 2022-23.
Foreign Direct Investment (FDI)	Trade	Investment through capital instruments by a resident outside India in an unlisted Indian company; or in 10 percent or more of the post-issue paid-up equity capital of a listed Indian company. Additionally, in case an existing investment by a resident outside India in capital instruments of a listed Indian company falls to a level below 10 percent, the investment shall continue to be treated as FDI.
Exports	Trade	Exports refer to transactions where goods are supplied with/without leaving the country, and payment for these supplies is received either in Indian rupees or in freely convertible foreign exchange.

Variable	Section	Definition
Pupil-Teacher Ratio	Socio-Economic Indicators (Education)	The Pupil-Teacher Ratio is the average number of students (pupils) per teacher in a school or educational institution.
Infant Mortality Rate	Socio-Economic Indicators (Health)	The probability of a child dying between birth and the first birthday, expressed per 1,000 live births.
Under-Five Mortality Rate	Socio-Economic Indicators (Health)	The probability of a child dying between birth and the fifth birthday, expressed per 1,000 live births.
Total Fertility Rate	Socio-Economic Indicators (Health)	The average number of children a woman is expected to have by the end of her childbearing years, assuming she experiences the current age-specific fertility rates throughout her reproductive life. Age- specific fertility rates are calculated based on the three years preceding the survey, using detailed birth histories provided by women.
Children Fully Immunized	Socio-Economic Indicators (Health)	Includes children aged 12-23 months who have received one dose of Bacillus Calmette Guerin (BCG) vaccine for tuberculosis, three doses of DPT vaccine for diphtheria, pertussis and tetanus, three doses for polio vaccine and one dose of measles vaccine at any time before the survey.
Under weight Children	Socio-Economic Indicators (Health)	Children under five years whose weight-for-age score is below minus two standard deviations from the median of the reference population are classified as underweight.
Stunting among Children	Socio-Economic Indicators (Health)	Children under age five years whose height-for-age score is below minus two standard deviations from the median of the reference population are considered short for their age (stunted).

Variable	Section	Definition
Anaemia among Children, Anaemia among Women	Socio-Economic Indicators (Health)	Children under five years and Women aged 15-49 years with haemoglobin levels below 11 grams/decilitre are considered anaemic.
Fiscal Deficit	Fiscal Indicators	Fiscal Deficit is calculated as the difference between the total expenditure and the total revenue (excluding borrowings).
Primary Deficit	Fiscal Indicators	Primary Deficit is calculated as the difference between fiscal deficit and interest payments.
Revenue Surplus (+)/Deficit (-)	Fiscal Indicators	Revenue Surplus/Deficit is a measure of the difference between the revenue receipts and revenue expenditure.
Total Revenue Receipts	Fiscal Indicators	Total Revenue Receipts is calculated as the sum of own tax revenue, own non-tax revenue and transfers from the centre.
Own Tax Revenue	Fiscal Indicators	Own Tax Revenue is the revenue collected by the government through taxes.
Own Non Tax Revenue	Fiscal Indicators	Own Non-Tax Revenue is the revenue collected by the government from non-tax sources like various services, fees, and penalties.
Revenue Expenditure	Fiscal Indicators	Revenue Expenditure refers to government spending that is incurred for the regular functioning of its departments and services, meeting its operational needs, and fulfilling its recurring liabilities.

Variable	Section	Definition
Transfers from the Centre	Fiscal Indicators	Transfers from the Centre refer to central taxes and grants devolved to States as untied funds for States to spend according to their discretion, under the recommendations of the Finance Commission.
Capital Expenditure	Fiscal Indicators	Capital Expenditure refers to government spending on creating physical and financial assets or reducing its liabilities.
Total Public Debt	Fiscal Indicators	Public debt include borrowings and other financial commitments arising from past fiscal operations that are yet to be repaid at a given point in time.
Contingent Liabilities	Fiscal Indicators	Contingent Liabilities are the commitments made by State governments to repay loans or other liabilities incurred by entities such as public sector undertakings (PSUs), corporations, local bodies, or other organizations if they fail to meet their debt obligations.
Off-Budget Borrowings	Fiscal Indicators	Off-Budget Borrowings involve the government taking on debt through entities, public sector undertakings (PSUs), or other off-budget mechanisms, rather than directly from the government's own borrowing channels that are not included in the official government budget.
Health Expenditure	Fiscal Indicators	Health Expenditure is calculated as the sum of Medical, Public Health, and Family Welfare expenditure.
Subsidies	Fiscal Indicators	Subsidies are financial assistance provided by the government to individuals, businesses, or sectors to support the production, consumption, or pricing of specific goods and services.
Buoyancy of Revenue Expenditure with GSDP	Fiscal Indicators	The Buoyancy of Revenue Expenditure is calculated as the ratio between the year-on-year growth rate of Revenue Expenditure and that of GSDP.
Committed Expenditure	Fiscal Indicators	Committed Expenditure is calculated as the sum of Wages, Salaries, and Pensions.

List of Acronyms

- AISHE All India Survey on Higher Education
- AT&C Aggregate Technical & Commercial
- BSR Basic Statistical Returns
- CAG Comptroller and Auditor General
- CapEx
 Capital Expenditure
- CHIPS Connect, Harness, Innovate, Protect and Sustain
- DGFT Directorate General of Foreign Trade
- **DISCOMS** Distribution Utilities/Companies
- EPWRF Economic and Political Weekly Research Foundation
- FC Finance Commission
- FLPR Female Labour Participation Rate
- FRA Fiscal Responsibility Act
- FRBM Fiscal Responsibility and Budget Management Act
- GPI Gender Parity Index
- GSDP Gross State Domestic Product
- GDP Gross Domestic Product
- GSVA Gross State Value Added
- GVA Gross Value Added

List of Acronyms

- MoSPI Ministry of Statistical Programme and Implementation
- MPI Multidimensional Poverty Index
- MTFP Medium Term Fiscal Policy
- NFHS National Family Health Survey
- **PFC** Power Finance Corporation
- PLFS Periodic Labour Force Survey
- RBI Reserve Bank of India
- RevEx Revenue Expenditure
- SDG Sustainable Development Goal
- SFR State Finances Report
- SPSE State Public Sector Enterprises
- SRS Sample Registration System
- SC Scheduled Caste
- ST Scheduled Tribe
- UDAY Ujwal DISCOM Assurance Yojana
- U-DISE Unified District Information System for Education

Selected Research Topics

STATE REPORTS
DATA REPOSITORY
NCAER-NITI AAYOG State FISCAL AND ECONOMIC DASHBOARD
Research & Commentary
• Paper
• Op-eds
Presentations

This a product of the NCAER-NITI States' Economic Forum. Prepared under the team led by Dr Poonam Gupta and Dr Anil Sharma, comprising of Dr Arjita Chandna, Dr Janani Rangan, Dr Jayanta Talukder, Ayesha Ahmed, S Priyadarshini, Aakansha Atal, Aliva Smruti, Shubhashree Jha, Sneha Jyoti Kundu and Rochelle Prakash; Product Design by Devanshi Mankotia; Co-ordination by Pooja Singh; IT Support by Praveen Sachdeva; Webpage by Mesmer Studios and Tableau Dashboards by Uneecops Business Solutions. Comments are welcome at stateseconforum@ncaer.org.



