

Evaluation of State Finances of Goa

2012-13 to 2022-23

Report submitted to the
Sixteenth Finance Commission
Government of India

By

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Executive Summary

Goa, the smallest state in terms of area, located on the west coast of India, has a geographical area of approximately 3,702 sq km and has a coastline of 131 km. The population of Goa forms 0.12 percent of India's population and it has increased from 14.58 lakh to 15.71 lakh in 2023 recording a decadal growth rate of 6.42 percent. The GSDP at market price increased from Rs 42,36,666 lakh in 2011-12 to Rs 89,12,974 lakh in 2022-23. In the same period, the per capita GSDP of the state increased from Rs 2, 89,192 to Rs 5,67,344, which was significantly higher than the all-India per capita income of Rs 71,609 and Rs 1,94,879 in 2011-12 and 2022-23, respectively. While the per capita income is significantly higher than the all-India per capita income, the compound annual growth rate of GSDP at market prices during the period was rather modest at 8.8 percent per annum. The state of the fiscal health of the state has to be assessed in this context that Goa's economy is high consumption economy with significant leakages from the state economy which has a rather limited manufacturing base.

Revenue receipts

The revenue receipts as a percentage to GSDP had attained a peak in 2013-14 (17.9 percent), which remained at around 15 to 16 percent of GSDP from 2015-16 to 2019-20, and then the it declined to 14.08 percent in 2019-20 and rose thereafter. A strong rebound reflects efforts in effecting economic recovery resulting in buoyant revenues. Tax Revenue (TR) grew significantly in 2013-14 (19.21 percent), 2015-16 (22.99 percent), and 2021-22 (42.11 percent) post-pandemic. The tax-to-GSDP ratio increased significantly from 9.7 per cent in 2012-13 to 12.3 per cent in 2013-14, from a substantial decline in the tax-GSDP ratio in 2020-21 to 8.7 per cent, which is followed by a sharp increase to 12.8 percent in 2022-23. Own Tax Revenue (OTR) has been the highest contributor (70 percent to 80 percent) compared to the state's share in Union taxes/duties. During 2022-23, major contributors of tax revenue were SGST (45 percent), taxes on sales, trades, etc. (24 per cent) and stamp duty and registration fees (13 percent). The total GST as a proportion to GSDP increased steadily over the years from 2.99 per cent (2017-18) to 5.13 per cent (2022-23). A drastic fall in the contribution from 'Taxes on Commodities and Services' in the post-GST period is observed. The GoI released GST compensation of Rs. 47,600 lakh in 2018-19 that went up to Rs 1,53,070 lakh in the form of grants-in-aid. A steady contributor towards OTR is State Excise. The revenue has shown a general increase to 12.40 percent in 2020-21. Among all the components of OTR, only SGST had a very high buoyancy coefficient of 2.83, followed by State Excise duties with a coefficient of 1.44. In sharp contrast, the Sales Tax, Taxes on Goods and Passengers, Other Taxes

on Duties and Commodities had negative coefficients indicating fall in collection while the GSDP grew.

The NTR as a percentage of GSDP began at 4.80 percent in 2012-13 and reached its highest point of 4.86 percent in 2014-15. Economic Services dominate Non Tax Revenue, contributing between 2.81 percent and 4.07 percent of GSDP. General Services show an increasing trend, growing from 0.27 percent in 2017-18 to 0.52 percent in 2022-23, indicating improvements in revenue collection from administrative charges and fees. Dividends and Profits remain negligible, contributing only 0.001 percent to 0.005 percent of GSDP. Interest Receipts are minimal, fluctuating between 0.03 percent and 0.11 percent of GSDP.

Expenditure

Revenue expenditure (RE) constitutes the bulk of the total expenditure for Goa. Since 2020-21 the percentage share of revenue expenditure to total expenditure (TE) witnessed a declining trend and the percentage share of capital outlay (CO) showed an increasing trend. The growth rates have been quite volatile especially for CO. In 2012-13 and 2019-20, CO witnessed negative growth rates of (-20.4) per cent and (-22.7) per cent respectively. Though the CAGR of CO during 2012-13 to 2022-23 was higher as compared to the RE which is an encouraging fact however the CAGR of CO was higher in 2012-13 to 2016-17 (14.84) as compared to 2017-18 to 2022-23 (10.34). A concerning fact is that the CAGR was the highest for total general services at 11.48 from 2012-13 to 2022-23 as compared to social and economic services. General services (revenue) as a per cent of TE have shown an increasing trend since 2016-17 and have surpassed the share of economic services (revenue) as a percentage of total expenditures. In fact in 2022-23, general services (revenue) were equal to the share of social services (revenue) as a percentage of total expenditure. This can explain as to why the development to non- development expenditure ratio which peaked at 2.74 in 2015-16, has been on a decline ever since. In terms of general services, on an average pension & miscellaneous services comprised of around 10.79 per cent and interest payments & debt servicing comprised of around 13.02 per cent of revenue expenditure during 2012-13 to 2022-23. Pension payments as a percentage of revenue expenditure overtook interest payments & servicing of debt from 2021-22 onwards. Expenditure on education, sports, art and culture forms the major component of expenditure under social services (revenue) with an average of 16.79 per cent during 2012-13 to 2022-23. Similarly, under economic services, energy comprises of the major component as a percentage of revenue expenditure

at 17.66 per cent on an average. A positive trend has been that social services (capital) as a per cent of TE increased from 2.67 per cent in 2012-13 to 4.92 per cent in 2022-23. Under social services on the capital account, water supply, sanitation housing and urban development comprised of the major component. Since 2016-17 onwards, it has always been above 14 per cent of capital expenditure and peaked at 21 per cent during 2017-18, 2020-21 and 2021-22. Transport comprised of the major component of economic services (capital). On an average transport comprised of 20.83 per cent of capital expenditure during 2012-13 to 2022-23. The buoyancy coefficient for general services is 1.54, which signifies strong responsiveness to economic growth.

Analysis of deficits – fiscal and revenue

The state has had a fluctuating trend in Revenue Deficit (RD) during the period under study. The Revenue account turned into a surplus in 2021-22 which witnessed a sudden rise in 2022-23. This is reflected in the compression of the Fiscal Deficit (FD) significantly from 3.23 percent to 1.15 percent in terms of GSDP and therefore only a marginal rise in capital outlay from 3.30 to 3.84 in terms of GSDP during the same period. In the Post-COVID year 2020-21, the RD turned into 2.23 percent of GSDP. This was only to be expected which also pushed the FD from 2.66 up to 4.90 while maintaining the CO at a stable level. In the past, in 2012-13 and in 2013-14, the FD went up beyond 3 percent of GSDP as the deficit in the revenue account emerged after recording a surplus in 2011-12. So a rise in revenue deficit raises fiscal deficit, and an emergence of surplus in the revenue account compresses fiscal deficit while the CO is being maintained at a steady level.

Level of debt to GSDP ratio

The reliance on Internal Debt for financing fiscal deficit was heavy in 2012-13 and in 2013-14, which was 2.78 percent and 2.34 percent in terms of GSDP respectively. The reliance on the other two sources, loans from the Centre and Withdrawal from small savings and provident fund (PF) continued to remain low throughout the period under study. Loans from the Centre turned, in fact, negative during 2017-18 to 2019-20. The state repaid to the Centre more than the Centre borrowed. Withdrawal from public accounts and utilization of cash balances do not reveal any definite trend over the years with the magnitudes changing sign arising out state's exigencies.

The total outstanding debt in terms of GSDP increased from 19.68 percent in 2011-12 to 30.47 in 2022-23, a rise by nearly 10 percentage points. In terms of component wise growth, the Internal Debt grew from 14.7 percent to 23.8 percent while loans and advances from Centre grew from 1.5 percent to 3.9 percent. The sum of these two components, the total public debt rose from 16.2 percent to 27.6 percent. The share of Small savings and PF fell from 3.46 percent of GSDP to 2.74 percent.

We observe that the effective rate of interest on debt outstanding declined from 9.29 to 7.36 percent during the period under study. Interest payment as a share in revenue receipts declined during the period from 12.72 to 10.97 percent. The buoyancy in revenue is responsible for this. Repayment of loans went up from 7.39 percent to 10.16 percent during the period. This is good because it reins in debt build up. A comfortable fiscal position has helped the state of Goa to resort to higher repayment of loans. The maturity profile in terms of the period of market loans and the effective rate of interest have gone up recently.

Medium Term Fiscal Plan

Goa did not have any annual Medium Term Fiscal Plan (MTFP) since 2011-12 to 2022-23. However, MTFP has been prepared for Goa for the year 2023-24. Goa was not able to attain the GFRBM targets of zero revenue deficit in the years 2012-13, 2013-14, 2019-20 and 2020-21 which can mainly be attributed to the mining ban in 2012 and in 2018, as well as the slump in tourism and outbreak of COVID in 2020-2021. Despite these major challenges to the economy, the government managed to have a huge revenue surplus of Rs. 239920 lakhs in 2022-23. Goa was not able to attain the GFRBM target of 3 per cent of fiscal deficit in the years 2012-13 and 2013-14. In 2020-21, though Goa's fiscal deficit jumped to 4.92 per cent of GSDP, it was still within the revised GFRBM target of 5 per cent. In terms of outstanding debt, Goa was not able to achieve the GFRBM target of total outstanding debt of less than 25 per cent of GSDP from 2019-20 to 2022-23. Since 2020-21 onwards the outstanding debt as a percentage of GSDP has been above 30 per cent. Interest payments as a percentage of revenue receipts have been below 16 per cent from 2012-13 to 2022-23 which is well within the specified limit of 20 percent. Most of the interest payments were undertaken on market loans. Outstanding guarantees have been well within the specified limit of Rs. 800 crores from 2012-13 to 2014-15 and within the revised limit of Rs.1500 crore for the years 2015-16 to 2022-23. In 2022-23, the state guarantee redemption fund could cover 99 per cent of the guaranteed amount. Hence, since 2021-22 Goa had achieved all the FRBM targets for its various fiscal indicators except for the outstanding debt.

State's transfers to urban and rural local bodies

From 2020 onwards there was a drastic increase in the total grants received by the Village Panchayats (VPs) while there was a moderate increase in the own income and other income of the Village Panchayats. The total expenditure by the VPs increased from 2012-13 to 2021-22, which exceeded even 200 percent growth, with expenditure on public works being the highest. The total income of Village Panchayats has grown significantly from Rs 7,216 lakhs in 2012-13 to Rs 38,360 lakhs in 2021-22, indicating a strong upward trend. VPs generated surpluses in most years with property/House Tax being the largest contributor to the own source of revenue. . With the introduction of the GST in the year 2017, many of the revenue sources of the local bodies like Octroi, taxes on entertainment, etc., got subsumed in the GST.

The Third State Finance Commission recommended budget provision of Rs 50 crore per year with an annual increment of the ten percent every year to compensate the local bodies in lieu of revenue forgone due to implementation of GST. 49.12 percent of non-tax revenue was from fees, fines, and miscellaneous receipts account, showing consistent dominance. Different various grants under Grants-in-aid from the state government have increased while, expenditure on categories/schemes were lower than the amount released. Both tied grants and untied grants under the 15th Finance Commission increased and full amount was disbursed to the VPs. Receipts of Municipal Corporation/Councils grew from Rs 13,937 lakh in 2012-13 to Rs 22,719 lakh in 2021-22. Expenditure followed a similar upward trend, increasing from Rs 10,974 lakhs in 2012-13 to Rs 21,698 lakhs in 2021-22. A surplus was maintained in most of the years. Municipal rates and taxes declined due to inclusion of Octroi in GST. The income of the ULBs from receipts witnessed a rise since 2012 but the increase was rather unstable. The major contribution to the income from receipts is from 'other fees and revenue'. Government Grants represent the largest component of the inflows of finance in the income from other sources of the MCs. There has been low fund utilization despite high allocations under the state grants to the ULBs. The City Corporation of Panaji and other MCs, grants for Solid Waste Management, compensation in lieu of Octroi, Smart City Mission showed underutilisation of funds. In case of the 15th Finance Commission Grants to the ULBs, there was an increase in allocation of funds to the ULBs under tied and untied grants of the 15th Finance Commission grants which was fully allocated to the various MCs.

Public Sector Enterprises (PSEs)

The ratio of PSEs' turnover to GSDP and the ratio of PSEs total revenue to GSDP were high in the initial years, but subsequently declined. The Goa State Infrastructure Development Corporation Limited (GSIDCL) had highest of both the ratios and contributed more towards GSDP. State Government provides financial support to the State PSEs in the form of equity, loans and grants/subsidy from time to time. Nine PSE's received equity support from the central government as well. For profitability ratios, Economic Development Corporation of Goa, Daman & Diu (EDC) had positive Return on Capital Employed (RoCE) for all the years ranging from 9 percent to 18 percent, followed by Goa State Schedule Tribes Finance and Development Corporation Limited (GSSTFDCL), Goa State Scheduled Caste and Other Backward Classes Finance and Development Corporation Limited (GSSCOBCFDCL), Info Tech Corporation of Goa Limited (ITCGL). PSEs like EDC, GSSTFDCL, Goa Tourism Development Corporation Limited (GTDCL) and Goa Industrial Development Corporation (GIDC) relied on their own finances-equity capital and reserves. The Kadamba Transport Corporation Ltd (KTCL) had the highest amount of accumulated losses followed by Goa Antibiotics and Pharmaceuticals Limited (GAPL), GIDC, ITCGL, Goa Handicraft, Rural and Small Scale Industries Development Corporation Limited (GHRSSIDCL), Goa State Horticultural Corporation Limited (GSHCL) and Goa Information Technology Development Corporation (GITDC). The net worth of KTCL, GIDC and GAPL are negative as it suffered complete erosion by the accumulated losses. However, it is necessary to note that Goa has a long dependence on Kadamba Transport (KTCL) along with private transport providers.

Power Sector Reforms and States' fiscal health

Goa's power consumption is driven by its residential, industrial, and tourism sectors, with tourism playing a significant role in demand fluctuations. The state has achieved nearly 100 percent electrification, per capita electricity consumption rose from 2045 kWh in 2012-13 to 3137 kWh in 2020-21, indicating a significant growth in energy demand and consumption, well-developed infrastructure and urbanized population. There was an overall upward trend in energy purchases, with a few dips (e.g., in 2013-14 and 2020-21). Energy sold had an increasing trend, starting at 2925.24 MW in 2012-13 and reaching 4019.40 MW in 2021-22. The energy purchased were consistently higher than energy sold, though the gap has narrowed in the recent years. Central sector power generating stations, allocates two types of power allocations: firm allocation and unallocated capacity. The revenue collected by the Electricity Department from 2019-20 to 2023-24 demonstrated an increase in income.

Expenditure on power consistently increased from Rs. 157,344.32 lakh in 2016-17 to Rs. 274,414.48 lakh in 2022-23. The Goa Energy Development Agency promotes Renewable Energy activities through its approved schemes. Reforms in the energy sector consist mainly of introduction of various schemes to support non-conventional energy resource generation with special focus on solar energy. This necessitates separate financial allocation to the energy sector and necessitates increased expenditure on energy under conventional and non-conventional energy.

Contingent liability

For the period, 2012-13 to 2020-21, the contingent liability of the state in terms of GDP, rose from a mere 0.32 percent to 1.30 percent. For the corporation and the cooperatives, the share of corporations was high at 84.3 percent and the remaining was accounted for by the cooperatives. The high share of corporations increased further from 84.3 percent to 99.7 percent by the end of the period under study, ie, 2020-21. There was a change in the classification since 2021-22. It was classified into two major components: Urban Development and Housing and other infrastructure. For the year, 2022-23, there was a fall in the contingent liability from 0.82 percent to 0.45 percent in terms of GSDP. The contingent liability has remained well within the limit as per the Goa State Guarantees (Fifth Amendment) Act, 2015 which raised the limit from Rs. 800 crores to Rs. 1500 crores.

Subsidies

On an average from 2012-13 to 2022-23, subsidies were around 0.38 per cent of GSDP and around 2.4 per cent of revenue expenditure. Subsidies both as a per cent of GSDP and as a percentage of revenue expenditure were marginally lower in the later period of the study. Average growth rate of subsidies declined substantially in the later period of the study to 3.27 per cent (2016-17 to 2022-23) as compared to 24.27 per cent in 2012-13 to 2015-16. On an average, subsidies to economic services comprised of 2.18 per cent of revenue expenditure and subsidies to social and general services comprised of 0.03 per cent and 0.19 per cent of revenue expenditure respectively during 2012-13 to 2022-23. The subsidies to general services increased from Rs 7.3 crore in 2013-14 to a peak of 38.1 crore in 2017-18 after which it began to decline. During 2020-22 there were no subsidies granted under general services. The share of social welfare and nutrition to social sector subsidies dropped from 91 per cent in 2012-13 to 39 per cent in 2019-20 and the share of subsidies on education, sports, art and culture increased from 9 per cent to 61 per cent. However in 2020-21, due to Covid outbreak in India, subsidies on social welfare and nutrition increased to 95

per cent and subsidies to education sports, art and culture dropped to 3 per cent. In 2021-22 there were zero subsidies for education. Agriculture and allied activities and road transport receive the major share of the subsidies under economic services. The share of agricultural subsidies began to decline over the period of the study and share of road transport began to rise. Industry and mines which comprised of 1.75 per cent of economic subsidies in 2012-13 peaked to close to 5 per cent of subsidies to economic services from 2021 onwards.

Outcome Evaluation of State Finances in the context of recommendations of the 14th and 15th FC

Because of the higher share of the states in the tax devolution formula, the central ministries cut-down on their allocations on various schemes. For the Centrally Sponsored Plan Schemes that were implemented under different sectors, the data reveals that grants received for Infrastructure has gone up significantly, followed by Health, Women & Child development, though this sector experienced variability in fund allocation. The state has been allocating a large proportion of its funds on the variety of schemes across multiple sectors in comparison to the Centre. For budget provision and actual expenditures made on the central schemes (Centrally Sponsored Schemes and Central Schemes) by both the Central and the State Government from 2012-13 to 2022-23, there was underutilization of funds. In 2012-13, the state's expenditure towards state's schemes (SS) was 97.94 percent, towards central schemes (CS) was 1.62 percent, while the Centre's expenditure towards central schemes was only 0.44 percent. Considering the fact that the states are expected to spend more on the central schemes we find that there was a proportionate rise in the state's expenditure on central schemes and a proportionate decline of the state expenditures on the state schemes.

Roadmap

The roadmap for the period 2023-24 to 2030-31 of the state of fiscal affairs of the state of Goa looks good if the present fiscal situation is sustained. To project revenue and expenditure (net of interest payments), we have used a combination of assumptions regarding the expected growth rate of some of the taxes as gleaned from the MTFP and on the basis of past trends. The interest payment is projected on the basis of the debt accumulated at the beginning of the financial year multiplied by the expected effective interest payment of 7 per cent per annum. It may seem to be a little on the higher side. The broad trends of the major fiscal variables can be expressed in terms of GSDP. The revenue receipts rise from 24.1 percent in 2025-26 to 25.0 percent in 2030-31 while revenue

expenditure remains almost stable, rising marginally from 22.5 to 22.8 percent during the same period. Capital outlay is maintained at the level of 6.0 percent GSDP by letting it grow at 10 percent which is similar to the rate of growth of GSDP. Fiscal deficit declines from 4.2 percent to 3.7 percent by the end of 2030-31, as there remain surpluses in the revenue account with the primary deficit falling from 2.1 percent to 1.4 percent during the same period. As a result debt to GSDP ratio rises from 32.8 percent to 35.8 percent by the end of 2030-31. The GSDP has been assumed to grow at 10 percent per annum.

Chapter 1 State Profile of Goa: 2012-13 to 2022-23

1.1 Introduction

Goa, the smallest state in terms of area, located on the west coast of India, has a geographical area of approximately 3,702 sq km, with 1,736 sq. km in the north and 1,966 sq. km in the south. As per 2011 Census, population of Goa forms 0.12% of India's population and it has increased from 14.58 lakh to 15.71 lakh in 2023 recording a decadal growth rate of 6.42 percent (GoG, 2024d). The density of population for Goa of 394 per sq. km was above the national average at 382 in 2011 and rose to 425 persons per sq.km as against the all India average of 422 in 2023. Population below poverty line in Goa was 5.09 percent as compared to 21.92 per cent in India (CAG, 2023). The table below shows the key socio-demographic variables based on the population census data.

Table 1.1: Key Indicators of Goa

Description	1981	1991	2001	2011	Sparkline
Population (in lakhs)	10.08	11.69	13.48	14.57	
The density of population (persons per sq. km)	272	316	364	394	
Urban population to total population (%)	32.03	41.01	49.76	62.17	
Rural population to total population (%)	67.97	58.99	50.24	37.83	
Sex ratio (females per 1000 males)	975	967	961	968	
Decadal Growth rate of population (%)	26.74	16.08	15.21	8.17	
Literacy Rate total (%)	63.6	75.51	82.01	87.4	
Male Literacy Rate (%)	73.36	85.48	88.42	92.81	
Female Literacy Rate (%)	53.61	68.2	75.35	81.84	
Birth Rate	15.5	19.5	14.2	13.2	
Death Rate	6.8	7.46	7.7	6.7	
Infant Mortality Rate	51	18	14	11	

Source: 1) Census of India (various issues), Census Atlas-Goa, Daman & Diu & Dadra and Nagar Haveli, series 29, Government of Goa.

2) *(SRS, Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, 2009)

3) Economic Survey (2002-03, 2007-08)

In 2023, the statistics reveal that the population of Goa was 16 lakh, with the density rising to 422 persons per sq.km. Literacy rate increased to 88.7 percent, with IMR coming down to 5, and the decadal growth rate of population being 6.42. Only life expectancy of the population in Goa was 68.50 which is lower than the national average of 70 years (CAG, 2024a). Goa has performed better on different social indicators like literacy rate, population below poverty line and infant mortality rate than the all-India average.

Goa is recognized as an International Tourist destination and the focus of the Government has been on implementing various innovations for development of its resources to maintain its International Standard to attract national and international tourists. Though Goa is always highlighted for its unique beaches, over a period of time, there has been a drastic change in the preferences of tourists visiting Goa from beaches to hinterland, adventure and heritage tourism. There have been new charter flights from key markets, including Russia, London, Uzbekistan, Kazakhstan and Poland to support international arrivals. These flights signify Goa's appeal beyond beach tourism, drawing visitors to the state's scenic hinterlands (The Economic Times, 2024). The table below shows the tourists arrival in Goa from 2019 to 2023.

Table 1.2: Tourist Arrivals in Goa

Year	Domestic	Foreign	Total	%
2019	7127287	937113	8064400	0.61
2020	2671533	300193	2971726	-63.15
2021	3308089	22128	3330217	12.06
2022	7018945	169005	7187950	115.84
Upto November 2023	7201989	403403	7605392	5.81

Source: Directorate of Tourism, Goa

Commissioning of the Manohar International Airport at Mopa has enhanced global connectivity, through new routes to meet the increasing travel demand to Goa.

Though Goa ranks 21st among all States and Union Territories in Foreign Direct Investment (FDI) in manufacturing sector, it tops the small States. Goa's total export value for the year 2023-24 (April to December 2023) was USD 1.77 Billion. 51.37% of the total export value was through Drugs and Pharmaceutical Commodity group followed by Engineering Goods Commodity Group (GoG, 2024d).

1.2 Gross State Domestic Product- State Income of Goa

As the National Statistics Office (NSO) has revised the base year of the national accounts from 2004-05 to 2011-12, the Gross State Domestic Product (GSDP or the State Income)

estimates for Goa has undergone a significant change with the shift in the base year from 2004-05 to 2011-12 (CSO, MoSPI, 2015). With regard to the State of Goa, based on the methodology adopted by the NSO, statistical comparisons between the old and new base year cannot be drawn for GSDP from 2011-12 onwards. Under the methodology for compilation of the GSDP in the revised base year i.e. 2011-12, the estimates of Gross Value Added (GVA), that were prepared at factor cost in the earlier series, are presently being prepared at Market Prices in the new series. $\text{GSDP at Market Prices} = \text{Gross State Value Added at Basic Prices} + \text{Product Taxes} - \text{Product Subsidies}$ (GoG, 2017, 2024).

Table 1.3: GDP and GSDP-market price at Current Prices (In lakhs Rs)

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
YEAR	GDP_Market price	GSDP_RBI Market price	GSDP_Goa Econ Survey	GDP Per Capita	GSDP Per Capita
2011-12	873632871	4236666	4236666	71609	289192
2012-13	994401310	3812002	3812002	80518	258441
2013-14	1123352161	3592110	3592110	89796	241893
2014-15	1246795929	4781418	4781418	98405	319827
2015-16	1377187388	5505385	5505385	107341	365806
2016-17	1539166901	6297631	6297631	118489	418598
2017-18	1709004236	6935205	6935205	130061	454172
2018-19	1889966844	7185334	7185334	142424	467795
2019-20	2010359286	7503209	7503209	149915	485645
2020-21	1985409601	7570540	7415792	146480	476900
2021-22	2359739853	8260370	8122613	172422	519681
2022-23	2694964586*	-	8912974	194879	567344

Source: RBI database, Ministry of Statistics and Programme Implementation (MoSPI) and GoG Economic Survey (Various years)

Note:* FRE-First Revised Estimates (MoSPI)

In the table above, the GDP and GSDP market price at current prices estimates has been taken from the database of RBI, MoSPI and GoG Economic Survey. We notice that up till 2019-20, the RBI and GoG Economic survey data have consistent figures for GSDP. However, from 2020-21, there has been variation in the value of GSDP from RBI and GoG Economic Survey. Also the RBI does not provide the actual data on GSDP for 2022-23. **We have, therefore, used the GSDP data from MoSPI and GoG Economic Survey (various years) in our analysis.** The estimates of GSDP, were prepared at factor cost in the earlier

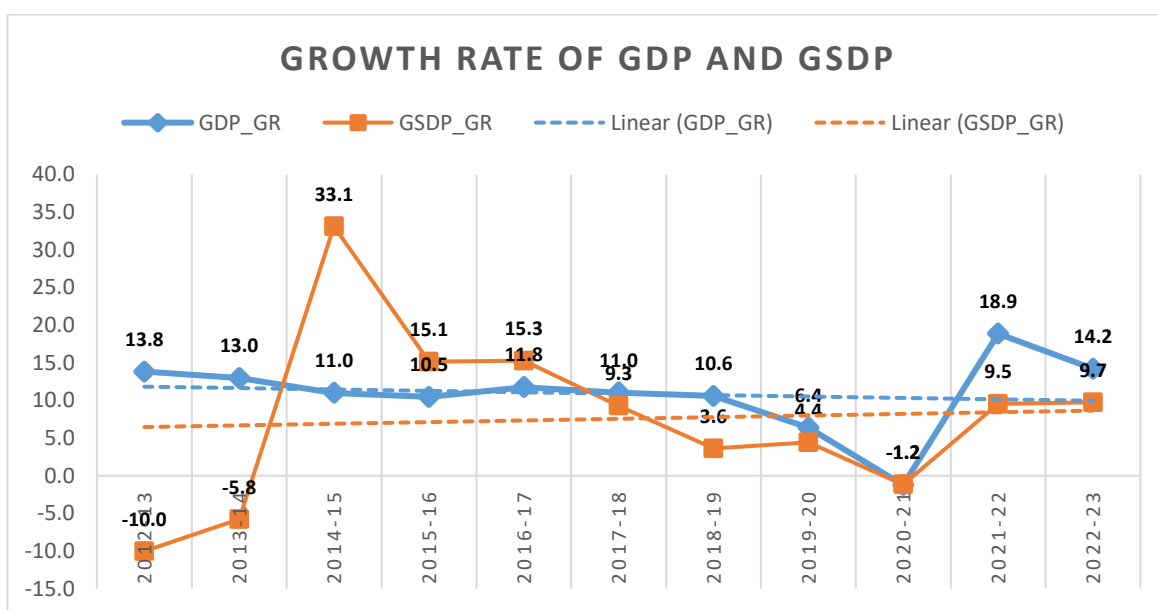
series (2004-05), however in the new series (2011-12) it is been prepared at market prices. We have therefore, employed GSDP at market price (current prices).

The total population of Goa as per 2011 Census was 14.85 lakh, with the density of the population being 394, much higher than the national average of 382. The GSDP at market price increased from Rs. 4236666 lakh in 2011-12 to Rs. 8912974 lakh in 2022-23. In the same period, the per capita GSDP of the state increased from Rs. 2 89,192 to Rs. 5, 67,344, which was significantly higher than the all-India per capita income of Rs. 71,609 and Rs. 1,94,879 in 2011-12 and 2022-23, respectively.

1.2.1 Comparison of GDP and GSDP growth rates (year on year) of the two series

The growth rates are calculated based on the GDP and GSDP data. The GDP growth rate has been relatively constant from 2012-13 to 2018-19, with a sharp fall during 2019-20 at -1.2 per cent.

Figure 1.1: Growth Rate of GDP and GSDP at current prices



Source: MoSPI and GoG Economic Survey (Various years)

We observe consistently fluctuating GSDP growth rates from 2012-13 onwards, with negative growth rates in the initial years of the study period. One of the reasons for this was the ban on iron ore mining in Goa, which was imposed in September 2012 (GoG, 2017). Though the GSDP growth rates fell substantially in 2013-14, it bounced back in subsequent years, drastically rising in 2014 -15 at 33.1 per cent.

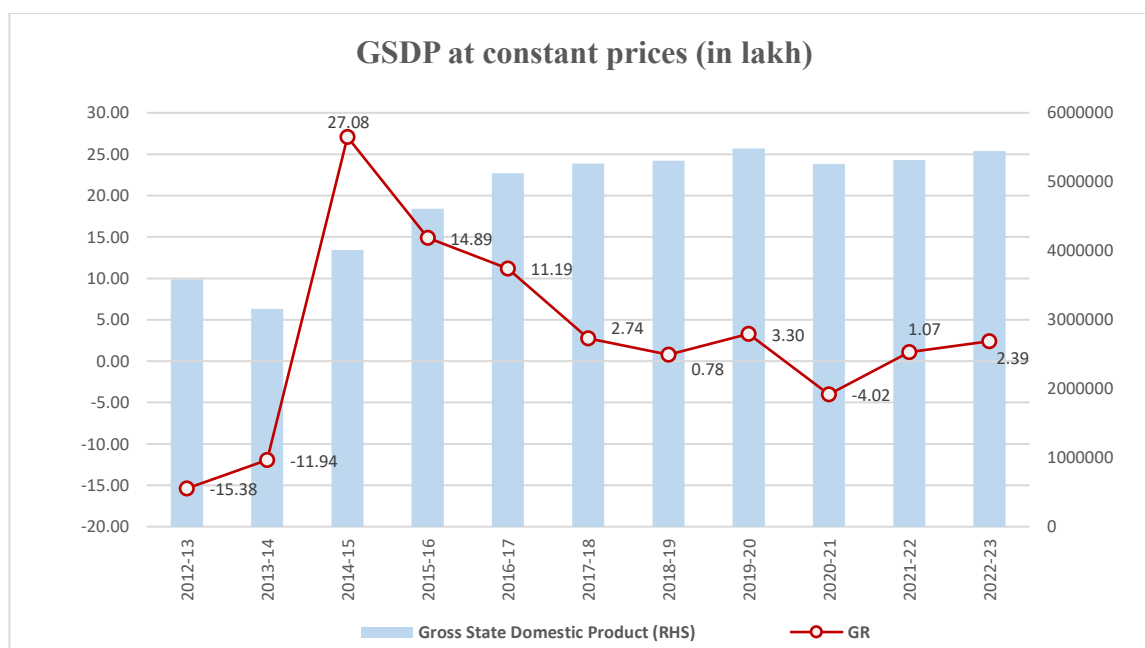
Goa's GSDP growth rate shows a sharp increase from -10.0% to 33.1%. This major surge was driven by fluctuations in key sectors, like mining. In Goa, mining has a significant

impact on economic growth. GSDP growth rate continues to decrease, with a significant decline from 10.6% in 2018-19 to 4.4% in 2019-20, reflecting slowdown in the mining industry due to regulatory restrictions. 2020-21, being the pandemic year, reduced the GSDP growth rate to -1.2 %.

1.2.2 Gross State Domestic Product at Constant Prices

The GSDP for the State of Goa at Constant Prices (2011-12) rose from 2013-14, showing a slight fall in 2020-21, with recovery thereafter.

Figure 1.2: Gross State Domestic Product at Constant Prices

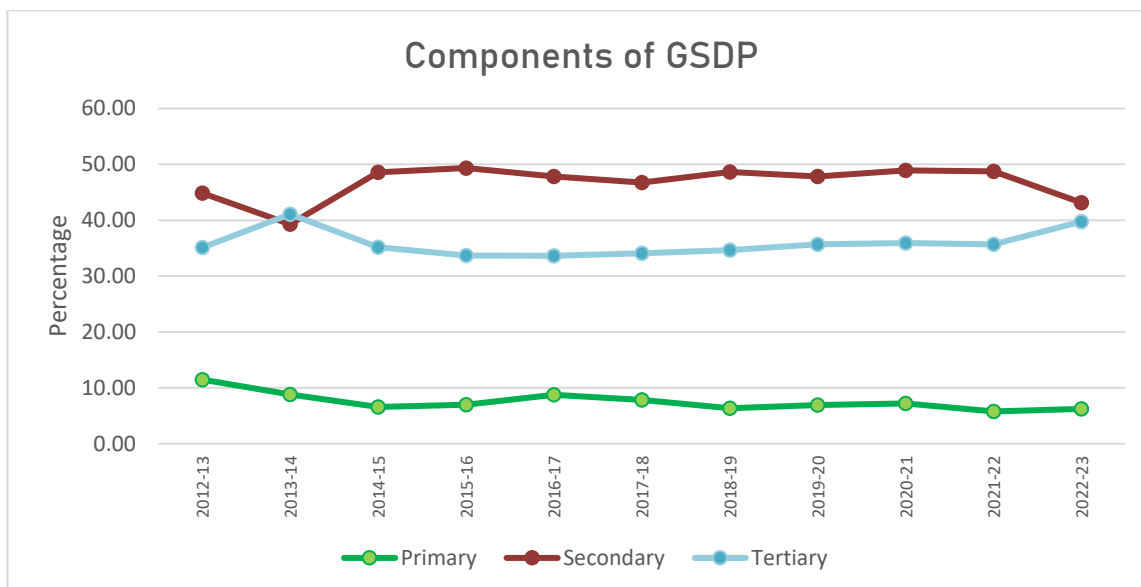


Source: MOSPI and GoG Economic Survey (Various years)

1.3 Sectoral Contribution to GSDP at Current Prices (%)

The contribution of the primary sector has declined from 20 percent in 2011-12 to 6.24 percent in 2022-23 (Figure 3). The contribution of the Secondary Sector towards GSDP, which accounted for 43.93 percent in 2011-12, witnessed a fall in 2013-14 to 39.28 percent but later there was an increase to 49.35 percent in 2015-16; the contribution by secondary sector remained within this range but in 2022-23 it declined to 39.77 percent.

Figure 1.3: Sector wise percentage composition of GSDP at Current Prices

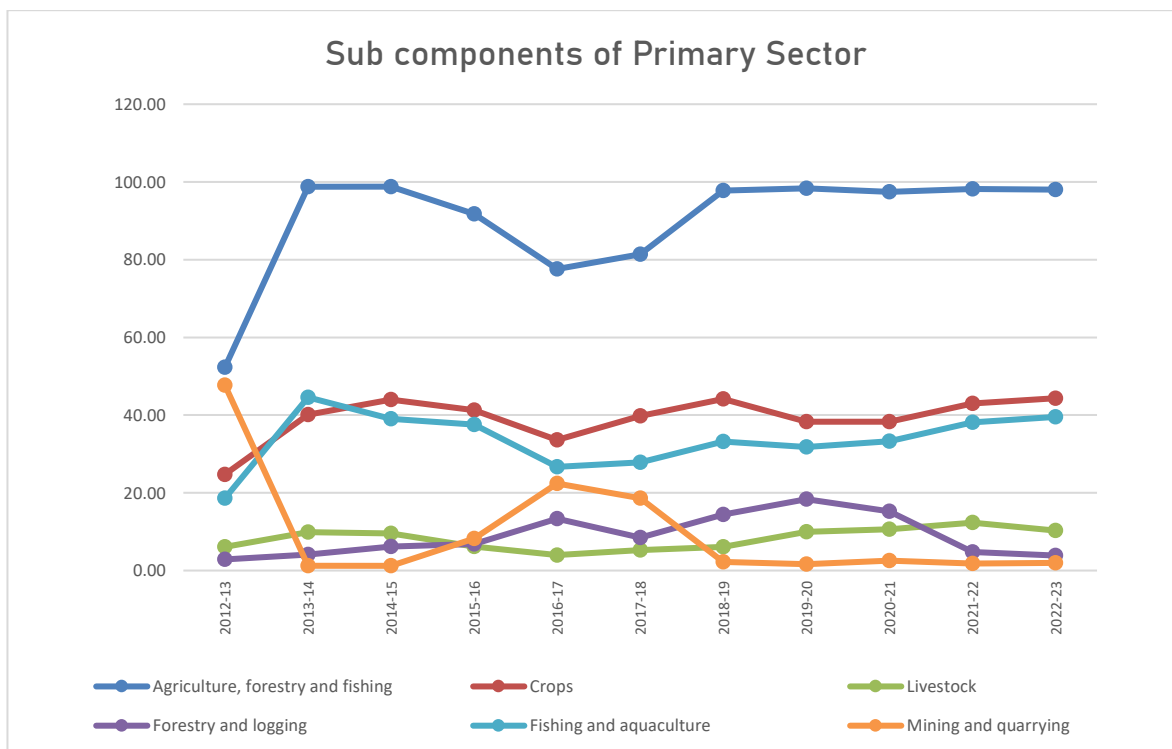


Source: MOSPI and GoG Economic Survey (Various years)

The contribution by the tertiary sector increased from 29.07 percent in 2011-12 to 41.08 percent in 2013-14, was 34 to 35 percent till 2021-22, but increased to 39.7 percent in 2022-23. In the next section we look at the contribution of sub components within each sector.

1.3.1 Primary Sector and its sub-components

Figure 1.4: Sub components of the Primary Sector

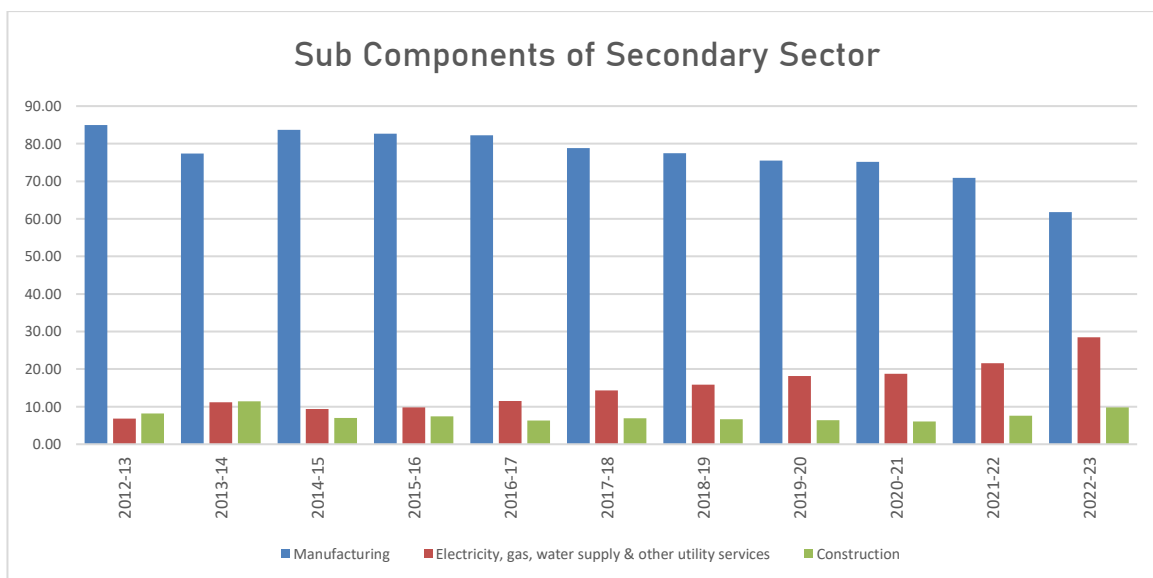


Source: MOSPI and GoG Economic Survey (Various years)

This chart shows the Gross State Domestic Product (GSDP) at current prices for the subcomponents of the Primary Sector in Goa, expressed in percentage terms from 2011-12 to 2022-23. Agriculture, Forestry, and Fishing, have been the largest subcomponent of the Primary Sector, showing a sharp increase in its contribution to GSDP around 2012-13, reflecting the economy adjusting after a sharp decline in mining and quarrying in 2012-13 (GoG, 2017). Mining was partially restarted in 2015 but was banned again in 2018, as the Supreme Court cancelled all mining leases in the state due to irregularities in the renewal process. The crop contribution has remained relatively stable over the years, with only minor fluctuations. Fishing and aquaculture begin below 5 percent but gradually increase to around 10% -15% by 2022-23. Forestry and logging have a very small and relatively stable contribution, remaining below 5% throughout the period. Livestock shows a gradual upward trend, beginning below 10% in 2011-12 and increasing to around 15% to 20% by 2022-23. Mining and quarrying initially comprised a large part of the Primary Sector's GSDP at around 60%-70% in 2011-12. With a steep drop in mining's contribution to below 10% by 2012-13, due to regulatory issues, and it has remained low, around 5% or less. There has been a structural change in Goa's economy, with mining no longer being a dominant sector in the Primary Sector.

1.3.2 Secondary Sector and its sub-components

Figure 1.5: Sub components of the Secondary Sector



Source: MOSPI and GoG Economic Survey (Various years)

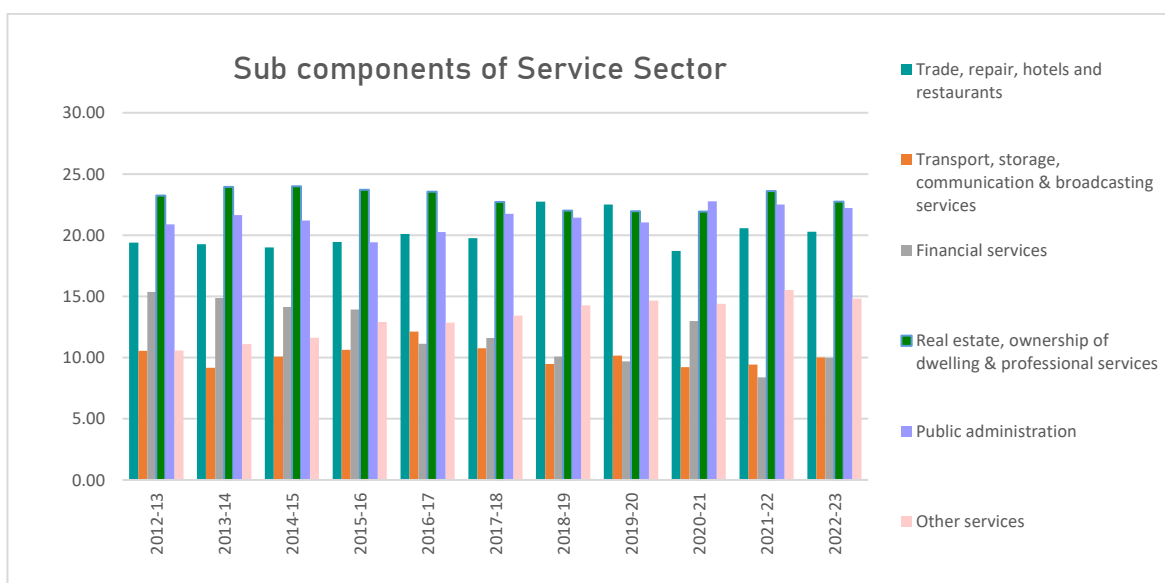
Despite its declining trend, the Manufacturing sub-sector remains the most significant contributor overall across the given years. In recent years, particularly from 2021-22 onward, Electricity, Gas, Water Supply & Other Utility Services shows notable growth.

Construction fluctuated but showed a slight recovery after 2020-21, and its contribution was within the range of 6 to 12 percent.

1.3.3 Tertiary Sector and its sub-components

Real Estate, Ownership of Dwellings and Professional Services has consistently been one of the highest contributors, fluctuating slightly but maintaining around 23% of the total share over the years.

Figure 1.6: Sub components of the Primary Sector



Source: MOSPI and GoG Economic Survey (Various years)

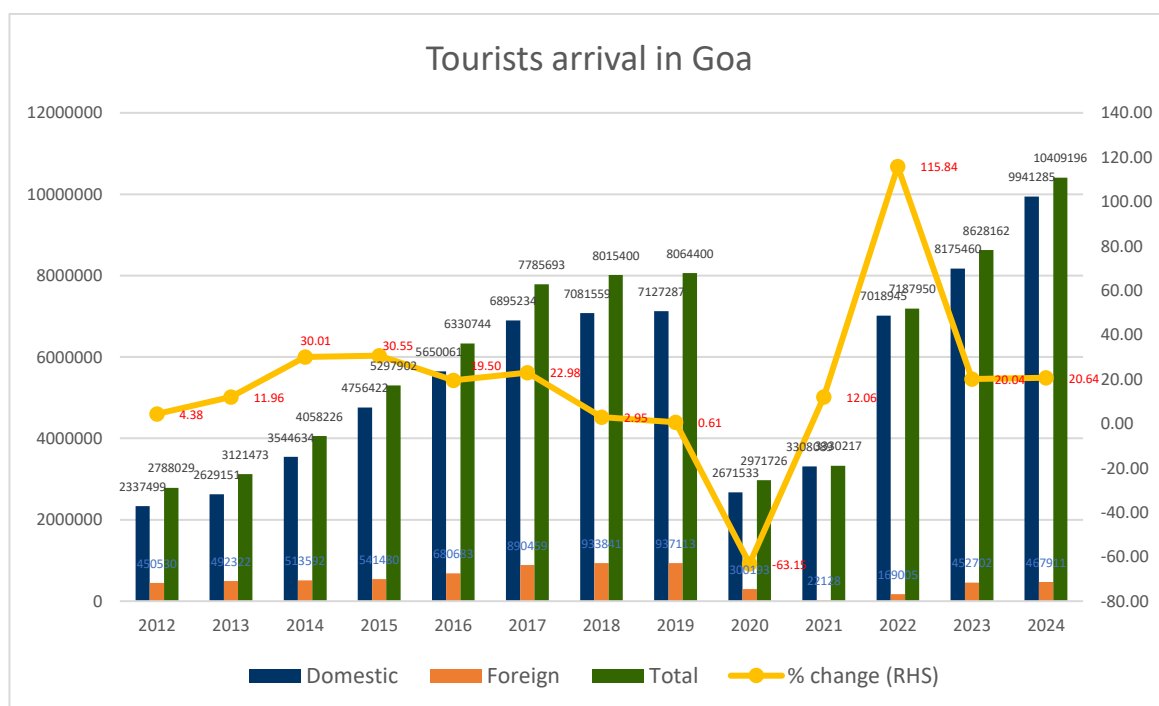
Public administration shows a steady share, with minor fluctuations. Its share increased from 20.88 in 2012-13 to around 22.21 in 2022-23. Financial services declined from 2012-13 until 2019-20, dropping from 15.37 in 2012-13 to around 9.69 in 2022-23. Trade, repair, hotels and restaurants had a high share; however, it dropped notably in 2020-21, likely due to pandemic impacts on hospitality and retail, with a partial recovery afterwards.

1.3.4 Recent trends in the tourism sector and its contribution to the state economy

Goa drew attention of the international tourists during the 1960s and 1970s, particularly the western ‘hippie’ travelers. Goa is recognized as an International Tourist destination (Routledge, 2001). The focus of the Government of Goa has been on implementing various innovations for development of its resources to maintain its International Standard to attract national and international tourists. Though Goa is always highlighted for its unique beaches, over a period of time, there has been a change in the preferences of tourists visiting Goa

from beaches to hinterland, adventure and heritage tourism (both spiritual and cultural) (Kaul, 2025). Though there has been a drastic decline in the number of charter flights in the post COVID period (GOG, 2023), there have been new charter flights from key markets (countries), including Russia, London, Uzbekistan, Kazakhstan and Poland to support international arrivals. These flights signify Goa's appeal beyond beach tourism, drawing visitors to the state's scenic hinterlands (The Economic Times, 2024). The table below shows the tourists arrival in Goa from 2012 to 2024.

Figure 1.7: Tourists arrival in Goa



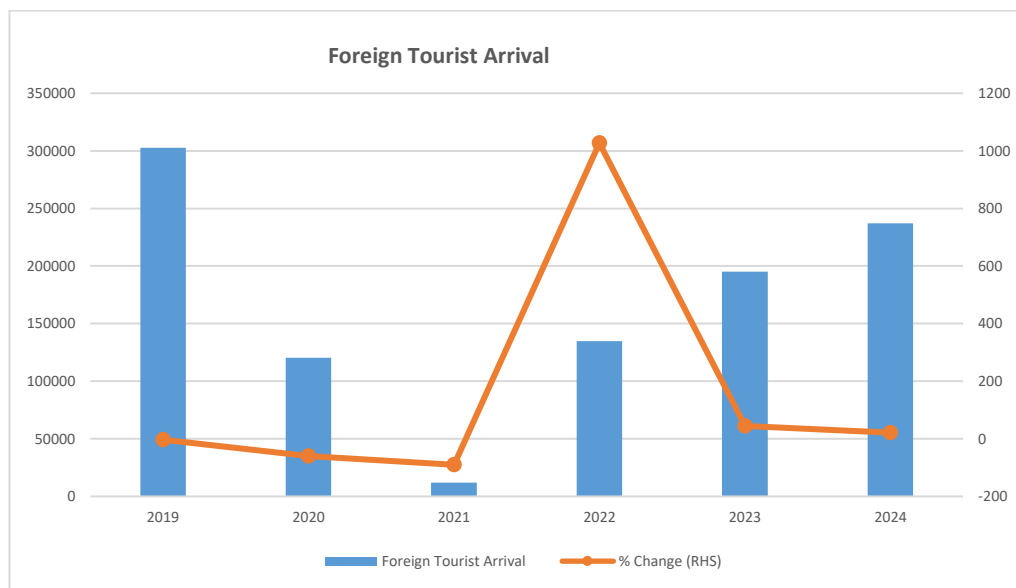
Source: Economic Survey (various years) GoG, and Directorate of Tourism, Goa

The Manohar International Airport at Mopa has enhanced global connectivity, through new routes to meet the increasing travel demand to Goa. From its commercial operations since 5th January 2023, a total of 8,470,000 domestic and international passengers and 56,800 aircraft movements (ATMs) have been facilitated up to 31st December, 2024, connecting 22 domestic and 10 international destinations (GoG, 2024c).

The foreign tourist footfall at Dabolim and Mopa Airport as well as cruise ships from 2019 to 2024 is given in the table below.

As seen in the figures below, though there has been a notable improvement in domestic and foreign visitors, the state has not returned to pre-pandemic level numbers with respect to the foreign tourists (Business Standard, 2025).

Figure 1.8: Foreign Tourist Arrival



Source: Economic Survey (various years) GoG, and Directorate of Tourism, Goa

Figure 1.9: Foreign Tourist/Passengers Arrival by Cruise Ships



Source: Economic Survey (various years) GoG, and Directorate of Tourism, Goa

Though there has been a notable improvement in domestic and foreign visitors, the state has not returned to pre-pandemic level numbers with respect to the foreign tourists (Business Standard, 2025). As per the Financial Express (2025) this could be due to a mix of geopolitical, economic, and environmental factors like Russia-Ukraine war, instability in the Middle East, increasing hotel tariffs, inflated transportation charges, and a higher cost of living have driven tourists to destinations like Thailand, Vietnam, and Indonesia, that offer better infrastructure at lower prices. Growing beach pollution, overcrowding, and unchecked commercial activities have also impacted inflow of tourists. Besides according

to (Rodrigues, 2024), the domestic tourism surge is not benefiting Goa economically. In North Goa, despite the place being packed with domestic tourists, the restaurants and shacks were less filled as domestic tourists spend more on roadside eating, and come by cars and buses. It is the foreign tourists that occupy most of the tables in shacks. Besides with the high end tourists that arrive, luxury resorts have good occupancy, taxis and handicrafts have greater demands. As a result there is a lot of optimism when the number of charters increase along with foreign tourist booking from UK, Italy and Scandinavia.

Table 1.4: Year-wise Revenue earned towards Registration and Renewal of different tourism activities

Activity name	2019-20	2020-21	2021-22	2022-23	2023-24
Dealers	1000	500	9500	0	9000
Deck beds and Umbrella	1062520	2703940	2646150	2745500	13360000
Government Shacks	27848000	37571200	44822300	46828000	71355000
Hotel	5028100	9471800	48401500	69272840	55365520
Photographer	70000	85000	132500	242500	1476000
Taxi	2923600	2087200	0	0	0
Tourist Guide	44900	26000	192000	80500	48000
Travel Agent	315000	287000	1121000	1985000	3032500
Water sports	3607000	2130500	2020750	4342100	3962500
Adventure Sports	0	0	15000	145000	50000
Event	0	7080	12980	1868000	12439000
Online Tourist Service Provider	0	0	400000	800000	1600000
Shacks	2369290	3032500	2789440	7210000	1540000
Spice Plantation	0	0	27500	70000	192500
Total	43269410	57402720	102590620	135589440	164430020

Source: Economic Survey (various years) GoG

Under the Goa Registration of Tourist Trade Act, 1982, person carrying out has to register/renew his/her activities with the Government. The data reflects fluctuation in tourism activity. The revenue collection of the Department has considerably increased owing to timely registrations and renewals (GoG, 2024c). The data shows diversified growth in Goa's tourism sector, especially in hotel registrations, government shacks, online services, and events.

1.3.5 Role and trends of remittances in the state's economy.

Kerala, Punjab and Goa can be considered to be amongst the most remittance dependent economies in the world. The total international remittance to gross national product was 11.4 per cent in Punjab, 20.8 per cent for Goa and 30.9 per cent in Kerala in 2007-08 (EXIM Bank of India, 2016). However Goa's share of household international remittances to the All- India household remittances was only 1.7 per cent as compared to 12.7 per cent in Punjab and 39.9 per cent for Kerala. Goa household remittances were directed more towards the urban areas. In Goa, around 39 per cent of the remittances were used for savings or investments (EXIM Bank of India, 2016). In 2020-21 the share of Goa in the all-India inward remittances was 1.1 per cent (GoI, 2025).

1.3.6 Economic and fiscal impact of revenue loss from the mining sector

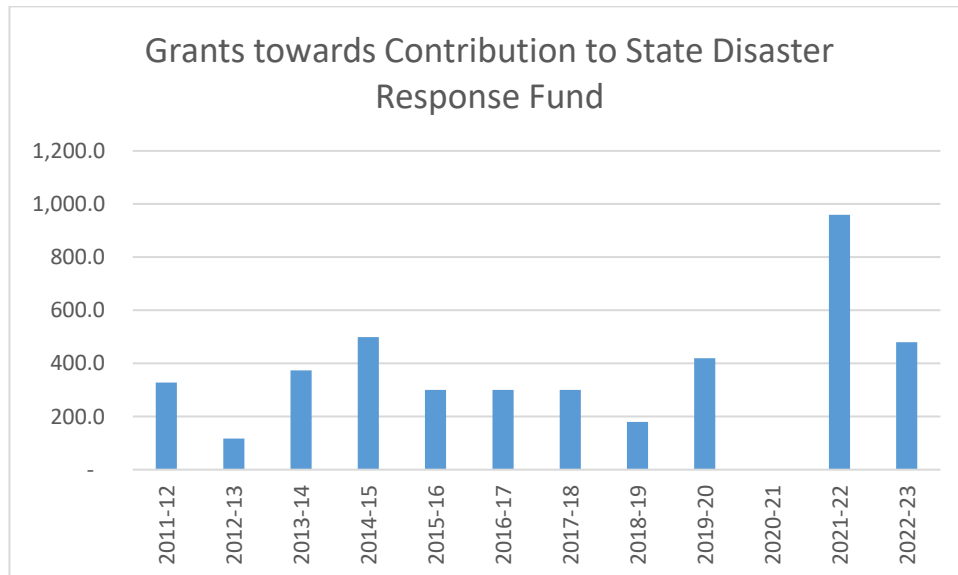
All mining operations were banned in Goa on September 10, 2012, as there were several violations by miners and cited lapses by state and central government officials in enforcing regulations (Ananthanarayanan, 2012). However in 2016 mining was restarted with the Government of Goa granting second renewals to 88 mining leases. Again, on March 16, 2018 mining operations were banned for a second time in Goa (Srivastava, 2022). According to (The Economic Times, 2020) mining used to contribute to more than 15 per cent of Goa's GSDP. The Goa government in its annual budget declared that around 20 per cent of its GSDP decline consecutively in 2018-19 and 2019-20 can be attributed to the mining ban. Goa earned Rs. 244.9 crore solely from the royalty accrued from the extraction and export of iron ore in 2016-17. Mining ban impacted over Rs. 34 billion in revenues (The Economic Times, 2020). According to (Srivastava, 2022) it was found that the revenue of mining companies was impacted by Rs.6976.71 crore between 2018-19 and 2020-21. The revenue of truck owners was impacted by Rs.609.28 crores, the revenue of barge owners was impacted by Rs.193.50 crores and mining machinery was impacted by Rs.40.45 crores. The mining ban resulted in employment loss of 10,108 workers employed with the service providers (barge & truck owners etc.) and another 4,750 mine workers employed by mining companies became unemployed. Around 398 workers at the Mormugao port lost jobs in 2018-19 (Srivastava, 2022). In fact, according to (The Economic Times, 2020) the closure of mining resulted in employment loss (direct and indirect) and affected 3,00,000 households. The mining companies in Goa specifically created a model where locals, and not the company, would transport ore, to build a system of dependency and to pressure locals

against opposing the further growth of environmentally hazardous mines (Vohra, 2021). With the ban, the mining companies walked away from the region with barely any cost, while the locals, particularly former truckers were left stranded with a polluted environment and insurmountable amounts of debt.

1.3.7 State's preparedness for disasters, including fiscal provisioning and institutional readiness.

Goa, being a coastal state, is particularly vulnerable to natural disasters such as cyclones, floods, heavy rainfall, cloudbursts, and landslides. With the change in the land use pattern, damage has been seen of forests and mangroves (Morakar et al., 2023). Due to low elevation, high population density, and heavy tourism activity, southern and central coastal talukas especially Salcete, Mormugao, and Bardez, are the most vulnerable. Rapid urbanization and conversion of wetlands have increased risk in Panaji, Vasco, and parts of Bardez and Salcete. Goa has a State Disaster Management Authority (Goa SDMA) under the Disaster Management Act, 2005. Also, District Disaster Management Authorities (DDMAs) exist in both districts.

Figure 1.10: Grants towards State Disaster Fund



Source: Economic Survey (various years) GoG

Under the Department of Revenue and Disaster Management, the Goa SDMA lays down policies and plans for disaster management in the State. As far as budgetary allocation is concerned, under the State Disaster Response Mitigation Fund, grants of Rs 1200 lakhs was received only in 2020-21. As per the guidelines on constitution and administration of the

State Disaster Response Fund, the Central and State Governments are required to contribute to the fund in the proportion of 75:25. The grants received by the State Government received as Central Government's share is given in the table below. The State Government has not received any contribution from the Central Government towards National Disaster Response Fund. Under the Finance Commission grants, Grants-in-Aid for State Disaster Response Fund of Rs 840 lakhs was received only in the year 2022-23, this includes Grants towards State Disaster Response fund of Rs 480 lakhs and Rs 360 lakhs against Grants State Disaster Mitigation Fund.

In 2022, due to the devastation and flash floods caused by cyclone 'Tauktae', the Government had identified low lying and vulnerable areas to flooding. To mitigate severe floods that have been occurring in the State during monsoons causing extensive damage across major rivers, the Government proposed measures for affected areas along the Mhadei, Chapora, Mapusa, and Khandepar rivers, completing the demarcation of flood-prone zones (GoG, 2024c). Under the National Disaster Management Project 11 out of 12 planned Multipurpose Cyclone Shelters have been completed, along with the installation of 23 out of 38 Early Warning Dissemination Towers. A State Emergency Operation Centre (SEOC), 2 District Centres (DEOCs), and 6 Taluka Centres are being set up to ensure seamless disaster communication Low-cost Automatic Weather Stations in vulnerable ecosystems, coastal areas uplands and areas in Western Ghats in Goa have been set up along with phenological monitoring cameras (GoG, 2024c).

Due to the hilly mountainous terrain, in combination with sandy coastal plains in Goa, construction activity on hilly areas has led to a number of landslides during rains. Additionally, with global warming and climate change, there has been an increasing vulnerability to the state. Goa needs a community-inclusive disaster management strategy that would balance development with coastal and ecological safety.

1.4 Fifteenth Finance Commission- Criteria for devolution

Under the 15th Finance Commission, the vertical share of 41 per cent of the divisible pool of taxes for the States and horizontal devolution formula recommended in 15th FC report for the year 2020-21 was retained. The Commission had recommended a horizontal devolution formula in its report for 2020-21. Same formula was continued to meet all the aforesaid considerations. Same criteria and weights for determining inter se shares of States for the 2021-22- 2025-26 award period were retained. To arrive at the inter shares of States in the

devolution, each criteria were grouped under certain categories. The criteria and weights assigned for Horizontal Devolution are given below.

- 1) **Need Based Criteria**, that includes a) Population, b) Area and c) Forest and Ecology
- 2) **Equity-based Criterion** that includes - a) Income Distance
- 3) **Performance-based Criterion** that includes a) Demographic Performance

Table 1.5: Criteria and weights assigned for Horizontal Devolution among the States

Sr. No	Criteria	Weight (%)
1	Population	15
2	Area	15
3	Forest and Ecology	10
4	Income Distance	45
5	Tax and fiscal efforts	2.5
6	Demographic performance	12.5

Source: XVth Finance Commission Report (2020)

The share of the state of Goa based on all the criterion is given below. The population of a State represents the needs of the State to undertake expenditure for providing services to its residents.

1.4.1 Goa's Share based on Individual Criterion

Table 1.6: Share of Goa based on individual criteria

Sr. No	Criteria	Goa's Inter se Share
1	Population	0.124
2	Area/Adjusted Area	0.121/2.000
3	Forest and Ecology	0.287
4	Income Distance	0.025
5	Tax and fiscal efforts	0.159
6	Demographic preference	0.195

Source: XVth Finance Commission Report

Many states raised concerns over the use of population data of 2011 for devolution purpose (Venkatraman, 2018). States which have controlled their population would be at a disadvantage if the latest population data is used instead of the 1971 data. However,

Commission's ToR specifies that the Commission shall use the population data of 2011 while making recommendations, as fiscal equalization being recommended by it is designed to meet the present needs of the States, and that is best represented by the latest population data. We next discuss the share for Goa under each of the criteria.

- a) **Population criteria**, Goa, like many other southern states has seen a decline in the population. As per the 2011 population Census, with 14.58 lakh population, inter se share population has been 0.124.
- b) **Area criteria**- the Area criteria is based on the ground of need. The larger the area, greater is the expenditure requirement for providing comparable services. A majority of the States have also suggested retaining area as a criterion in the horizontal devolution formula. Since the states incur certain minimum costs even if the area is very small, same adjustments were made as done by the FC-XIV as well as FC-XIII and FC-XII while calculating the shares of geographical area of the States, by assigning a floor of 2 per cent share to those States with less than 2 per cent share in the actual area. As the total area of Goa is 3702 sq km, which is the actual geographical area, area share for Goa has been 0.121 and the adjusted area shares for Goa has been 2.00.
- c) **Forest and Ecology**- Though the forest cover maintained by States provide wider ecological benefits, it also imposes opportunity costs that need to be compensated. This is arrived at by calculating the share of the dense forest of each State in the aggregate dense forests of all the States, Goa share under this criteria has been 0.287
- d) **Income Distance**- this is Equity-based Criterion, where the Distance of per capita income has been used as an equity criterion in the devolution formula by previous Commissions, with weights assigned in a range of 33.5 percent. Higher devolution is given to States with lower per capita income (and lower own tax capacity). Hence per capita GSDP is used as a proxy for the distance between States in tax capacity. The top three per capita GSDP states were Goa, Sikkim and Haryana. Since Goa and Sikkim are small and outlier states, the state with third highest per capita GSDP, - Haryana was considered, wherein the distance of per capita GSDP of each State from Haryana's per capita GSDP was calculated. Goa, Sikkim and Haryana have been assigned the income distance as calculated for the State with the fourth highest per capita GSDP – Kerala. Goa's share under this criterion has been 0.025

- e) **Tax and fiscal efforts-** Many Finance Commissions have used tax effort of States as a criterion in the devolution formula to reward State's own tax performance. This was done to incentivize states with higher efficiency of tax collection. Goa share under this criteria has been 0.159.
- f) **Demographic Performance-**demographic performance criterion has been used to reward efforts made by states in controlling their population. Under this criterion of demographic performance a measure of total fertility rate (TFR) data of all States is used. States with a lower fertility ratio will be scored higher on this criterion. States which have achieved lower TFR will be scored higher on demographic performance whereas States with higher TFR will receive a lower score. Goa's share under this criterion has been 0.195.

1.4.2 Net proceeds of the taxes (divisible pool)

For the period 2021-22 to 2025-26, the inter shares of States in the net proceeds of the taxes (divisible pool) as recommended by this Commission, based on the methodology, is given below.

Goa had a share of 0.39 percent in the net proceeds under the XV FC which was slightly higher than 0.38 percent under the XIV FC. Though Goa is performing well on all the key socio economic indicators, we notice that the share in tax devolution from the Centre is the least for Goa. With the increase in tax devolution, the central grants also are lowered, making the state rely on its own resources and funding. The period of 2012-13 to 2022-23 had seen two mining bans, COVID 19 pandemic which led to the decline in tourism activities in the state. Despite of these factors, the state had revenue surplus in 2020-21 and in 2021-22.

Table 1.7: Net proceeds of the taxes (divisible pool) as recommended by XVth Finance Commission

Sr.No	State	(%)	Sr.No	State	(%)
1	Andhra Pradesh	4.047	15	Manipur	0.716
2	Arunachal Pradesh	1.757	16	Meghalaya	0.767
3	Assam	3.128	17	Mizoram	0.5
4	Bihar	10.058	18	Nagaland	0.569
5	Chhattisgarh	3.407	19	Odisha	4.528
6	Goa	0.386	20	Punjab	1.807

7	Gujarat	3.478	21	Rajasthan	6.026
8	Haryana	1.093	22	Sikkim	0.388
9	Himachal Pradesh	0.83	23	Tamil	4.079
10	Jharkhand	3.307	24	Telangana	2.102
11	Karnataka	3.647	25	Tripura	0.708
12	Kerala	1.925	26	Uttar Pradesh	17.939
13	Madhya Pradesh	7.85	27	Uttarakhand	1.118
14	Maharashtra	6.317	28	West Bengal	7.523

Over the next chapters we explore the different dimensions of public finance management in Goa during the decadal period 2012-13 to 2022-23.

1.5 How can Goa accelerate growth and position itself as a model state for others?

Though Goa has high per capita income, with a strong service sector growth, it heavily depends on buying consumption items like electronic gadgets and even fruits and vegetables from neighboring states resulting in a significant outflow of income, which can be construed as an economic leakage. Given that the local production base is limited, a significant proportion of high consumption expenditure is spent on buying goods from other states. Thus Goa's high GSDP and service-led growth has not been translated into self-reliant food systems or strong agriculture, leading to structural imbalance and limiting local value creation. Economic benefits arising out of a sizeable tourism sector and other sectors therefore are reduced due to the leakage of revenue from the state economy (Sharma et al., 2015). Also, given its small geographical size, ecology and socio economic composition, prioritizing large-scale manufacturing would not be compatible with Goa's development strengths and sustainability goals.

Goa can position itself as a model state due to its performance on various socio-economic, human development and governance indicators (Saikia, 2025). High literacy rate (88.7%), along with high female literacy rate (81.4%), indicating high gender parity in education, has encouraged civic participation, while good health indicators supported by strong public health infrastructure, access to services has resulted in low infant and maternal mortality (GoG, 2024c) Goa has been consistently ranked among the top states in terms of per capita income. In 2022-23, the per capita GSDP of Rs. 5,67,344, was significantly higher than the all-India per capita income of Rs. 1,94,879. Besides, it has an enormous geographical and

demographic advantage, its small size (3702 sq km) has led to manageable governance, faster implementation of schemes, and better targeting of development. Public healthcare penetration is also relatively strong due to the small size of the State.

Being a former Portuguese colony for 450 years, Goa has a unique cultural diversity, traditional values, and a mix of Indian and Portuguese history and architecture, along with strong religious roots and this has been core to Goa's identity (Brammer & Beech, 2004). This has, since the 1960s, attracted tourists from all over the world. Goa is known for its scenic landscapes as well as its diversified and rich environmental and historical heritage. Rich biodiversity, longer coastline, estuaries, Western Ghats forest, makes it ecologically valuable but also vulnerable (Vaz et al., 2017). The large scale tourism has produced pressures on both society and the environment. There has been increasing pressure on land and water resource, along with use and abuse of beaches (Brammer & Beech, 2004). In many places, the public access to the beach has been curtailed as hotels have appropriated and privatized the waterfront (Routledge, 2001). The growing trend of purchase of holiday homes and weekend properties in Goa is increasingly becoming a serious issue, pushing up the land prices and bringing about challenges to the local communities (Mondal, 2025; Solomon, 2009).

Therefore the goal of achieving sustainable development is crucial to ensure sustained improvement in the welfare of the state. The allocation of investments has to be carefully monitored so as to not jeopardize the development trajectory the state has been pursuing keeping in mind the very strengths of the state as well as fragility of the state's ecological balance. With its charm scenic landscape and uniqueness of the rich cultural heritage, the state of Goa has been attracting people from all over the globe which needs to be preserved and maintained, by preventing any form of over exploitation of Goa's natural resources. Goa's development model should not only be fiscally sustainable but also environmentally responsible, carefully balancing growth with the preservation of its pristine beaches, forested hinterlands, and unique biodiversity. As the state is rich in cultural fabric, shaped by centuries of Portuguese influence, its multilingual social harmony needs to be preserved. Against this backdrop of high levels of socio-economic development, rich culture and social harmony and unique geographical features, the state of Goa is still left with potential to realize and evolve as a model state in terms of high quality of living being rendered feasible by high levels of human development, provisioning of good infrastructure being managed and maintained by good governance which would be worth-emulating by the other states.

Chapter 2 Analysis of Taxation in Goa

2.1 Introduction

The World Bank's Report emphasized the role of the Government in allocating resources and stressed that taxation and expenditure are essential tools for macroeconomic stabilization, growth, and development (Chhibber, Ajay, 1997). In the development process, the states not only increase the levels of taxation but also undergo tremendous changes in patterns of taxation. The state and local governments raise revenues from taxes, charges, borrowings and intergovernmental grants. Taxes are compulsory imposts, while the charges and borrowings are voluntary. Among the three sources, taxes provide maximum revenues (Musgrave & Musgrave, 1980). A sound tax system facilitates the financing of public expenditures by helping Governments rely less on internal and international public borrowing (Balajee et al., 2024). With the ability to raise revenues effectively, states can provide security, meet basic needs or foster economic development.

Economists and social philosophers point out the requirements of a 'good' tax structure that includes a) yielding adequate revenues, b) having a distribution of tax burden that is equitable, c) facilitating the use of fiscal policy for stabilization and growth objectives, d) having fair and non-arbitrary administration and e) having low administrative and compliance costs compatible with other objectives. However, establishing an efficient tax system has been challenging in many countries, thus resulting in a low tax base and tax buoyancy. To fulfil the objectives of equity, efficiency and neutrality, it is, therefore, necessary to adopt an economically rational structure of tax sources given the political structure of the economy. One of the priorities for improving the tax system is the creation of conditions to increase the tax potential and collection. Tax effort is an effective indicator and a valuable tool for the State to understand how much it needs to make to attain its development objectives. Only when the Government raise sufficient revenues can it enhance access and provide quality services to the people. Growth promotion policies also consider tax effort as an essential indicator, wherein how much income should be left for private allocation is often discussed, along with the type of taxes to collect revenue. The level of taxation and the type of taxes are linked to the level of development (Toye, 2013).

This chapter estimates the revenue capacities of the State of Goa. It highlights the measures to improve the tax-GSDP ratio, along with suggestions for enhancing the revenue productivity of the tax system. From a tax policy perspective, one of the objectives of this

chapter is to give a quantitative indication of the scope for additional revenue mobilization in the State of Goa.

2.2 Definitions

We first look at the basic concepts of taxation generally used in literature.

- 1) **Tax Incidence:** Tax incidence is the analysis of which individuals bear the ultimate burden of taxes. Incidence is the change in private real incomes and wealth because of an adoption or change of a tax.
- 2) **Tax capacity:** measures the maximum amount of tax that can be feasibly collected given the economic, social, institutional and demographic characteristics. It is thus the tax potential of the State.
- 3) **Tax Effort** measures the ratio between actual and potential tax collection (or its taxable capacity). It serves as an effective indicator when there is a need for tax reforms to raise funds.
- 4) **The effective tax rate** is measured by dividing the actual tax revenue by the actual base.
- 5) **Tax Buoyancy** is the elasticity of a particular tax to a measure of aggregate income. A buoyant tax is one whose revenues increase by more than one per cent for a one per cent increase in national income or output (Leuthold & Tchetti, 1986).

2.3 Estimation of Revenue Capacity

To understand the revenue system of the State an empirical estimation of a state's taxable capacity and tax effort is required. Tax effort is a criterion the finance commissions use to decide the transfer of resources from the union government to the states. Conventionally, tax performance for any level of Government is usually measured by the ratio of actual performance to a measure of taxable capacity. The tax-income ratio was most commonly used and is based on the assumption that income is the indicator of tax capacity. The actual tax-to-GDP (or GNP) collection ratio is interpreted as a measure of tax effort. It is used as the basis for cross-country tax comparison (Musgrave & Musgrave, 1989a). In the case of the states, the tax-to-gross state domestic product (GSDP) ratio is a useful measure of a state's capacity to generate tax revenues concerning the size of its economy. This metric estimates a state's ability to mobilize resources to fuel development.

Apart from being a simple performance indicator, income could be an imperfect proxy for the tax base, mainly when the tax structure comprises different taxes, each related to a distinct tax base (Karnik & Raju, 2015). Consequently, to estimate the tax effort and taxable

capacity for the State, we would require the use of appropriate proxies of the tax base and estimation procedures that would be different from the computation of this simple TAX-GSDP ratio. The standard technique employed is the regression approach. However, two assumptions are implicit in this, considered as a 'back-of-the-envelope' calculation -- that income is a good proxy for tax capacity and that the relationship between the two is linear and proportional. Attempts are made to devise better proxies for the tax base and more refined empirical estimates of the tax effort. The use of dis-aggregated measures of tax effort using the representative tax system has become popular in the literature (Sen, 1997). Here, each tax is regressed against its tax base and the estimated tax value is compared to actual tax collection to compute the tax effort. Since the database required to disaggregate across taxes can be demanding and sometimes unavailable, researchers have adopted a more pragmatic approach relying on data availability.

Before beginning our estimation process, we present the scenario in Goa concerning the different tax heads and tax receipts in the period under study.

2.4 Resources of the State

The State's resources include a) Revenue Receipts, b) Capital Receipts and c) Net Public account receipts. The revenue receipts consist of tax revenue, non-tax revenue, and share of the State in Union taxes, duties and Grant-in-aid from the Government of India (GoI). These three sectors are further divided into sub-sectors like 'Goods and Services Tax', 'Taxes on Income and Expenditure', 'Taxes on Property and Capital Transactions' and 'Taxes on Commodities and Services'. The capital receipts section includes proceeds from disinvestments, recoveries of loans and advances, debt receipts from internal sources like market loans, borrowings from financial institutions and commercial banks, and loans and advances from GoI. The Net Public account receipts include transactions such as small savings, provident funds, reserve funds, deposits, suspense, remittances, etc., which do not form part of the Consolidated Fund.

2.4.1 Classification of Revenue Receipts (RR) in Goa

The table below provides the trends and growth of RR and its components. Revenue Receipts increased steadily from Rs 584,543 lakh in 2012-13 to Rs1,728,369 lakh in 2022-23, except for declines in 2019-20 (-1.23%) and 2020-21 (-7.59%), probably due to the COVID-19 pandemic and its impact on economic activity.

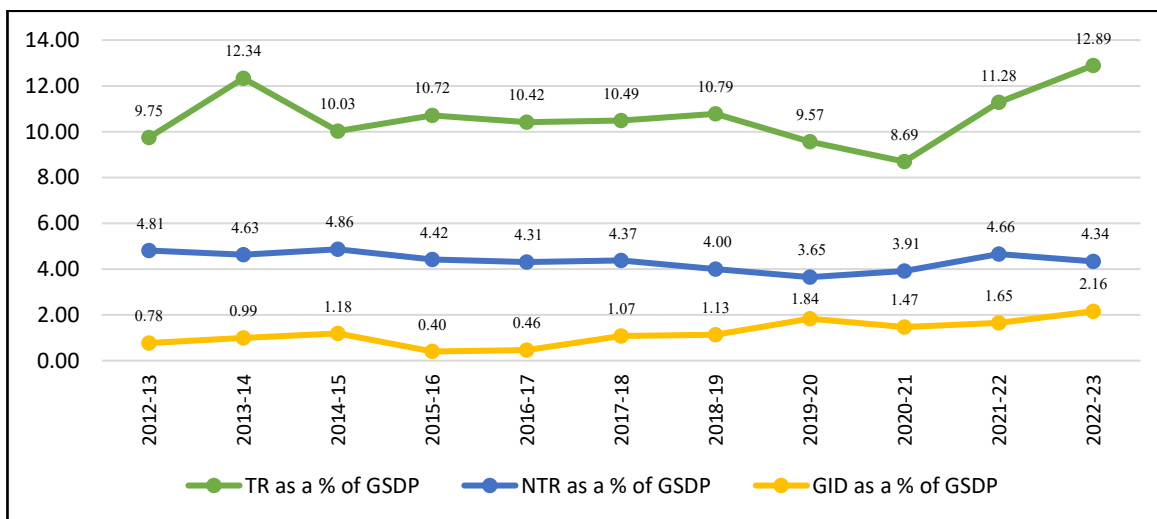
Table 2.1: Trends in Revenue Receipts and its components

Year	Revenue Receipts (RR)	Rate of Growth of RR	Tax Revenue (TR)	Rate of Growth of TR	Non Tax Revenue (NTR)	Rate of Growth of NTR	Grants-in-aid	Rate of Growth of Grants-in-aid
2012-13	584543	1.12	371687	15.02	183290	-20.77	29566	25.5
2013-14	644977	10.34	443101	19.21	166156	-9.35	35721	20.82
2014-15	768869	19.21	479650	8.25	232563	39.97	56656	58.61
2015-16	855224	11.23	589913	22.99	243192	4.57	22118	-60.96
2016-17	956497	11.84	656036	11.21	271200	11.52	29261	32.29
2017-18	1105352	15.56	727563	10.9	303328	11.85	74462	154.48
2018-19	1143798	3.48	774972	6.52	287366	-5.26	81460	9.4
2019-20	1129752	-1.23	718041	-7.35	273754	-4.74	137956	69.36
2020-21	1044029	-7.59	644721	-10.21	290280	6.04	109028	-20.97
2021-22	1428627	36.84	916221	42.11	378724	30.47	133681	22.61
2022-23	1728369	20.98	1149212	25.43	386847	2.14	192311	43.86
Sparkline								

Source: Finance Accounts, GoG, Various Years

A strong rebound in 2021-22 (36.84%) and 2022-23 (20.98%) reflects economic recovery efforts and increased government revenues. Tax Revenue grew significantly over the period from Rs371,687 lakh in 2012-13 to Rs1,149,212 lakh in 2022-23. High growth is seen in 2013-14 (19.21%), 2015-16 (22.99%), and 2021-22 (42.11%) post-pandemic. NTR has shown irregular growth patterns, increasing from Rs183,290 lakh in 2012-13 to Rs386,847 lakh in 2022-23. Grants-in-aid (GID) reflects volatile growth rates. Negative growth in 2015-16 (-60.96%) and 2020-21 (-20.97%), indicating reductions in central support.

Figure 2.1: TR, NTR and GID as a % of GSDP



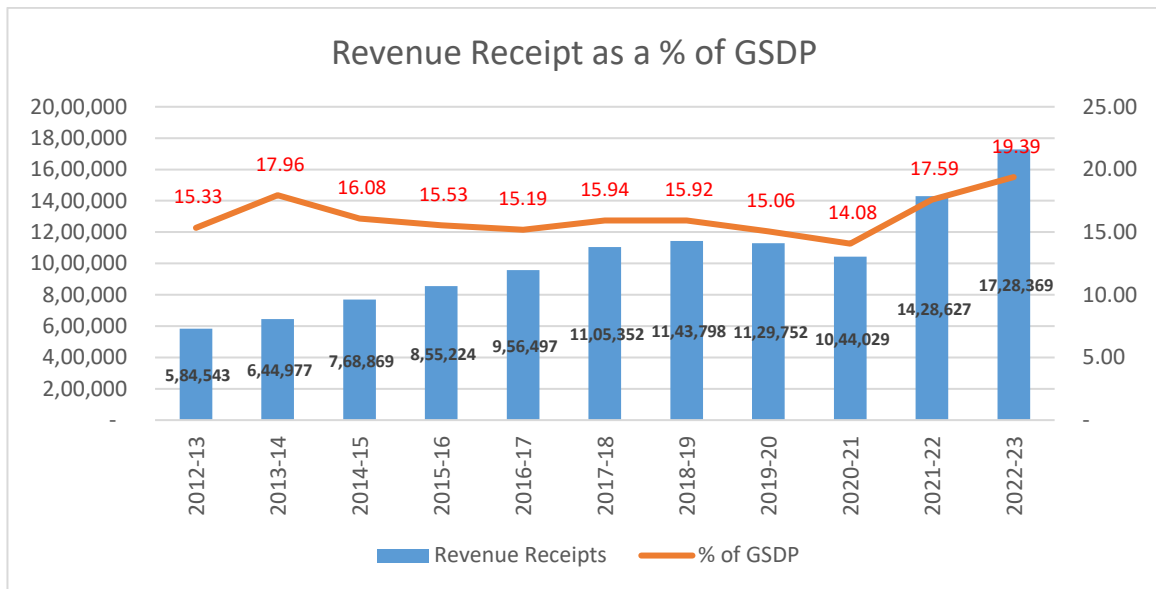
Source: Author's calculation based on Finance Accounts, GoG, Various Years

The tax-to-GSDP ratio increased significantly from 9.7 per cent in 2012-13 to 12.3 per cent in 2013-14, from a substantial decline in the tax-GSDP ratio in 2020-21 to 8.7 per cent, there was a sharp increase to 12.8 per cent in 2022-23. NTR to GSDP ratio was highest in 2014-15 at 4.86 percent.

2.4.2 Trends of revenue receipts relative to GSDP

The revenue receipts as a percentage to GSDP had a peak in 2013-14, remained at around 15 to 16 percent of GSDP from 2015-16 to 2019-20, then declining to 14.08 percent in 2019-20 and rising thereafter.

Figure 2.2: Revenue receipts relative to GSDP



Source: Author's calculation based on Finance Accounts, GoG, Various Years

2.4.3 Sources of Tax Revenue

Broadly, the revenues of the State are classified into:-

- A) Tax revenue comprises the State's own tax revenues (OTR) and share in Central taxes.
- B) Non-tax revenues comprise the State's non-tax revenues and
- C) Grants from the Centre

In this chapter we look at the Tax Revenue of the State. Under the tax revenue category, the State's OTR indicates its tax performance since it is computed by excluding any allocations the Central Government made to the State. The table below provides the classification of sharable and State's own taxes in Goa.

Table 2.2: Sources of Tax Revenue with Budget Heads in Finance Accounts of Goa

S.No	Description	Budget Head
(a) Taxes on Income and Expenditure (State's Own tax sources are in bold and italics)		
1	Central Goods and Services Tax (CGST)	0005
2	<i>State Goods and Services (SGST)</i>	<i>0006</i>
3	Integrated Goods and Services Tax (IGST)	0008
4	Corporation Tax	0020
5	Taxes on Income other than Corporation Tax	0021
6	Other Taxes on Income and Expenditure	0028
(b) Taxes on Property and Capital Transactions		
7	<i>Land Revenue</i>	<i>0029</i>
8	<i>Stamps and registration Fees</i>	<i>0030</i>
9	Taxes on wealth	0032
(c) Taxes on Commodities and Services		
10	Customs	0037
11	Union Excise Duties	0038
12	<i>State Excise</i>	<i>0039</i>
13	<i>Sales Tax/ Tax on Sales, Trade etc</i>	<i>0040</i>
14	<i>Taxes on Vehicles</i>	<i>0041</i>
15	<i>Taxes on Goods and Passengers</i>	<i>0042</i>
16	<i>Taxes on Duties on Electricity</i>	<i>0043</i>
17	Service Tax	0044
18	<i>Other Taxes and Duties on Commodities and services</i>	<i>0045</i>

Source: Finance Accounts, GoG, Various Years

Note: a) From 2017-18, Other Taxes on Income and Expenditure (0028), has been shifted to the category b) Taxes on Property and Capital Transactions

b) From 2014-15, Sales Tax (0040) was renamed as Tax on Sales, Trade etc

c) Other Taxes and Duties on Commodities and Services has a sub component-Share of net proceeds assigned to States, which is a part of Shareable taxes.

Since the tax revenue of the state comprises of the state's OTR and the share of the net proceeds from the Centre, we further categorize sources of own tax revenue under each Major Heads. The tables showing Minor heads separately for state's OTR is seen in Annexure below.

Harmonizing the tax base is generally expected to reduce the vertical imbalances in a federal system (Mukherjee, 2020). The Goods and Services Tax (GST) was introduced in India on 1st July 2017. The GST encompasses various indirect taxes from Union and State indirect tax bases. GST is levied on intra-State supply of goods or services (except alcohol for human consumption and five specified petroleum products like Petroleum crude, motor spirit (petrol), high speed diesel, natural gas and aviation turbine fuel etc) and its components are shared by the Central GST (CGST) and the State GST. The Integrated GST (IGST) is levied

and collected by the Central Government on inter-State supply of goods and services. This tax so collected is apportioned between the Centre and the concerned State where the goods and services are consumed. The GoI enacted the GST (Compensation to States) Act, 2017, to compensate the states, if the share of the state fall short of the revenue earned in the pre GST regime. GoI released the compensation to the state in the form of grants-in-aid. (CAG Report, GoG, 2022).

In the Finance Accounts of GoG, the sources of Tax Revenue are divided into three categories viz:-

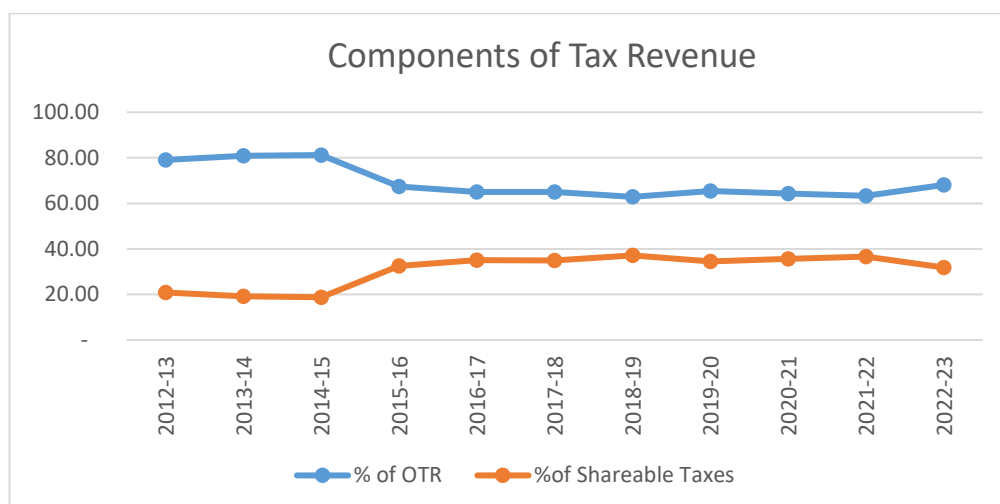
- (a) Taxes on Income and Expenditure,
- b) Taxes on Property and Capital Transactions
- c) Taxes on Commodities and Services.

The GST and its components are categorized under the head a) Taxes on Income and Expenditure, as seen in the table above. In contrast, in the Finance Accounts of the Central Government, the sources of Tax Revenue are divided into four categories, wherein GST and its components are given in a separate head. To facilitate the calculations of different sub-components of taxes, we follow the categorization adopted in the Finance Accounts of the Central Government (GoI, 2021) by categorizing the GST and its components separately, this allows us to see the contribution made by GST towards tax revenue exclusively.

2.5 Overview of Tax performance of Goa: 2012-13 to 2023-24

As discussed above, the State's tax revenue can be further classified as State's OTR and share of the State in Central taxes. The figure below shows the contribution made by OTR and shareable taxes. OTR has been the highest contributor at around 80% of the two components from 2012-13 to 2014-15, while the rest was contributed through shareable taxes. From 2015-16 onwards there has been a rise in the share in Central taxes above 30 percent with the highest in 2018-19 at 37.1 percent in 2018-19 while the contribution of the OTR has been below 70 per cent since 2015-16.

Figure 2.3: Components of Tax Revenue



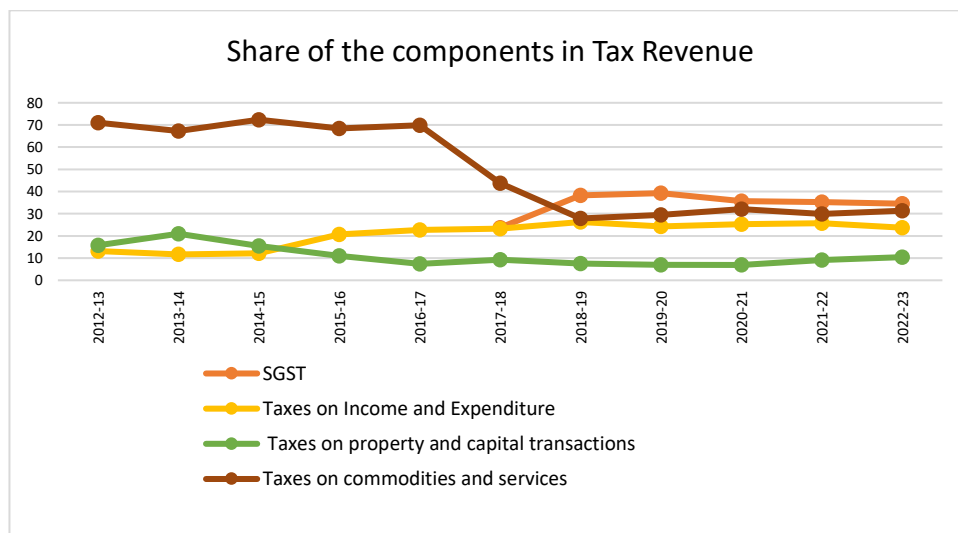
Source: Author's calculation based on Finance Accounts, GoG, Various Years

The TR is made up of OTR and Share in Central Taxes. A major portion of the State's share in central taxes comes from corporation tax, followed by Income tax, Customs and Union Excise Duties. OTR accounted for around 80 percent of the State's total tax revenue till 2016-17 thereafter, its contribution has been below 70 percent.

Tax revenue is one of the constituents of Revenue Receipts (RR) of the Government of Goa. We examine the various components of taxes in tax revenues. From 2012-13 onwards, we see a change in the share of three major components: (a) Taxes on Income and Expenditure, b) Taxes on Property and Capital Transactions, c) Taxes on Commodities and Services in the total tax revenues.

The highest contribution towards total tax revenues over the years was from 'Taxes on Commodities and Services', which ranged from 70.9 percent in 2012-13 to 69.9 percent in 2016-17, till the introduction of GST. With the introduction of GST in 2017, the contribution from the three categories of GST— Central Goods and Services Tax (CGST), State Goods and Services (SGST) and Integrated Goods and Services Tax (IGST) was in the range of 23.7 percent to 39.2 percent over the period. We therefore notice a drastic fall in the contribution from 'Taxes on Commodities and Services' in the post GST period.

Figure 2.4: Trends in the components of Tax Revenue



Source: Author's calculation based on Finance Accounts, GoG, Various Years

Among the other two components, the contribution from 'Taxes on Income and Expenditure' increased from 13.1 percent in 2012-13 to 20.6 percent in 2015-16 and further rose to 26.2 percent in 2018-19, indicating an increased contribution of this component to the tax revenue of the state. In the same year, the contribution from 'Taxes on Property and Capital Transactions' was 15.8 percent in 2012-13 rising to 20.9 percent in 2013-14, but declining continuously thereafter and has been below 10% in most of the years from 2016-17.

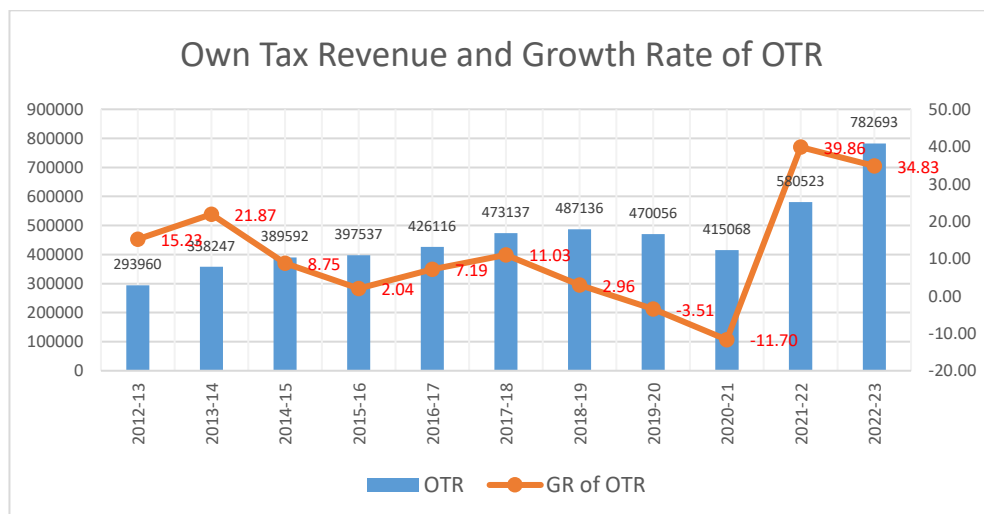
2.5.1 Composition and trend of the State's Own tax Revenue and Share in the Central Taxes

State's performance in the mobilization of additional resources as distinct from the share in Union taxes/duties and grants-in-aid from GoI, should be assessed in terms of its own resources. In this section we look at the composition of the State's OTR and its share in the Central taxes.

2.5.1.1 State's Own Tax Revenue

The own tax revenue (OTR) of the state from 2011-12 to 2022-23 in absolute terms and the growth rate of OTR is given below. The State's own tax revenue in 2022-23 increased by 34.83 percent over the previous year. This increase was due to higher collections under SGST, taxes on sales, trade, stamp duty and registration fee, State excise, and taxes on vehicles. During 2022-23, major contributors of tax revenue were SGST (45 percent), taxes on sales, trades, etc. (24 per cent) and stamp duty and registration fees (13 percent) (CAG, 2024a). The growth rate surged to 39.86 percent in 2021-22, driven by revival of economic activity, particularly in Goa's tourism and related sectors in the post-COVID-19 period.

Figure 2.5: Growth Rate of OTR



Source: Author's calculation based on Finance Accounts, GoG, Various Years

In 2021, approximately 33.08 lakh domestic and 0.22 lakh foreign tourists preferred Goa as their tourist destination and in 2022 till September approximately 49.5 lakh domestic tourist and 0.95 lakh foreign tourist visited the state (The Economic Times, 2023a).

Table 2.3: Composition of State's Own Tax Revenue (in Rs lakh)

Year	State Goods and Services (SGST)	Land Revenue	Stamps and registration Fees	State Excise	Sales Tax/ Tax on Sales, Trade etc	Taxes on Vehicles	Taxes on Goods and Passengers	Other Taxes and Duties on Commodities and services	OTR
2012-13		1113	52442	21290	157742	14834	25750	20790	293960
2013-14		45436	39610	23576	170805	15391	38641	24788	358247
2014-15		2538	65984	26800	185986	18088	40419	49776	389592
2015-16		2451	52490	31952	211569	19563	46440	33072	397537
2016-17		3910	36511	32090	243817	24400	45344	40045	426116
2017-18	146374	4202	52969	41000	162169	31473	20975	13976	473137
2018-19	252909	6662	43234	47798	101353	29868	3045	2268	487136
2019-20	243850	3711	39337	49179	103284	26877	3214	604	470056
2020-21	198492	3418	35041	51486	98981	21942	4129	1579	415068
2021-22	275766	6584	64453	65004	138326	26110	2231	2050	580523
2022-23	353628	8412	98599	86577	189876	41173	2508	1920	782693
Sparkline									

Source: Finance Accounts, GoG, Various Years

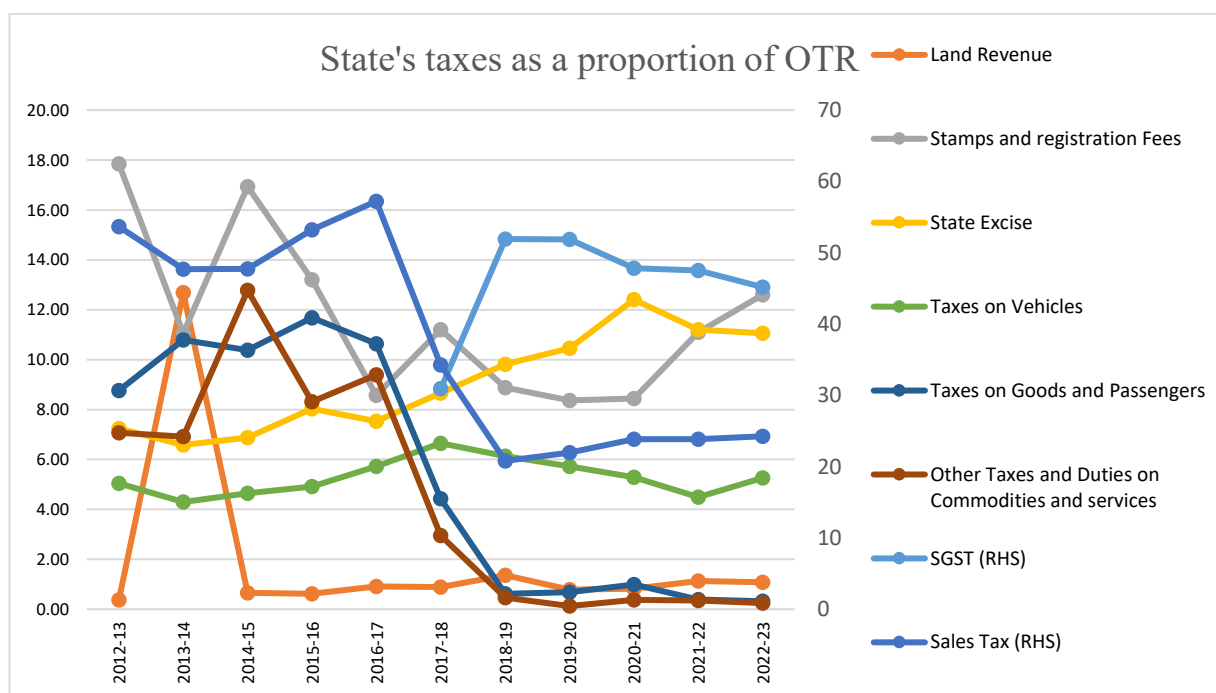
Note: Taxes on Duties on Electricity had no revenues collected during the study period.

OTR comprises of SGST, Other Taxes on Income and Expenditure, receipts from land revenue, stamps and registration, taxes on wealth, State excise, Sales tax, taxes on vehicles, taxes on goods and passengers, taxes and duties on electricity and other taxes and duties on commodities and services. There has been a steady rise in the OTR till 2019-20, with a decline in 2020-21 and a steep rise in the 2021-22. Among all the components SGST and State Excise has shown an increasing trend as reflected in the Sparkline.

Increase in State Excise was mainly due to increase in receipts due to sale of country spirit, malt liquor and foreign liquor and spirits. The State Government had also increased the processing fee, renewal fee for retailers and Minimum Guaranteed Quantity of country

liquor, etc. under the State Excise Policy. In 2023, To promote the sale of high-end foreign liquor and to encourage north Indian tourists to buy liquor in Goa, the state government reduced the excise duty on high end foreign liquor and marginally increased the duty on other categories of IMFL to increase the state's revenue (The Times of India, 2023). The figure below shows the percentage share of each taxes in OTR.

Figure 2.6: State's taxes as a proportion of OTR



Source: Finance Accounts, GoG, Various Years

Note: Sales tax and SGST is represented on Secondary axis,(RHS), all the other taxes are represented on the primary Axis (LHS).

Among all the sub-components, SGST and sales tax have been the major contributors to the state's OTR. With the introduction of SGST in 2017, the contribution of sales tax drastically declined from 47.68 percent in 2012-13 to 24.2 percent in 2022-23. On the other hand, the contribution of SGST increased from 30.94 percent in 2017-18 to 45.18 percent in 2022-23.

Stamps and registration fees has been the next largest contributor to OTR with more significant variation in its contribution over the years, showing a surge in revenue from Stamps and Registration Fees in 2012-13 at 11.06 to 16.9 percent in 2013-14 percent, with a significant decline in revenue at 8.37 percent 2019-20. Due to less receipts under court fees realized in stamps and sale of stamps during the years 2018-19 and 2019-20 tax revenue has declined.

The contribution of "Land revenue" has always remained low except in 2013-14, where it showed a steep rise to 12.68 percent. In fact this is a tremendous increase in receipts from land revenue in 2013-14. Similarly, there is an almost three fold increase in the revenue

from stamps and registration since 2012-13. There was a steep rise in revenue collection under the Stamp Duty in 2014-15 over 2013-14 mainly due to increase in collection under Stamps (Non-Judicial) fees (from Rs 28926.4 lakh to 53444.3 lakh). During 2013-14 the land revenue had increased substantially due to more collections under ‘Land Revenue Tax’ and ‘Survey and Settlement Operations’. These two developments can be thus attributed to the upward revision in the rates of taxes under these heads (GOG 2014). In the same period for certain projects, like tourism and industry related, it was proposed in the budget to levy conversion fees on the entire plot of land and not only for the plinth area which is desired to be converted. However, the collections under the land revenue decreased by 94 per cent in 2014-15 as compared to previous year and has been less thereafter.

The third largest and a steady contributor towards OTR is from State Excise, the revenue has shown a general increase, peaking in 2020-21 at 12.40 percent from 6.58 percent in 2012-13. The detail of the contribution made by the State Excise is given below in the table..

Revenues from Taxes on Goods and Passengers dropped below 1 percent after 2017-18, from 10.64 percent in 2016-17 with the introduction of GST. Revenue from vehicle taxes fluctuated slightly but remained relatively stable at between 4 and 6 percent over the years. Revenue from taxes on wealth has formed only a meagre portion. In the category of Other Taxes and Duties on Commodities and Services, Entertainment tax and luxury tax contributed highest till 2017-18. The casino industry paid Rs 135.45 crore in this form including entertainment tax, entry charges, liquor license and port charges (The Economic Times, 2013). Casinos charged Rs 500 per customer as entry tax and the full amount is paid to the government. This was reduced from Rs 2000 per person in the 2011-12 fiscal year. To balance out, the government hiked licence fee for casino operators.

2.5.1.2 Components of State Excise

State excise revenue is one of the main sources of revenue for the Government of Goa. As the revenue collected from State Excise has been the major component in OTR, the table below gives the details of the sub components of State Excise duties.

Table 2.4: Components of State Excise

Types	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Sparkline
Country Spirits	0.59	0.44	0.56	0.60	0.97	0.58	0.49	0.44	0.45	0.41	0.37	0.31	
Malt Liquor	29.22	28.20	28.93	29.33	24.63	28.17	29.37	28.24	27.42	24.58	23.25	27.47	
Liquor	5.26	6.65	6.40	8.85	11.69	11.22	8.68	9.44	9.72	7.25	7.52	48.28	
Foreign Liquors and Spirits	4.65	5.10	4.94	3.31	7.51	2.02	2.31	4.59	11.07	8.95	9.25	9.42	
Commercial and denatured spirits	0.03	0.02	0.02	0.05	0.06	0.02	0.00	0.00	0.00	0.00	0.00	2.14	
Medicinal and toilet preparations	3.04	2.36	2.62	3.02	1.20	1.52	0.38	0.01	0.00	0.01	0.03	0.06	
Wines	1.63	1.81	2.15	1.87	0.99	2.05	2.09	1.89	1.83	1.12	1.34	0.00	
Indian Made Foreign Liquors	40.22	40.68	40.15	41.76	40.45	45.39	45.22	43.87	40.34	42.97	49.43	0.00	
Spirits	6.95	5.71	5.11	3.23	2.82	3.64	2.92	3.62	3.65	2.73	2.65	0.00	
Sales to Canteen Stores Depot	0.26	0.25	0.24	0.26	0.09	0.02	0.02	0.02	0.00	0.00	0.03	0.00	
Licences	6.86	7.52	7.60	6.44	7.87	4.29	7.48	7.08	4.72	11.27	5.49	0.01	
Fines and Confiscations	0.07	0.07	0.03	0.04	0.58	0.05	0.03	0.03	0.02	0.03	0.04	0.01	
Other Receipts	1.23	1.20	1.27	1.26	1.14	1.04	1.01	0.78	0.76	0.68	0.58	12.30	

Source: Author's calculation based on Finance Accounts, GoG, Various Years

Revenue collected from Malt Liquor and Indian made Foreign liquor (IMFL) has been having a higher percentage contribution as denoted by the spark line in the table above.

State excise is collected at two points; a) at the point of manufacture of liquor in manufacturing units through levy of excise duty and b) at the level of taluka excise stations for granting permission for wholesale and retail sale of liquor through levy of license fees, additional fees, occasional fees, surcharge etc. The yearly renewal license fees from wholesaler/retailers and grant of new liquor licenses is the main sources of revenue for the taluka excise stations. Besides, surcharge from hotels for operation of casinos, licensees operating on weekly closure day, additional time license fee, occasional license fee, fines, sales proceeds etc. are also collected. At the manufacturing units excise duty is levied on manufacture of liquor for local dispatch based on the Maximum Retail Price (MRP) of the liquor. Export fee is levied for export of liquor out of the State by the manufacturing units. In addition to local excise duty and export fee, library cess and health surcharge etc. are also levied.

The table above shows Malt liquor and Indian made foreign liquor has been the largest contributor to the state excise in Goa. There has been an increase in the Excise Duty marginally on Indian Made Foreign Liquor and Beer other than Milk Punch and Wines manufactured in the State of Goa/imported from the rest of India/or from outside India and sold in the State of Goa.

A Performance Audit on levy and collection of the State excise revenue was taken up to assess the system for levy and collection of the State excise revenue. Audit findings (CAG Report, GoG, 2022) indicate certain lacunae in Goa Excise Policy,- a) there was an absence of standards for minimum production and b) wastage on malt spirit.

Generally, Government prescribed standard for minimum production of spirit and permissible wastage are the key controls for adequate supervision of distilleries by the Excise Department. The absence of such key controls creates a risk of excess/short accountability of liquor production and wastages remaining undetected by the Department, resulting in a leakage of government revenue. After been pointed out by the audit, Government notified in June 2021 the allowable wastage of 0.5 per cent per month on the quantity of malt spirit kept for maturation in the wooden vats (CAG Report, GoG, 2022).

Besides, there was no action taken by the department against non-renewal of licenses. The non-enforcement of existing control mechanism, resulted in short recovery of excise duty, license fees and other dues. Audit found 1,275 licensees out of 9,188 licensees had not renewed their licenses in the five selected excise stations for the periods ranging from 2014-15 to 2019-20. After being pointed out by Audit, the Department renewed 250 licenses out of 1,275 for period ranging between 2016-17 and 2019-20 and recovered 40.51 lakh between June 2019 and September 2020. Department had cancelled about 180 number of licenses and instructions were issued to excise inspectors to propose for cancellation of non-renewal cases after following due procedure.

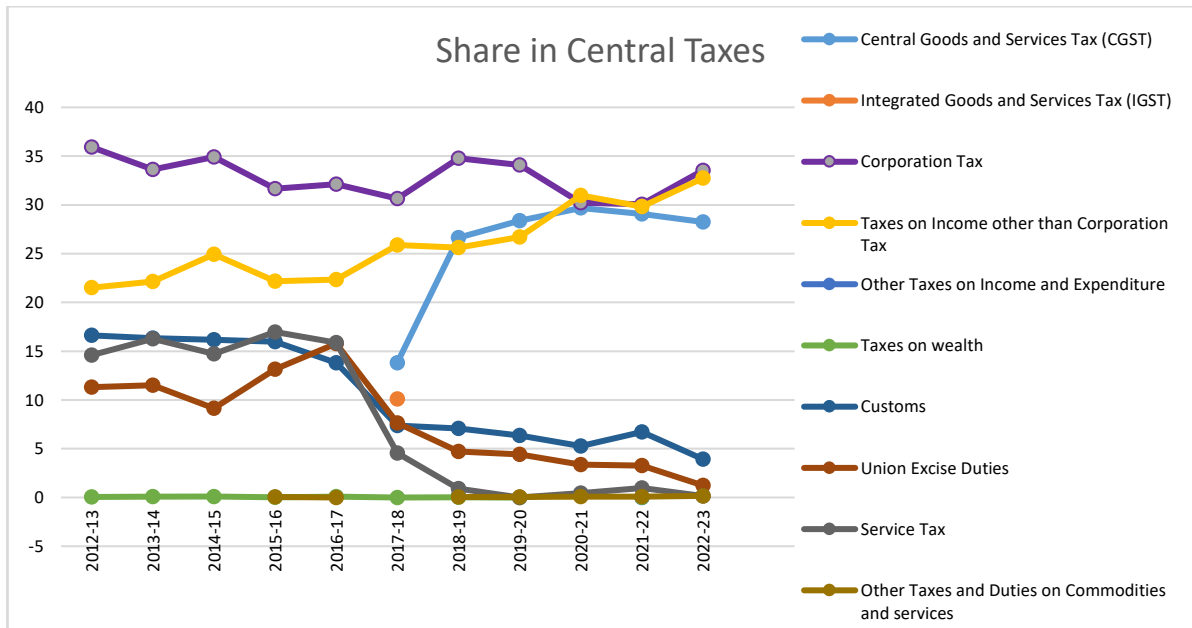
An additional license fee of one lakh was to be levied separately for retail sale of Foreign Liquor (FL) from hotels having casino license issued by the Government. It was also observed in audit scrutiny done in July 2017, November 2017 and February 2018, that additional license fee was not levied from nine licensees having casinos license for retail sale of FL during the period from 2008- 09 to 2015-16. This resulted in short levy of additional license fee amounting to `Rs 1.22 crore including interest.

2.5.1.3 Share of the States in Central Taxes

With the implementation of GST in 2017 in the Indian tax system, numerous indirect taxes have replaced by a uniform tax structure. The share in CSGT has increased considerably from 13.81 percent in 2017-18 to 28.26 percent in 2022-23. This reflects the increasing significance of GST as a major tax source. In the category of 'Taxes on Income and Expenditure' the share of corporation tax has been has been in a consistent range of 30-36%.

Though there has been fluctuations in its share, it has remained a significant share of the divisible pool throughout.

Figure 2.7: Ratio of Share in Central Taxes



Source: Author's calculation based on Finance Accounts, GoG, Various Years

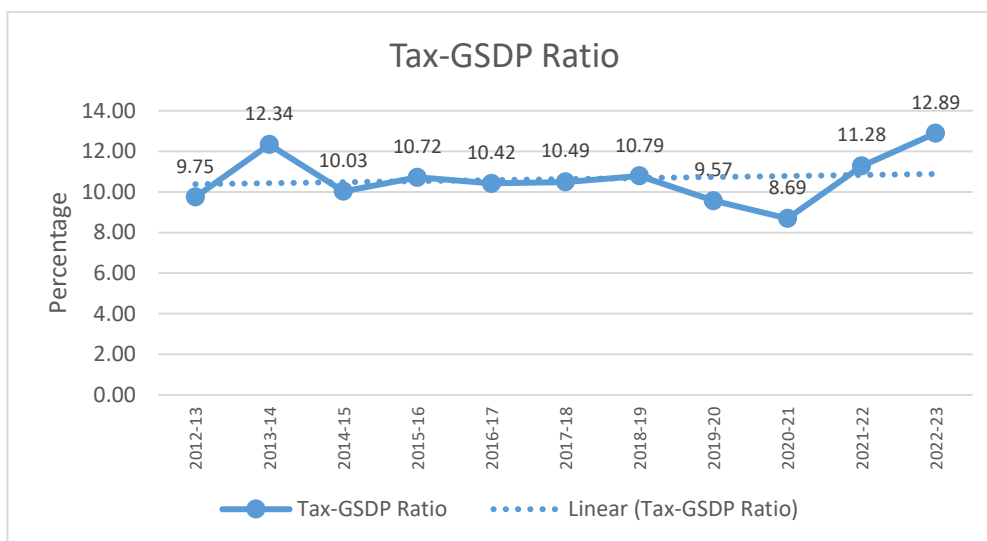
There has been a fall in the Corporation taxes from 35.92 percent in 2012-13 to 30.64 percent in 2017-18 but it picked up in the next two years. There has been growing contribution from Taxes on Income other than Corporation tax, personal income tax in certain years could be driven by higher tax compliance and increase on tax base. Custom duties, Union excise duties and service tax has shown a declining trend from since the introduction of GST. Custom duties declined from 16.62 percent in 2012-13 to 7.38 percent in 2017-18, and had a sharp decline to 3.94 percent in 2022-23. Similar was the case of union excise duties, from 11.29 percent in 2012-13 to 1.24 percent in 2022-23. The service tax share dropped drastically from 14.6 percent in 2012-13 to 4.55 percent in 2017-18, and then it became negligible, reaching 0.16 percent by 2022-23. Other Taxes and Duties on Commodities and services had negligible contribution over the years.

2.5.2 Tax-GSDP Ratio

A standard measure of the State's tax performance is the tax-GSDP ratio, which measures the proportion of income generated in the taxed economy. Given the taxable capacity, the actual tax revenue collection will depend, among other things, on the tax effort made, the tax collection machinery's efficiency and the state economy's performance. The

performance of the State Government on each of these sources of revenue is discussed below.

Figure 2.8: Tax-GSDP Ratio



Source: Finance Accounts, GoG, Various Years and Economic Survey, GoG various years

The State Government's tax-to-GSDP ratio has fluctuated over the years. It increased significantly from 9.7 per cent in 2012-13 to 12.3 per cent in 2013-14, and after that declined to around 10 per cent from 2014-15 to 2018-19. From a substantial decline in the tax-GSDP ratio in 2020-21 to 8.7 per cent, there was a sharp increase to 12.8 per cent in 2022-23.

The disaggregated internal composition of taxes as a proportion of GSDP is given in the table below. We look at the key trends and significance from 2012-13 to 2022-23.

Table 2.5: Internal composition of taxes as a proportion of GSDP

Tax Revenue	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
0005 CGST	0.00	0.00	0.00	0.00	0.00	0.51	1.07	0.94	0.92	1.20	1.16
0006 SGST	0.00	0.00	0.00	0.00	0.00	2.11	3.52	3.25	2.68	3.40	3.97
0008 IGST	0	0	0	0	0	0.37	0	0	0	0	0
Total GST	0.00	0.00	0.00	0.00	0.00	2.99	4.59	4.19	3.60	4.60	5.13
0020 Corporation Tax	0.73	0.79	0.66	1.11	1.17	1.12	1.39	1.13	0.94	1.24	1.38
0021 Taxes on Income other than Corporation Tax	0.44	0.52	0.47	0.77	0.82	0.95	1.03	0.88	0.96	1.23	1.35
(a) Taxes on Income and Expenditure	1.17	1.32	1.13	1.88	1.99	2.07	2.42	2.01	1.89	2.47	2.72

0028 Other Taxes on Income and Expenditure	0	0	0	0	0	0	0.0073	0.0000	0.0000	0.0000	0
0029 Land Revenue	0.03	1.26	0.05	0.04	0.06	0.06	0.09	0.05	0.05	0.08	0.09
0030 Stamps and Registration Fees	1.38	1.10	1.38	0.95	0.58	0.76	0.60	0.52	0.47	0.79	1.11
0032 Taxes on wealth	0.001	0.002	0.002	0.000	0.003	0.000	0.001	0.000	0.000	0.000	0.000
(b) Taxes on property and capital transactions	1.41	2.37	1.43	1.00	0.64	0.82	0.70	0.57	0.52	0.87	1.20
0037 Customs	0.34	0.39	0.30	0.56	0.50	0.27	0.28	0.21	0.16	0.28	0.16
0038 Union Excise Duties	0.23	0.27	0.17	0.46	0.58	0.28	0.19	0.15	0.10	0.14	0.05
0039 State Excise	0.56	0.66	0.56	0.58	0.51	0.59	0.67	0.66	0.69	0.80	0.97
0040 Sales Tax/ Tax on Sales, Trade etc	4.14	4.76	3.89	3.84	3.87	2.34	1.41	1.38	1.33	1.70	2.13
0041 Taxes on Vehicles	0.39	0.43	0.38	0.36	0.39	0.45	0.42	0.36	0.30	0.32	0.46
0042 Taxes on Goods and Passengers	0.68	1.08	0.85	0.84	0.72	0.30	0.04	0.04	0.06	0.03	0.03
0043 Taxes on Duties on Electricity	0	0	0	0	0	0	0	0	0	0	0
0044 Service Tax	0.30	0.38	0.28	0.59	0.58	0.17	0.04	0.00	0.01	0.04	0.01
0045 Other Taxes and Duties on Commodities and Services	0.55	0.69	1.04	0.60	0.64	0.20	0.03	0.01	0.02	0.03	0.03
(c) Taxes on commodities and services	7.17	8.65	7.47	7.84	7.78	4.60	3.08	2.80	2.69	3.33	3.84
Total Tax Revenue	9.75	12.34	10.03	10.72	10.42	10.49	10.79	9.57	8.69	11.28	12.89

Source: Author's calculation based on Finance Accounts, GoG, Various Years

The introduction of GST in 2017 has altered the tax revenue system, with contributions from CGST and SGST rising steadily while the contribution of Sales Tax, Service Tax and Union Excise duties declining over the years. The CGST as a proportion of GSDP rose from 0.51 per cent to 1.16 per cent in 2022-23, with the highest at 1.20 percent in 2021-22. The SGST

has been the more significant component of GST and has grown steadily from 2.11 per cent in 2017-18 to 3.97 percent in 2022-23. IGST only made a small contribution at 0.37 percent in 2017-18. The total GST as a proportion to GSDP increased steadily over the years, indicating that GST is an essential source of tax revenue in the state of Goa.

The total 'Taxes on Income and Expenditure' proportion of GSDP has grown consistently from 1.7 per cent in 2012-13 to 2.72 per cent in 2022-23, reflecting an increasing reliance on direct taxes as a source of tax revenue. The two components of this tax- the Corporation Tax and the Taxes on Income other than Corporation Tax- increased from 0.79 and 0.52 per cent to 1.38 and 1.35 per cent, respectively in the same period. The percentage of Corporation tax was highest in 2022-23 (1.38 per cent).

'Taxes on property and capital transactions' have been highly volatile with large fluctuations. It was 1.41 percent in 2012-13, with the highest contribution in 2013-14 at 2.37 percent. The major component of this tax has been 'Stamps and Registration Fees', which decreased from 1.38 percent in 2012-13 to 1.11 percent in 2022-23. Land revenue has been a small and inconsistent contributor, it peaked only in 2013-14 at 1.26 percent of GSDP. Taxes on Wealth has made negligible contributions over the years.

The total 'taxes on commodities and services' had the highest proportion of GSDP before GST was introduced. It was 7.17 percent in 2012-13 and steadily increased to 8.65 per cent in 2013-14 thereafter showing a fall to 7.78 percent in 2016-17. However, post GST there has been a steady decline in this tax to 3.38 percent in 2022-23, reflecting the transition to a new tax regime. Within this segment, the major component has been 'Sales Tax/ Tax on Sales, Trade etc', it was 4.14 per cent in 2012-13 and increased to 4.76 percent in 2013-14. After GST implementation, its contribution dropped to 1.38 percent in 2019-20 and rose to 2.13% by 2022-23. The 'State Excise' has consistently grown from 0.56 percent in 2012-13 to 0.97 percent in 2022-23. The contribution of 'Customs' as a percentage of GSDP ranged from 0.34 percent in 2012-13 to 0.16 percent in 2022-23, while 'Union Excise Duties' was 0.23 percent in 2012-13, rose to 0.58 percent in 2016-17, but after that dropped significantly, reaching 0.05% by 2022-23. The contribution of 'Taxes on vehicles' was between 0.30 percent and 0.46 percent of GSDP, and it has remained fairly consistent over the years. 'Service tax' as a proportion to GSDP was 0.30 percent in 2012-13 and increased to 0.58 percent in 2016-17, but drastically reduced after 2017, when service tax was subsumed into GST, reaching 0.01 per cent in 2022-23. Contribution of 'Other Taxes and Duties on Commodities and Services' was higher in the pre GST period, from 0.55 percent

in 2012-13 it increased to 1.04 percent in 2014-15 but thereafter it continuously declined and was negligible by 2022-23. The huge fluctuations in the ratio has been due to the change in the tax structure.

Before GST implementation, multiple indirect taxes, like sales tax, service tax, excise, and others, contributed heavily to state revenues. From 2017, number of union and state taxes were subsumed in the goods and services tax (GST). As a result, the legislative authority of states over revenues have considerably diminished. Some studies show that the reduction of state autonomy in the sphere of taxation would reduce states own tax revenue by around 17% (Suhag & Tiwari, 2018). The introduction of GST in 2017 resulted in a shift in the composition of tax revenue. The total tax revenue as a proportion of GSDP was 7.63 per cent in 2011-12. It dropped in the years following GST implementation but rose again to 12.89% in 2022-23.

2.6 Tax Buoyancy

As the GSDP increases does the tax revenue also rise at the same pace? To understand this aspect we need to measure the tax buoyancy and tax elasticity. Buoyancy is an indicator of the responsiveness of tax receipts to economic growth. A tax is said to be buoyant when revenues increase by more than one percent for a one percent increase in national income or output. A tax is not buoyant in the opposite case. Buoyancy coefficient is a measure of the degree of responsiveness to changes in income and is as follows:

$$\ln Y = \alpha + \beta \ln X \quad 1$$

The basic estimation procedure for tax buoyancies is through a double log specification of the type given in equation 1, where, X is independent variable (GSDP) and Y is dependent variable (Tax Revenue).

Table 2.6: Estimated Buoyancy Co-efficient of State Taxes (2012-13 to 2022-23)

	State Taxes	Buoyancy Coefficient	P-Value	R-Squared
1	Own Tax revenue	0.81	0	0.73
2	State Goods and Services (SGST)	2.83	0.02	0.74
3	Land Revenue	0.49	0.64	0.02
4	State Excise Duty	1.44	0	0.88
5	Sales Tax	-0.32	0.28	0.11
6	Taxes on Vehicles	0.98	0	0.82
7	Taxes on Goods and Passengers	-3.13	0.004	0.58
8	Stamps and registration Fees	0.52	0.2	0.15

9	Other Taxes on Duties and Commodities	-3.38	0.008	0.51

Source: Author's calculation based on Finance Accounts, GoG, Various Years

Tax buoyancy is a measure of how taxes react to economic growth. In the above table, the tax buoyancy is estimated for the components of state's OTR. The sum of revenue Items (28, 29, 30, 32, 39, 40, 41, 42, 43 and 45) has a coefficient of 0.81 (significant at 99%) showing a low tax buoyancy in the overall OTR of the state. Among all the components of OTR, only SGST had very high buoyancy coefficient of 2.83 (significant at 95%). This is followed by State Excise duties with a coefficient of 1.44 (significant at 99%). In sharp contrast, the Sales Tax, Taxes on Goods and Passengers, Other Taxes on Duties and Commodities is seen to have a negative coefficient indicating low buoyancy.

As SGST was introduced in 2017 by subsuming some of the taxes, we have considered only the pre GST period from 2011-2-17 to capture the tax buoyancy of the respective taxes.

Table 2.7: Pre GST- Buoyancy rate

	State Taxes	Buoyancy Coefficient	P-Value	R-Squared
1	Own Tax revenue	0.65	0.04	0.59
2	Land Revenue	-0.64	0.79	0.01
3	Sales Tax	0.31	0.25	0.24
4	Taxes on Vehicles	1.09	0.002	0.87
5	Taxes on Goods and Passengers	0.09	0.8	0.004
6	Stamps and registration Fees	0.37	0.62	0.05
7	Other Taxes on Duties and Commodities	0.09	0.91	0.002

Source: Author's calculation based on Finance Accounts, GoG, Various Years

Except for taxes on vehicles, no other type taxes had high buoyancy in this period.

We have also estimated the tax buoyancy for certain sources of OTR like Sales tax, State Excise duties, Taxes on Vehicles, Goods and Passenger Tax, Stamps and Registration and Other Taxes by taking into account their specific tax bases. The Government needs to broaden the Tax- base by including certain new areas under taxation.

Table 2.8: Types of Tax and Tax base

Sr.No	Types of Tax	Tax Base
1	Sales Tax	Gross Value added (GVA) from Manufacturing, GVA from Hotels and Restaurants, GVA from Financial Services

2	State Excise Duty	PCGSDP
3	Taxes on Vehicles	Number of vehicles registered and PCGSDP
4	Goods and Passenger Tax	GVA from Transport, GSDP
5	Stamps and Registration	GVA from Real Estate
6	Other Taxes on Duties and Commodities	GSDP

Source: Author's calculation based on Finance Accounts, GoG, Various Years

Table 2.9: Tax buoyancy with different tax base

	PCGSDP	GSDP	Number of Vehicles	Real Estate	GVA manufacturing	Hotels and restaurants	Financials services	transport
Vehicles	1.15***		0.55***					
	10.49		3.38					
Stamps and Registration				0.75***				
				2.32				
State Excise	1.53***							
	8.23							
Sales tax					-0.39	0.17	-0.15***	
					-0.8	0.41	2.8	
Goods and Passengers		-7***						4.04**
		-2.47						1.43
Other taxes		-3.36***						
		-3.27						

Note *T-value in the parentheses, both the dependent and independent variables are expressed in log.

Specific tax bases depending on the type of taxes, show statistically significant results. Increase in the Number of vehicles and rise in the pcGSDP has increased the tax collected for vehicles. Similarly, increase in real GVA from real estate has brought about a rise in the

tax collected on stamp and registration. Increase in pcGSDP increased the state excise duties, while rise in GSDP is negatively related to goods and passenger tax and other taxes.

2.7 Tax Effort Comparison

The term 'tax effort' signifies the measure of a country's tax performance. It is the expected tax yield given a country's taxable capacity. It thus reflects the extent to which a country uses its taxable capacity (Teera & Hudson, 2004). It is used by the Finance Commission to decide the transfer of resources from the Centre to the state government. Higher tax efforts will mobilize more resources to increase public investments, adding to the state's productive capacity and improving public service delivery (Boadway, 1997). Among the different methods of estimating tax efforts regression and Stochastic Frontier Analysis are considered to be the best ones (Malik et al., 2023)

Table 2.10: Comparison of Tax Efforts

Sr.No	Year	Average Tax/GSDP (2011-12 to 2016-17)	Average Tax/GSDP (2017-18 to 2022-23)	Ratio of Col(3)/Col(2)
	Col (1)	Col (2)	Col (3)	Col (4)
1	GST	-	4.181	-
2	0005- Central Goods and Services Tax (CGST)	0.000	0.966	-
3	0006-State Goods and Services (SGST)	0.000	3.153	-
4	0008-Integrated Goods and Services Tax (IGST)	0.000	0.062	-
5	(a) Taxes on Income and Expenditure	1.407	2.266	1.61
6	0020 - Corporation Tax	0.849	1.200	1.41
7	0021 - Taxes on Income other than Corporation Tax	0.557	1.066	1.91
8	(b) Taxes on property and capital transactions	1.218	0.782	0.64
9	0028 - Other Taxes on Income and Expenditure	0.000	0.001	
10	0029 - Land Revenue	0.246	0.071	0.29
11	0030 - Stamps and registration Fees	0.971	0.710	0.73
12	0032 - Taxes on wealth	0.002	0.000	0.07
13	(c) Taxes on commodities and services	7.521	3.390	0.45
14	0037 - Customs	0.395	0.228	0.58
15	0038 - Union Excise Duties	0.315	0.151	0.48
16	0039 - State Excise	0.549	0.730	1.33
17	0040 - Sales Tax	4.066	1.716	0.42

18	0041 - Taxes on Vehicles	0.378	0.384	1.01
19	0042 - Taxes on Goods and Passengers	0.776	0.083	0.11
20	0043 - Taxes on Duties on Electricity	0.000	0.000	
21	0044 - Service Tax	0.387	0.044	0.11
22	0045 - Other Taxes and Duties on Commodities and services	0.654	0.054	0.08
23	Own Tax Revenues	7.64	6.89	0.90
24	Sharable with Centre	2.51	3.72	1.48
25	Total- Tax Revenue	10.14	10.62	1.05

Source: Author's calculation based on Finance Accounts, GoG, Various Years

In the table we compare tax efforts made by the State in the period under study. We divide the period into two distinct time periods of six years each (2011-12 to 2016-17 and 2017-18 to 2022-23). We calculate the Average Tax/GSDP ratio in the two periods and provide a ratio of these tax efforts between the periods. The column (4) indicates the tax effort made by the state. The ratio of the two periods (Col 4) takes only non-negative values (unless there are refunds in a year exceeds collections). If the ratio is greater than 1 it means that the tax-to-GSDP ratio increased in the second period (2017-18 to 2022-23), indicating improved tax efforts. If the ratio is less than 1, it means the tax-to-GSDP ratio fell, suggesting a decline in tax efforts made by the State during the second half of the period.

With the adoption of GST, there was a significant rise in the taxes collected under SGST of 3.15 percent of GSDP. Combining the GST (CGST, SGST, IGST), we have a high tax to GSDP ratio of 4.18 percent in the second period (2017-18 to 2022-23). As GST was introduced only from 2017 onwards, calculation of the ratio for comparing tax efforts is not given in the table. The tax effort under the component 'Taxes on Income and Expenditure' increased substantially having a ratio of 1.61 percent indicating an increasing tax effort made in the second half of the period. Within this component, the Corporation Tax and Taxes on Income other than Corporation Tax both have ratios more than one, at 1.41 and 1.91 percent respectively, showing that these taxes serve as a robust source of tax revenue of the state of Goa. The component 'Taxes on property and capital transactions' underperformed in the second period shown by the ratio of 0.64 percent, reflecting a declining tax efforts of the State. Its sub components, Land Revenue and Stamps and registration Fees showed a significant drop with the ratio of 0.28 and 0.73 respectively in

the second period. The overall tax effort in the component 'Taxes on commodities and services' fell sharply to the ratio of 0.45, showing that the tax collection in this category could not keep pace with the rise in GSDP. Under this component, only two sub components, State excise and Taxes on Vehicles, tax effort took the value of more than one, 1.32 and 1.01, showing rising efforts in the second period. State excise imposed on Malt Liquor and Indian Made Foreign Liquors rose in the second period leading to an improved tax effort ratio. While, under Taxes on vehicles, the sub component 'Receipts under the State Motor Vehicles Taxation Acts' had large contribution in the second half period resulting in higher tax effort ratio. Again, in the first period, the sales tax was a major contributor with an average tax to GSDP ratio of 4.06, however, after 2017-18, Sales Tax was replaced by GST resulting in the drastic fall of the average tax to GSDP ratio to 1.71. The tax effort therefore showed a steep fall to 0.42.

The OTR ratio of 0.90, reflects a decline in the tax effort of the State to raise its own taxes compared to the growth in GSDP in the second period. The tax effort in case of the shareable taxes with the Centre increased as seen by the ratio of 1.48 indicating an increased tax collection efforts of the Government. Overall tax revenue collection of the state has improved in the second period as shown by the ratio of 1.04. We can thus infer that with the change in the tax structure the contribution from GST replaced many conventional taxes. The tax efforts from property transactions needs to be increased with reforms in areas and diversifying the tax base.

2.8 Suggestions for Enhancing Revenue Productivity

In some of the taxes we notice that a good tax effort is made as reflected by the ratio above the one. Under the component 'taxes on income and expenditure' the ratio being 1.61 reflects increasing tax efforts. Corporation Tax and Taxes on Income serve as an impotent source of revenue to the state.

State's performance in mobilization of additional resources, as distinct from its share of Union taxes/duties and grants-in-aid from GoI, needs to be assessed in terms of its own resources.

'Taxes on property and capital transactions' though has a significant revenue potential for states like Goa underperformed in the second period, indicating less tax effort. As Goa has a significant real estate market, property tax and urban tax can be upgraded. The luxury properties and holiday homes, leveraging Goa's tourism-driven real estate boom need to be

having high progressive tax. Rebates may be provided for green-certified properties to encourage sustainable construction and also to incentivize compliance. To increase the tax base all unregistered and unidentified properties need to be surveyed. There need to be differentiated rates for urban, rural, and high-value property sales and corporate transactions to balance revenue and prevent undervaluation. Luxury properties and second homes, especially those in premium coastal and tourist zones needs levy of additional taxes. On each type of tax it is necessary to expand the tax base to improve the revenue productivity. Similarly, strengthening the compliance mechanisms is needed.

2.9 Conclusion

Based on the above analysis, we can conclude that tax revenue grew significantly over the period from Rs 371,687 lakh in 2012-13 to Rs 1,149,212 lakh in 2022-23. OTR has been the highest contributor at around 80% of the two components from 2012-13 to 2014-15, from 2015-16 onwards there has been a rise in the share in Central taxes above 30 percent with the highest in 2018-19 at 37.1 percent in 2018-19. Till the introduction of GST, 'Taxes on Commodities and Services', contributed around 70.9 percent in 2012-13 to 69.9 percent in 2016-17. Post GST regime, contribution from the three categories of GST was in the range of 23.7 percent to 39.2 percent. Contribution from "Taxes on Property and Capital Transactions" is declining over time, tax effort in this category needs to be enhanced. State excise revenue is one of the main sources of revenue for the Government of Goa. . The tax performance of the state of Goa suggests that there has been the better tax efforts made by the State in the collection of taxes, overall tax revenue collection of the state has improved in the second period as shown by the ratio of 1.04.

Annexure 1: Detailed classification of Own Tax Revenue

S.No	Description	Budget Head
1	State Goods and Services Tax (SGST)	0006
2	Tax	101
3	Apportionment of IGST - Transfer - in of Tax Component to SGST	106
4	Advance Apportionment from IGST	110
5	Other Receipts	800
6	Land Revenue -	0029
7	Land Revenue/Tax	101
8	Rates and Cess on Land	103
9	Receipts on account of survey and settlement operations	106
10	Other Receipts	800
<u>11</u>	<u>Other Services</u>	<u>60</u>
12	Other Receipts	800
13	Stamps and Registration Fees	0030
14	<u>Stamps-Judicial</u>	<u>01</u>
15	Court Fees realized in stamps	101
16	Sale of Stamps	102
17	Other Receipts	800
18	<u>Stamps-Non-Judicial</u>	<u>02</u>
19	Sale of Stamps	102
20	<u>Registration Fees</u>	<u>03</u>
21	Fees for registering documents	104
22	State Excise	0039
23	Country Spirits	101
24	Malt Liquor	103
25	Liquor	104
26	Foreign Liquors and Spirits	105
27	Commercial and denatured spirits and medicated wines	106
28	Medicinal and toilet preparations containing alcohol, opium, etc.	107
29	Wines	108
30	Indian Made Foreign Liquors	109
31	Spirits	110
32	Sales to Canteen Stores Depot	111
33	Licenses	112
34	Fines and Confiscations	150
35	Other Receipts	800
36	Sales Tax/Taxes on Sales, Trade etc	0040
37	Receipts under Central Sales Tax Act	101
38	Receipts under State Sales Tax Act	102
39	Trade Tax	105

40	Surcharge on Sales Tax	104
41	Receipts under Value Added Tax	105/111
42	Other Receipts	800
43	Taxes on Vehicles	0041
44	Receipts under the Indian Motor Vehicles Act	101
45	Receipts under the State Motor Vehicles Taxation Acts	102
46	Other Receipts	800
47	Taxes on Goods and Passengers	0042
48	Tax Collection-Passenger Tax	103
49	Tax Collection-Goods Tax	104
50	Tax on entry of goods into Local Areas	106
51	Other Taxes and Duties on Commodities and Services	0045
52	Entertainment Tax	101
53	Luxury Tax	105
54	Receipts from cess under other Acts	112
55	Other Receipts/Items	800

Source: Finance Accounts, GoG, Various Years

Note: a) Under SGST, Other Receipts (800) was added from 2021-22,

b) Under Land Revenue, Other Services (60) was added from 2021,

c) Under Sales Tax, Trade Tax (105) added from 2018-19, and the Minor head digit of Receipts under Value Added Tax changed was from 105 to 111.

Chapter 3 Analysis of State's Own Non-Tax Revenue

3.1 Introduction

Fiscal policy, encompassing taxation and public expenditure, serves as a vital instrument of economic management and is inherently intertwined with a nation's broader economic policy strategy (Musgrave & Musgrave, 1989b). It influences resource allocation, income distribution, and economic stabilization. While taxation is a cornerstone of fiscal policy, Non-tax revenue (NTR) has emerged as an equally crucial component, particularly in enhancing fiscal flexibility and addressing budgetary constraints (Tanzi & Zee, 2000).

The fiscal sustainability of a state is heavily dependent on the effective mobilization of revenues, both tax and non-tax, to meet growing public expenditure demands. Non-tax revenues, which include user charges, profits from departmental enterprises, and dividends from non-departmental commercial enterprises, provide states with much-needed flexibility to address budgetary constraints and reduce dependence on tax revenues and external borrowings (Tanzi & Zee, 2000). Goa's economic structure is driven by sectors such as tourism, mining, power, and infrastructure, thus non-tax revenues represent a critical, component of the revenue framework (Bird, 2008).

This study undertakes a comprehensive analysis of Goa's own non-tax revenues, focusing on their trends, composition, and responsiveness to economic changes over the period 2012-13 to 2022-23. Given the increasing significance of non-tax revenue in the fiscal structure and the growing emphasis on cost recovery through the implementation of 'user charges', this study aims to examine the fiscal importance of the states' own non-tax sources. Additionally, we analyse the trend rate and estimate the buoyancy of all major non-tax sources.

3.2 Composition of Revenue Receipts:

Revenues of the States can be broadly classified into tax and non-tax revenues

- i. Tax revenue is composed of States own tax revenues and share in Central taxes.
- ii. Non-tax revenues comprise of two components:

- a) States own non-tax revenues i.e. the Administrative non-tax receipts which are classified into - Receipts from General Services - Receipts from Social Services - Receipts from Economic Services and interest receipts and,
- b) Dividends and profits Interest receipts

3.3 Scope of the Study

This chapter studies the performance of Goa's Non-Tax revenue for a period ranging from 2012-13 to 2022-23. The Non tax revenue sources that are analysed in this chapter include the states Own Non-Tax Revenue – General Service, Social Service and Economic Service and Interest Receipts, Profits and Dividends.

3.4 Classification of Non-Tax Revenues in Goa

Non-tax revenue is one of the constituents of the revenue receipts in the States. The non-tax sources include a) Revenues that originate from and b) those which originate from the administrative departments and departmental undertakings.

Table 3.1 : Sources of Non-tax Revenue with Budget Heads in Finance Accounts of Goa

Sl. No.	Description	Budget Head
1	Revenue from Assets	
1.1	Interest receipts	0049
1.2	Dividends and Profits	0050
2	General Services	
2.1	Public Service Commission	0051
2.2	Police	0055
2.3	Jails	0056
2.4	Supplies and Disposals	0057
2.5	Stationery and printing	0058
2.6	Public Works	0059
2.7	Other Administrative Services	0070
2.8	Contribution and recoveries towards Pensions and other Retirement Benefits	0071
2.9	Miscellaneous General Services	0075
3	Social Services	
3.1	Education, Sports, Art and Culture	0202
3.2	Medical and Public Health	0210
3.3	Family Welfare	0211
3.4	Water Supply and Sanitation	0215
3.5	Housing	0216
3.6	Urban Development	0217
3.7	Information and Publicity	0220
3.8	Labour and Employment	0230
3.9	Social Security and Welfare	0235

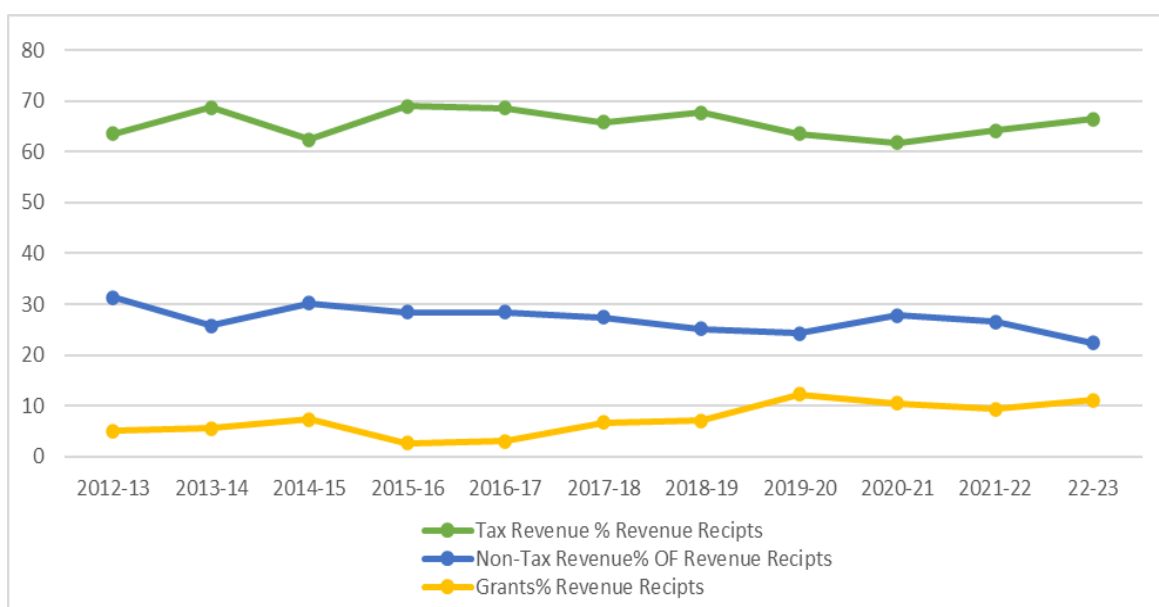
Sl. No.	Description	Budget Head
4	Economic Services	
4.1	Crop Husbandry	0401
4.2	Animal Husbandry	0403
4.3	Dairy Development	0404
4.4	Fisheries	0405
4.5	Forestry and Wild Life	0406
4.6	Cooperation	0425
4.7	Other Agricultural Programmes	0435
4.8	Other Rural Development Programme	0515
4.9	Major and Medium Irrigation	0701
4.10	Minor Irrigation	0702
4.11	Power	0801
4.12	Village and Small Scale Industries	0851
4.13	Industries	0852
4.14	Non Ferrous Mining and Metallurgical Industries	0853
4.15	Ports and Lighthouses	1051
4.16	Roads and Bridges	1054
4.17	Inland Water Transport	1056
4.18	Tourism	1452
4.19	Civil Supplies	1456
4.20	Other General and Economic Services	1475

Source: Finance Accounts, GoG, Various Years

3.5 Composition of States Revenue Receipts

The composition of Goa's revenue resources reveals distinct patterns in tax revenue, non-tax revenue (NTR), and grants from the Centre. The different components of revenue resources over the years 2012-13 to 2022-23 is presented below.

Figure 3.1: Composition and Trends in Revenue Receipts



Source: Finance Accounts, GoG, Various Years

Tax revenue as a percentage of revenue receipts, has remained relatively stable over the years, fluctuating around 65–70%, highlighting its consistent dominance in state finances. The share of non-tax revenue in total revenue, however, exhibits notable fluctuations. Peaks, such as those in 2013-14 and 2015-16, stem from higher contributions from key non-tax sources like mining royalties, tourism-related revenue, Conversely, dips in years like 2014-15 and 2016-17 can be attributed to reduced mining activity due to regulatory restrictions(The Economic Times, 2023b).

Table 3.2: Revenue Receipts and its components as a percentage of GSDP

Year	ONTR (in lakhs)	ONTR % of GSDP	NTR % of GSDP	TR as a % of GSDP
2012-13	1,81,280.20	4.75	4.80	9.75
2013-14	1,64,632.98	4.58	4.62	12.34
2014-15	2,30,663.12	4.82	4.86	10.03
2015-16	2,41,275.51	4.38	4.41	10.72
2016-17	2,69,062.53	4.27	4.30	10.42
2017-18	3,00,407.67	4.33	4.37	10.49
2018-19	2,84,799.43	3.96	3.99	10.79
2019-20	2,67,329.95	3.56	3.64	9.57
2020-21	2,81,891.99	3.72	3.83	8.52
2021-22	3,76,411.61	4.55	4.58	11.09
2022-23	3,81,822.09	4.28	4.34	12.89

Source: Calculations based on Finance Accounts, GoG, Various Years

The above table provides a view of Goa's Own Non-Tax Revenue (ONTR) in the context of its Gross State Domestic Product (GSDP), examining the contributions of various revenue streams and the dependence on grants over time.

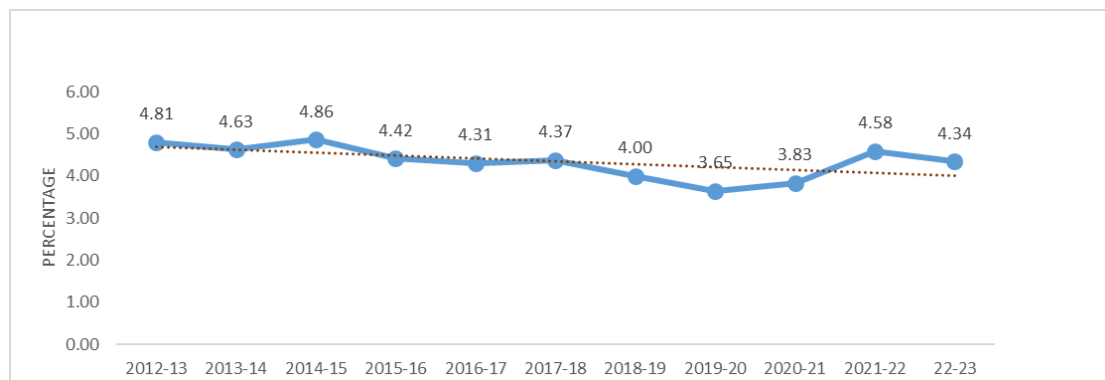
ONTR and its GSDP Contribution: the ONTR in lakhs has shown a general upward trend, increasing from Rs.181,280 lakhs in 2012-13 to Rs.381,822 lakhs in 2022-23. This suggests that while ONTR is growing nominally, its proportionate contribution to GSDP has remained relatively stable.

Tax Revenue (TR) as a Percentage of GSDP: Tax Revenue as a percentage of GSDP fluctuates, with highs observed in 2022-23 (12.89%) and other periods (12.34% in 2013-14). Revenue Receipts as a percentage of GSDP saw an increase in early years, peaking in 2014-15 (30.29%) before declining. It settled at 28.39% in 2022-23, showing some resurgence after a dip during 2020-21 (24.63%).

Non-Tax Revenue as a percentage of GSDP: The NTR as a percentage of GSDP began at 4.80% in 2012-13 and reached its highest point of 4.86% in 2014-15. A notable decline occurred in 2015-16 (4.38%) and 2016-17 (4.27%), and 2018-19 (3.99) after which there was an improvement from 2019-20.

The graph below illustrates the trend of total non-tax revenue (NTR) as a percentage of Gross State Domestic Product (GSDP) over time (2012-13 to 2021-22).

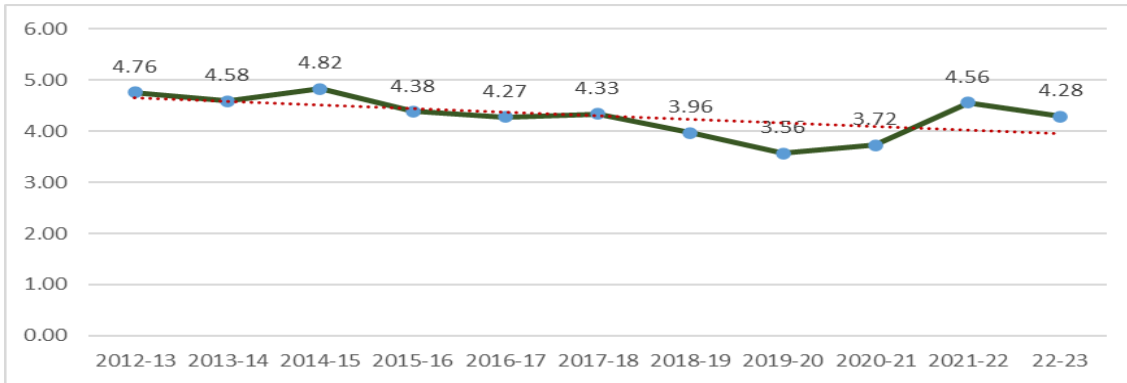
Figure 3.2: Non-Tax Revenue as a proportion of GSDP (Market Price)



Source: Finance Accounts, GoG, Various Years

The graph illustrates the proportion of Non-Tax Revenue (NTR) to Gross State Domestic Product (GSDP) for the years 2012-13 to 2022-23, highlighting fluctuations in its contribution to the state's economy. Starting at 4.81 in 2012-13, the NTR proportion shows a slight increase to 4.86% in 2013-14. The peak is attributed mining sector in Goa had resumed operations in 2014 after the Supreme Court's temporary lifting of the mining ban imposed in 2012. This contributed to royalties and fees from mining activities, boosting non-tax revenue. However, a significant decline is observed between 2015-16 and 2017-18, reaching a low of 4.31%. There was a sharp decline in mining royalties, which contributed significantly to non-tax revenue, thereby decreasing the receipts of non-tax revenue. The proportion begins to recover gradually, stabilizing around 3.83% by 2020-21. A notable surge occurs in 2021-22, with the proportion increasing sharply to 4.58%.

Figure 3.3: ONTR as a proportion of GSDP (Market Price)



The ONTR of the state begins at 4.76% in 2012-13, showing a slight decline to 4.58% in 2013-14, followed by an increase to 4.82% in 2014-15. From 2015-16 to 2018-19, the percentage shows a consistent downward trend, dropping from 4.38% in 2015-16 to a low of 3.96% in 2018-19, reflecting a phase of reduced performance or revenue generation. The lowest point in the graph is observed in 2019-20 at 3.56%, however a recovery phase is evident from 2020-21, where the percentage rises from 3.72% to 4.56% in 2021-22.

3.6 State's Own Non-Tax Revenue (ONTR) and its components

The State's Own Non-Tax Revenue (ONTR) across various categories—General Services, Social Services, Economic Services, Interest Receipts, and Dividends & Profits—from 2012-13 to 2022-23 is displayed below.

Table 3.3: States Non-Tax Revenue and its components

Year	General Services	Social Services	Economic Services	Interest Receipts	Dividends & Profits	Total
2012-13	10642.80	16391.23	154246.20	1836.64	173.26	183290.10
2013-14	13461.11	19240.98	131930.90	1411.86	110.67	166155.50
2014-15	17518.59	18351.34	194793.20	1718.12	181.91	232563.20
2015-16	16310.44	22299.33	202665.70	1774.11	142.69	243192.30
2016-17	21005.93	25735.17	222321.40	2050.70	86.44	271199.70
2017-18	18422.53	24680.95	257304.20	2723.72	196.15	303327.50
2018-19	49360.35	29692.44	205746.70	2419.91	146.43	287365.80
2019-20	30495.88	25795.23	211038.80	6282.49	141.91	273754.40
2020-21	22276.12	21920.07	237695.80	8258.11	129.42	290279.50
2021-22	34212.08	29904.46	312295.10	2151.71	160.95	378724.30
2022-23	46050.29	37790.84	297981.00	4877.77	146.83	386846.70

Source: Calculations based on Finance Accounts, GoG, Various Years

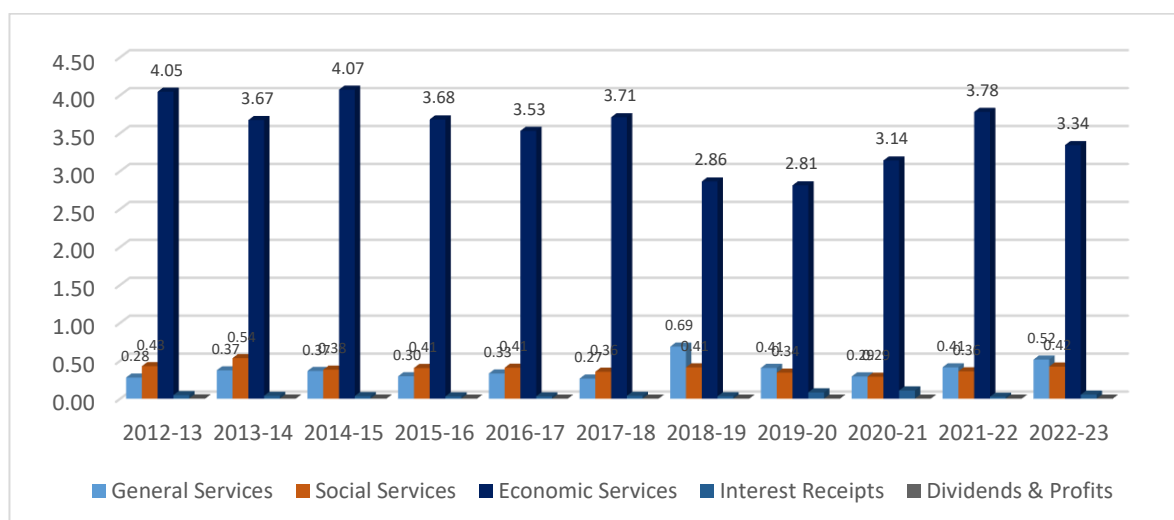
With respect to General Services there has seen substantial growth, particularly in 2018-19, where revenue spiked to 49360.35 lakhs. Revenue from social services shows a steady increase, though it remains a smaller portion compared to general and economic services.

The economic services category is consistently the largest contributor to ONTR, with a significant spike in 2021-22 to 312295.1 lakhs. The interest component has grown substantially, with a particularly large increase in 2020-21 to 8258.11 lakhs, followed by fluctuations. Dividends and profits remain the smallest component of ONTR, relatively stable across the years, without major fluctuations. The low numbers indicate that the state's investments in enterprises or equity stakes yield modest returns, or it could imply limited direct profit-making enterprises. The overall ONTR has shown an upward trend from 183290.1 lakhs in 2012-13 to 386846.7 lakhs in 2022-23, more than doubling over this period.

3.7 Components of NTR as a percentage of GSDP

The Figure highlights the components of Non-Tax Revenue (ONTR) as a percentage of Gross State Domestic Product (GSDP), showcasing that Economic Services dominate ONTR, consistently contributing between 2.81% and 4.07% of GSDP.

Figure 3.4: Components of NTR as a percentage of GSDP



Source: Calculations based on Finance Accounts, GoG, Various Years

General Services show an increasing trend, growing from 0.27% in 2017-18 to 0.52% in 2022-23, indicating improvements in revenue collection from administrative charges and fees. Social Services contribute modestly, with their share ranging between 0.29% and 0.54%. Dividends and Profits remain negligible, contributing only 0.001% to 0.005% of GSDP. Interest Receipts are minimal, fluctuating between 0.03% and 0.11% of GSDP.

Buoyancy coefficient (β^*) and components of revenue receipts

The buoyancy coefficient is utilized to evaluate the effectiveness and flexibility of revenue generation in relation to GSDP growth. It is represented by the formula: $\beta = (dY/dX) * X/Y$

and is derived from the equation: $\ln Y = \alpha + \beta \ln X$, where X denotes the independent variable (GSDP) and Y represents the dependent variable-(own non-tax revenue). ONTR is considered buoyant when revenues increase by more than one percent for each unit increase in national income or output. The table below displays the beta coefficients (elasticity). The subsequent section presents the buoyancy of ONTR and its components.

Table 3.4: Buoyancy coefficient (β^*) and components of revenue receipts

Components	β Co-efficient (Buoyancy)	t	R-Square
General Services	1.54***	5.14	0.73
Social Services	0.74***	5.8	0.77
Economic Services	0.69***	5.72	0.76
Interest Receipts	1.16**	2.68	0.42
Profits and Dividends	0.03	0.11	0.001
ONTR	0.77***	9.19	0.89

Source: Calculations based on Finance Accounts, GoG, Various Years

The buoyancy analysis reveals varying responsiveness of Goa's ONTR components to GSDP. General services are highly elastic (1.54), with revenue growing faster than GSDP, supported by strong statistical significance (t-value: 5.14, R^2 : 0.73). Social services (0.74) and economic services (0.69) exhibit inelastic responses, showing slower revenue growth relative to GSDP but with robust reliability (t-values: 5.8 and 5.72, R^2 : 0.77 and 0.76, respectively). These figures suggest general services drive growth dynamically, while social and economic services remain stable yet less responsive.

3.8 Components of General Services

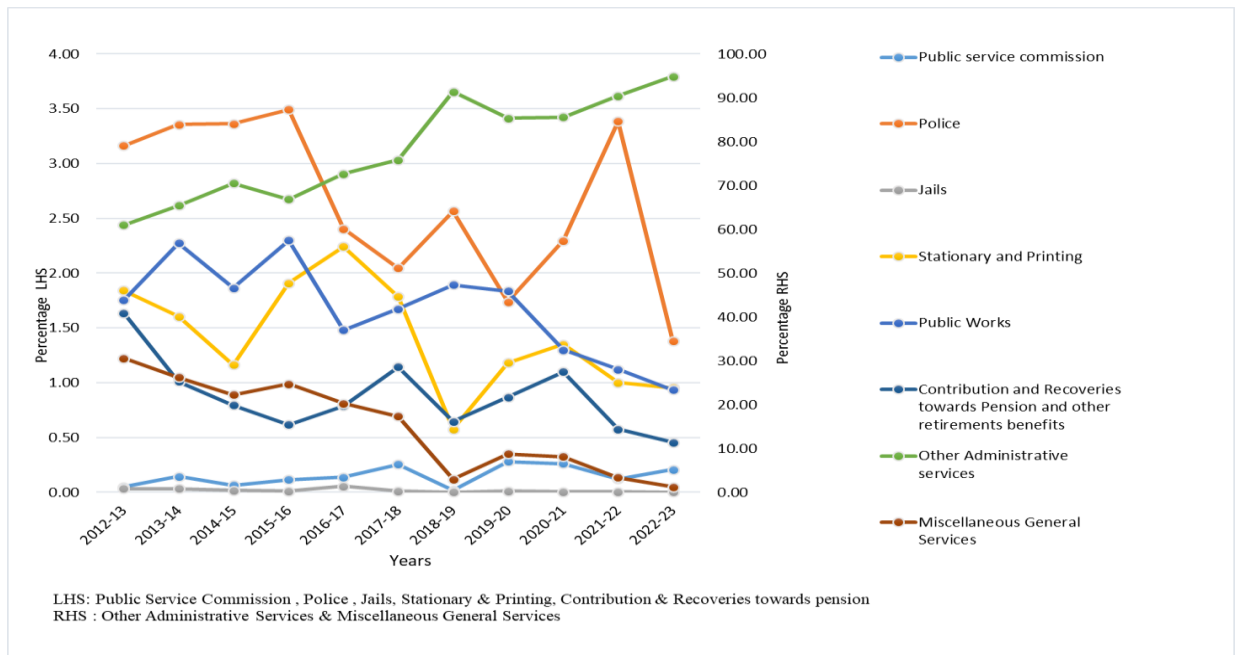
Since the fiscal year 2012-13, Other Administrative Services have emerged as the predominant contributor to General Services, consistently demonstrating the highest contribution to this sector. The proportion of this contribution has exhibited a steady increase from 60.97% in 2012-13 to approximately 95% in 2022-23. Miscellaneous General Services initially constituted a substantial proportion, commencing at 30.55% in 2012-13 but exhibiting a marked decline over the years to merely 1.25% in 2022-23. Police revenues reached a high in 2018-19, partly due to increased enforcement activities, including a significant number of fines issued by traffic police (Hindustan Times, 2019).

Public Works saw peaks in 2016, 2018, and 2021, indicating increased infrastructure activity like constructing government facilities and road maintenance. These years likely reflect significant investment in public projects. For example, the Manohar International

Airport project, started in 2016 and finished in 2022, required substantial public infrastructure investment. (Business Goa, 2024).

Contribution and Recoveries towards Pension and Retirement Benefits: The observed peak in 2013 for reflects a significant number of retirements in pension obligations during that period. This aligns with the state's transition to the National Pension System (NPS), a defined contribution scheme, which was implemented for new employees from August 5, 2005. The gradual decline in contributions from 2015 onwards can be attributed to the increasing proportion of employees under the NPS, which reduces the state's direct pension liabilities. Under the NPS, both employees and the government contribute to individual pension accounts, shifting the financial responsibility from the state to a shared model (Comptroller and Auditor General of India., 2020)

Figure 3.5: Components of General Services



Source: Finance Accounts, GOG, Various Years

3.9 Components of Social Services

The graph illustrates trends in contributions to various components of Goa's revenue from social services from 2012-13 to 2022-23. Among these, water supply and sanitation consistently exhibit significant contributions, maintaining high levels throughout the period, with a visible peak in 2016-17, reflecting increased user charges in water infrastructure. s such as the expansion of the Salaulim Water Supply Scheme, replacement of old pipelines in Margao, and laying underwater pipelines in Sirsaim, which improved service delivery

and increased user charge (Public Works Department, Goa, 2015). Urban development shows a notable decline from 2013-14 due slowdown in real estate and urban infrastructure activities, but stabilizes post-2018 (Economics Survey of Goa, 2017).

Education, sports, arts, and culture exhibit moderate contributions with gradual growth post-2017-18, reflecting increased emphasis on cultural programs and public education initiatives. Medical and public health show consistent growth, peaking in 2020-21, coinciding with the COVID-19 pandemic, which necessitated higher spending and recoveries in the healthcare sector (Economics Survey of Goa, 2020). Housing reflects irregular trends with minimal contributions, highlighting a lack of significant investment in public housing schemes during this period. Information and publicity, as well as labor and employment, maintain low and stable contributions throughout, reflecting limited revenue-generating activities in these sectors.

Figure 3.6: Composition of Social Services



Source: Finance Accounts, GoG, Various Years

3.10 Components of Economic Services

The Power sector consistently exhibits the highest contributions, with notable peaks in 2013-14, 2018-19, and 2022-23. The Goa Budget for 2013-14 emphasized the government's commitment to enhancing the power sector. The budget allocated funds for upgrading transmission and distribution networks to reduce losses and improve efficiency. (Budget Speech, 2013). The 2018-19 budget highlighted substantial investments aimed at

modernizing the power infrastructure. This included the implementation of smart grid technologies and the expansion of renewable energy projects to meet the increasing energy demands of the state (Budget Speech, 2018). The 2022-23 budget reflected the state's economic recovery post-pandemic, with a focus on revitalizing industrial and commercial activities. The budget allocated resources to support the power sector in meeting the increased demand resulting from the resurgence of economic activities (Budget Speech, 2022b).

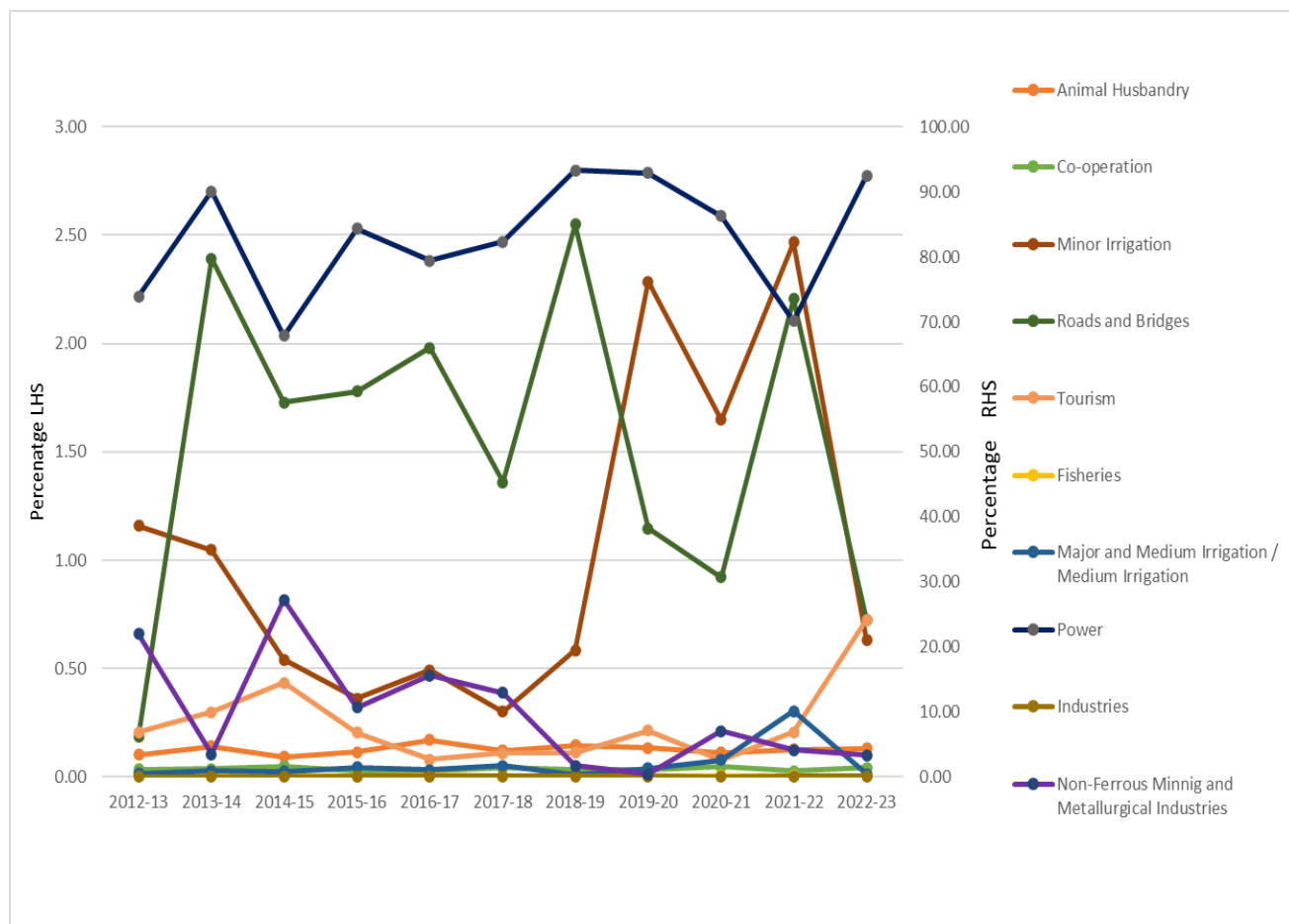
The mining sector in Goa experienced a significant peak in 2014-15, reflecting intensive mining activities during that period. This surge was primarily due to the Supreme Court lifting the mining ban in April 2014, which had been imposed in 2012 following the M.B. Shah Commission's report on illegal mining (The Economic Times, 2023b). However, the subsequent decline in mining contributions can be attributed to the Supreme Court's decision in February 2018 to quash 88 mining leases, effectively halting mining operations from 2018 (The Economic Times, 2018). This legal and regulatory uncertainty led to reduced contributions from the mining sector in the following years.

The observed peaks in the Major and Medium Irrigation sector during the fiscal years 2013-14, 2015-16, 2019-20, and 2021-22 can be attributed to specific irrigation projects and infrastructure developments undertaken by the Government of Goa. In 2013-14, the Government of Goa implemented the Selaulim Irrigation Project. This major project, primarily aimed at irrigation with a substantial water supply component, significantly transformed the agricultural landscape of South Goa.

The Goa Budget for 2023-24 indicates that substantial allocations were made towards irrigation and flood control, with Rs 574 crore allocated in 2023-24, reflecting a consistent focus on enhancing irrigation infrastructure in preceding years (Budget Speech, 2022b).

The peak in Minor Irrigation expenditure during the fiscal year 2019-20. In 2019-20, Goa received Rs.0.08 crore under the Surface Minor Irrigation (SMI) and Repair, Renovation, and Restoration (RRR) of water bodies components of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) (Press Information Bureau, 2024). Fisheries and Industries consistently record minimal values.

Figure 3.7: Composition of Economic Services



Source: Finance Accounts, GoG, Various Years

3.11 Contribution of ONTR to GSDP

The analysis of Goa's economic services as proportion to GSDP emphasizes the dominance of Power Development Schemes, contributing 31.55% to the Gross State Domestic Product (GSDP) due power infrastructure and development projects, supported by significant allocations in the Goa Budget 2024-25 (PRS Legislative Research, 2024). Mineral Concession Fees and Royalties, the second-largest contributor at 2.56% this finding is in line up with discussions in the National Mineral Policy 2019, which emphasizes sustainable mining practices and revenue optimization (Ministry of Mines, 2019). Other Receipts, accounting for 1.54%, include miscellaneous streams, while the Salauli Project contributes 0.57%, showcasing the impact of specific infrastructure projects.

Social services as a proportion of GSDP reveals significant contributions from the following key components. Receipts from Urban Water Supply Schemes emerged as the largest contributor, accounting for 1.31% of the Gross State Domestic Product (GSDP), followed by Other Receipts (0.93%) and Receipts from Rural Water Supply Schemes (0.92%). These highlight the critical role of water supply management in revenue generation, as showed by

the Goa Budget Analysis 2024-25, which allocated significant funds for urban water programs (PRS Legislative Research, 2024). Tuitions and Other Fees, contributing 0.24%, reflect revenues tied to education services, supported by rising enrollment and state-managed institutions (Directorate of Planning, Statistics, and Evaluation, 2022). Similarly, Allopathy (Healthcare) contributes 0.13%.

The analysis of the top contributors to General Services reveals that "Other Receipts" dominates with a cumulative contribution of 3.16% to the GSDP, growing at an average yearly rate of 24.36%. State Lotteries, the second-largest contributor, accounts for 0.52% of the GSDP but shows an average yearly decline of -14.24% due to alternative gambling and lottery schemes (Rockefeller Institute of Government, 2016). Police Supplied to Other Parties, a smaller yet notable contributor, has a cumulative contribution of 0.058%.

3.12 Enhancing revenues from User Charges

Since the buoyancy coefficient for general services is 1.54 focusing on enhancing user charges from general service can further boost ONTR receipts by increase charges on licenses, permits, and registrations to match rising costs. With respect to urban development which saw a decline in 2013-14 and further increase in 2018, the user charges here can be increased by introducing user charges for urban amenities like parking, waste management and public transport. Power sector being the highest contributor, revenue receipts can be further increased by implementing digital payment system which will help to avoid leakages in revenue collection. The Royalty that the state receives from Mineral concession fees and royalties, can be enhanced by charging the royalties based on the quality and concentration of minerals extracted, and additional charges for environmental rehabilitation aligning with restrictions imposed on mining. (MDFP, 2023). Revenues from healthcare, education, and public transport can be improved by increasing fees for premium services while keeping basic services subsidized. (Comptroller and Auditor General of India., 2020)

3.13 Actual Revenue Realization

The actual revenue realization (NTR) as a percent of revenue expenditure (RR/RE), however, varies according to the type of service. In this analysis of the efforts of the State in collecting appropriate user charges for services provided, we present estimates of the percentage share of revenue realized (RR) from a service to the revenue expenditure (RE) incurred on providing that service.

We confine ourselves to those non-tax sources, which originate from the administrative departments and departmental undertakings of a non-commercial nature. Therefore, sources such as interest, profits and dividends arising from the States' commercial undertakings are beyond its scope of this chapter and dealt separately.

The actual revenue realization of non-tax revenues as a percent of the corresponding revenue expenditure (RR/RE) is calculated from the data provided in the Finance Accounts of Goa. We have taken only revenue expenditure as the denominator assuming that at least this could be first met as a target for achieving the desired RR/RE. The RR/RE for general services, social services and economic services and their components for the period 2012-2013 to 2022-23 are given in the following tables below.

Table 3.5: RR/RE for General, Social and Economic Services

Year	General Services (RR/RE)	Social Services (RR/RE)	Economic Services (RR/RE)
2012-13	5.72	7.43	77.32
2013-14	6.48	7.30	63.03
2014-15	7.39	6.52	87.51
2015-16	6.36	7.01	75.83
2016-17	7.31	7.69	83.96
2017-18	5.23	5.94	89.71
2018-19	13.01	7.03	67.10
2019-20	7.74	5.99	63.38
2020-21	5.53	4.79	68.55
2021-22	6.89	5.38	84.30
2022-23	7.53	5.87	57.82

Source: Calculations based on Finance Accounts, GoG, Various Years

Goa's RR/RE from economic services has been higher than general services and social services in all the years under consideration.

Table 3.6: Revenue Receipts as proportion of Revenue Expenditures for Select Services

Year	Education	Medical	Water Supply	Forestry	Major and Medium Irrigation Projects	Minor Irrigation	Power
2012-13	2.57	1.91	44.51	9.17	24.74	46.08	91.33
2013-14	1.87	2.64	42.48	7.15	34.75	39.86	100.85
2014-15	1.40	2.47	37.08	9.62	39.27	29.21	100.07
2015-16	2.24	2.70	35.04	8.20	59.15	17.40	114.77
2016-17	1.78	3.66	41.56	8.63	35.08	24.36	112.97
2017-18	1.48	4.64	34.43	9.06	51.89	16.85	126.87
2018-19	1.22	3.83	48.93	8.73	11.39	20.50	101.37

Year	Education	Medical	Water Supply	Forestry	Major and Medium Irrigation Projects	Minor Irrigation	Power
2019-20	1.27	2.94	39.27	7.45	49.78	95.65	88.81
2020-21	1.06	2.13	34.13	5.47	115.22	63.64	98.76
2021-22	1.19	2.46	17.28	5.41	1217.89	180.36	98.39
2022-23	1.25	7.07	44.24	7.68	31.85	26.21	110.38

Source: Calculations based on Finance Accounts, GoG, Various Years

The table highlights revenue receipts as a proportion of revenue expenditures for various public service sectors over the decade from 2012-13 to 2022-23. This metric is crucial for evaluating the cost recovery and financial sustainability of public services. The sectors analysed include Education, Medical, Water Supply, Forestry, Major and Medium Irrigation Projects, Minor Irrigation, and Power.

The Education sector shows consistently low revenue recovery across the observed period, reflecting a high dependency on subsidies and public funding. The proportion of revenue receipts to expenditures was 2.57% in 2012-13, declining to 1.87% in 2013-14, and further to 1.40% in 2014-15. The recovery rate fluctuates around this low range, reaching its lowest in 2020-21 at 1.06%. By 2022-23, the proportion slightly increased to 1.25%, indicating minimal improvement over the years.

The Medical sector similarly shows low-cost recovery, but with notable variations. The revenue receipts as a proportion of expenditures started at 1.91% in 2012-13, rose slightly to 2.64% in 2013-14, and remained between 2% and 4% until a peak of 4.64% in 2017-18. The proportion then dropped to 2.13% in 2020-21 but saw a substantial increase to 7.07% by 2022-23. This sharp rise in 2022-23 may indicate increased revenue generation from healthcare services, possibly influenced by post-pandemic restructuring in healthcare funding or user charges.

The Water Supply sector demonstrates a comparatively moderate level of cost recovery. The revenue receipt-to-expenditure ratio was 44.51% in 2012-13 and remained relatively stable over the years, with a peak at 48.93% in 2018-19. In 2022-23, the proportion was 44.24%, consistent with historical levels. This suggests a somewhat effective revenue recovery model in the Water Supply sector, though it still indicates a reliance on subsidies to cover full expenditures.

Forestry has one of the lowest revenue recovery rates among the sectors analysed. Starting at 9.17% in 2012-13, the recovery rate fluctuated slightly, peaking at 9.62% in 2014-15, but

generally stabilized around 7-9% in recent years. In 2022-23, the proportion was 7.68%. This consistently low level of recovery may be attributed to the sector's reliance on conservation goals and the limited potential for revenue generation from forestry activities.

The Major and Medium Irrigation Projects sector demonstrates significant variability in revenue recovery. The recovery ratio began at 24.74% in 2012-13, increasing to 59.15% by 2015-16. It fluctuated within this range until an extraordinary peak at 1217.89% in 2021-22, indicating that revenue generation from irrigation in that year far exceeded the expenditures. This anomaly may be due to increased water usage fees or significant one-time revenue, potentially from policy changes or adjustments in user fees. In the following year, 2022-23, the proportion dropped back to a more typical level of 31.85%.

Minor Irrigation shows lower and more stable recovery rates, with a notable outlier. The sector's recovery ratio was 46.08% in 2012-13, generally declining to a low of 16.85% in 2017-18. However, there was a sudden increase to 180.36% in 2021-22, similar to Major Irrigation, suggesting special circumstances or one-time revenue increases. In 2022-23, the recovery rate returned to 26.21%, more consistent with historical levels.

The Power sector stands out as the most financially sustainable, with high levels of cost recovery throughout the observed period. In 2012-13, the revenue receipt-to-expenditure ratio was 91.33%, reaching 100.85% in 2013-14, indicating nearly full cost recovery. The proportion exceeded 100% in several subsequent years, with a notable peak of 126.87% in 2017-18, implying surplus revenue generation. In 2022-23, the sector maintained a high recovery rate of 110.38%, reflecting a well-established revenue model that supports financial self-sufficiency.

3.14 Desired Percentage of RR/RE

The "desired RR/RE" represents a benchmark that states may strive to achieve through ongoing efforts. By determining the optimal revenue realization as a percentage of revenue expenditure, it becomes possible to evaluate a state's performance in sustaining the RR/RE ratio. An econometric model is employed to establish the standards for the desired RR/RE.

The econometric model used to establish non-tax revenue norms will be structured according to the following functional form.

$$Y_t = \alpha + \beta X_t + \gamma Z_t + u_t,$$

In this equation, Y represents the non-tax revenue collected by the state for a specific item over the years, X stands for GSDP, Z is a vector of state characteristics deemed crucial in determining non-tax revenue collection for a particular service, t signifies time, and u_t is the stochastic error term. The equations that follow demonstrate the calculation of the percentage share of RR/RE for selected non-tax sources from 2012-13 to 2022-23., focusing on specific services.

1. RR/RE for Medical and public health (recmed)

$$\text{recmed} = f\{\text{pcgsdp}, \text{beds}\}$$

In this regression of Medical and public health, we take into account the pcgsdp and number of beds available.

2. RR/RE for Water supply and sanitation (rewssani)

$$\text{rewssani} = f\{\text{pcgsdp}\}$$

For Water supply and sanitation, the independent variable is pcgsdp.

3. RR/RE Forestry and wild life, (reforw)

$$\text{reforw} = f\{\text{pcgsdp}, \text{gsdpfore},\}$$

For revenue realized from Forestry and wild life, we take into account pcgsdp and gsdp from forest.

4. RR/RE Major and medium irrigation (recmajirr)

$$\text{recmajirr} = f\{\text{pcgsdp}, \text{gsdpagr}, \text{grsirrarea}\}$$

For major and medium irrigation, the dependent variables used are pcgsdp , gsdp from agriculture and gross area under irrigation

5. RR/RE Medium and Minor irrigation (recminirr)

$$\text{recminirr} = f\{\text{pcgsdp}, \text{gsdpagr}, \text{grsirrarea}\}$$

For minor irrigation, the dependent variables used are pcgsdp , gsdp from agriculture and grossarea under irrigation

6. RR/RE Energy :reenergy = f{pcgsdp, gsdpenner, consner}

For revenues realized from energy we use psgsdp, gsdp from energy and consumption from energy as the independent variables.

Table 3.7: Coefficients of PCGSDP for the estimated RR/RE of each select service

Services	Co-efficient	t	R-square
Medical	3.01 *	2.28	0.53

Source: Calculations based on Finance Accounts, GOG, Various Years

The regression results may be seen in Appendix. The pcgsdp is significant for the services like Medical and public health. A positive and significant coefficient of 3.01 implies that as the per capita GSDP increases, the revenue realization (RR/RE ratio) from medical and public health services grows proportionately. For Forestry a coefficient of 3.49 for per capita GSDP, forestry revenue also appears highly elastic but lacks statistical significance ($p > 0.05$). For major irrigation, the buoyancy coefficient (163.19) indicates a high potential for revenue growth. However, the high standard errors and low significance ($p = 0.845$). For minor irrigation, a significant negative relationship exists between irrigation revenue and gross irrigated area (-527.85, $p < 0.05$) while power availability (59.4, $p = 0.121$) shows potential influence on GSDP.

3.15 Conclusion

The analysis of Goa's Own Non-Tax Revenue (ONTR) highlights significant opportunities to optimize revenue generation across General, Economic, and Social Services. As per the analysis of Goa's Non-Tax Revenue, it was observed that Goa's ONTR doubled from Rs.1,81,280.20 lakhs in 2012-13 to Rs.3,81,822 lakhs in 2022-23, driven by economic services as the largest contributor. General services spiked in 2018-19 while dividends and profits remained minimal and stable. The peaks in Power sector (2013-14, 2018-19, and 2022-23) is due to investments in infrastructure modernization, smart grids, renewable energy, (Budget Speech, 2013, 2018, 2022b). Mining spiked in 2014-15 due to the lifting of the ban but declined after the 2018 lease cancellations.(The Economic Times, 2018, 2023b). This has led to considerable downfall of receipts collected via mining thereby reducing the NTR. Major and Medium Irrigation showed peaks due to projects like the Selaulim Irrigation Project as substantial allocations were made towards irrigation and flood control, with Rs 574 crore allocated in 2023-24, reflecting a consistent focus on enhancing irrigation infrastructure (Budget Speech, 2022b). Minor Irrigation peaked in 2019-20 under PMKSY funding(Press Information Bureau, 2024). With respect to Social Receipts from rural water supply schemes fluctuated, peaking at 31.66% in 2012-13 and declining to 19.01% in 2022-23, due to government programs like the National Rural Drinking Water Program and Jal

Jeevan Mission, which subsidized and expanded access to rural water services, reducing reliance on user contributions (Press Information Bureau., 2022). Education, health, and culture showed steady growth, with health peaking in 2020-21 due to COVID-19. General Services saw a dominant contribution from Other Administrative Service, while Pensions peaked in 2013 due to retirement obligations, with a gradual decline from 2015 as NPS adoption reduced liabilities (Comptroller and Auditor General of India., 2020).

Chapter 4 Expenditure Analysis

4.1 Introduction

In this chapter we analyse the expenditure pattern and trends separately for revenue and capital, and the major components of expenditure thereunder for the time period 2012-13 to 2022-23. Further we also try to calculate the technical efficiency of public expenditure in important sectors like health and education for Goa during the last 5 years. We look at measures to enhance the allocative and technical efficiency in expenditures and provide suggestions for improving efficiency in public spending.

4.2 Classification of Public Expenditures in Goa

Government expenditures are classified in 3 different ways for understanding a variety of processes.

1. Revenue & Capital – This is to understand whether the expenditure is for asset building purposes (capital) or otherwise (revenue). Revenue expenditure is expenditure incurred for the normal functioning of various government departments and services, interest charges on government debt, subsidies etc. Capital expenditure is the expenditure undertaken to acquire, upgrade, manage, fix, or maintain physical assets like plants, land, machinery, technology or buildings (GoG, 2023).

2. Plan & Non-Plan – This is an accounting classification to separate out expenditures that come under a new 5-year plan or from a previous plan. Since the fiscal year 2017-18, the plan and non-plan classification of expenditures was done away with by the Government of India (PIB, 2016).

3. Development and Non-Development – This is a classification to examine whether a expenditures are under heads that are considered to be for fulfilling development needs – like merit goods, or non-development needs (like defence, etc).

In this chapter we look at trends in all the three classifications.

As can be seen in the table that the total expenditure (consolidated fund) increased from Rs.734665.5 lakhs in 2012-13 to Rs.1959366 lakhs in 2022-23 with a CAGR of 10.3 per cent during this period. The total expenditure comprises of revenue expenditure and capital disbursements. The total capital disbursements comprises of capital outlay, public debt repayment, loans and advances and transfer to the contingency funds. The capital

disbursements increased from Rs.128530.76 lakhs in 2012-13 to Rs.470917.89 lakhs in 2022-23 with a CAGR of 13.9 per cent. Transfer to the contingency fund was incurred only during 2015-16 and 2016-17. Public debt repayments increased from Rs.33906.08 lakhs in 2012-13 to Rs.12, 7944.8 lakhs in 2022-23 with a CAGR of 14.2 per cent.

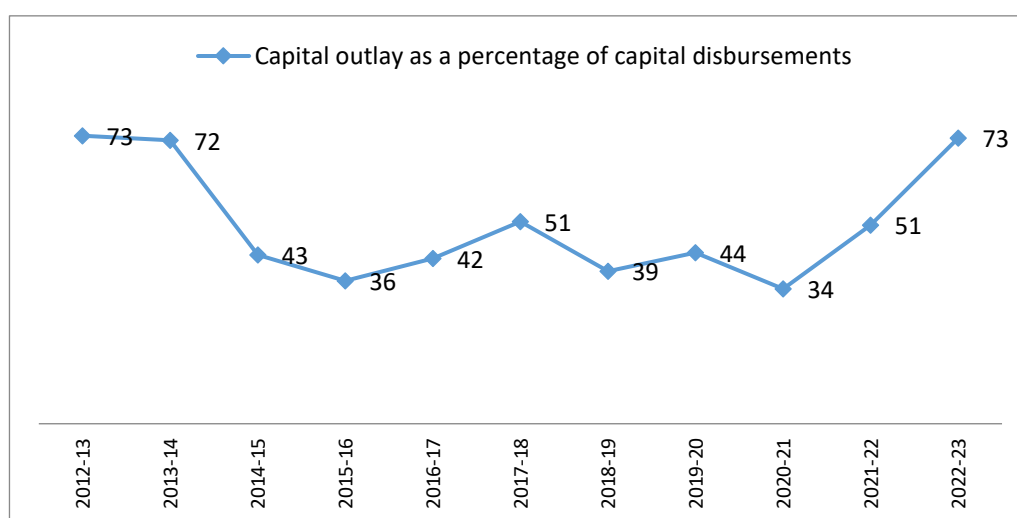
Table 4.1: Total Expenditure and its broad components (Rs. Lakhs)

Year	Revenue Expenditure	Capital Expenditure (Capital Outlay)	Public Debts (repayment)	Loans and Advances	Transfer to Contingency Funds	Total capital disbursements	Total Consolidated Funds (Total Expenditure)
1	2	3	4	5	6	7 (Col 3+4+5+6)	8 (Col 2+Col 7)
2012-13	606134.7	94227.05	33906.08	397.63		128530.76	734665.5
2013-14	680327.7	100822.4	38505.45	425.26		139753.07	820080.8
2014-15	741025	123411	143282	292.34		286985.29	1028010
2015-16	841955.7	162227	276363	269.06	20000	445859.04	1287815
2016-17	886597.8	163872.8	225285.9	340.7	7000	389499.36	1276097
2017-18	1054289	209407.3	194516.2	3392.61		407316.1	1461605
2018-19	1108284	214914.2	338018.1	309.66		553241.99	1661526
2019-20	1162267	166023.8	213704.6	1341.77		381070.25	1543337
2020-21	1209265	199667.2	381905	160.92		581733.17	1790999
2021-22	1422688	268093	261821	387.21		530301.21	1952989
2022-23	1488449	342543	127944.8	430.11		470917.89	1959366

Source: Finance Accounts, GoG, Various years.

Capital outlay as a percentage of total capital disbursements have been close to 50 per cent or less for most years of this study (from 2014-15 to 2021-22).

Figure 4.1: Capital outlay as a percentage of total capital disbursements



Source: Finance Accounts, GoG, Various years.

The only years capital expenditure as a percentage of total capital disbursements was in the range of 72 to 73 per cent was in the years 2012-13, 2013-14 and 2022-23. Hence in this chapter we will analyse capital expenditure as capital outlay and not total capital disbursements as it gives a better picture of the amount spent on the creation of new assets exclusive of debt repayments.

4.3 Revenue and Capital Expenditures (Capital Outlay)

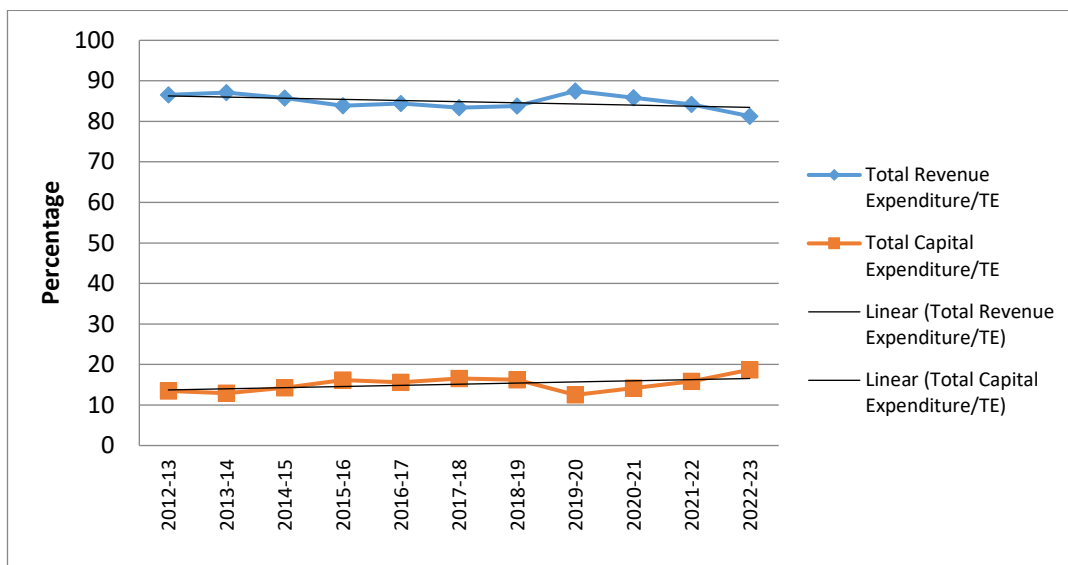
In Goa, revenue expenditures has increased significantly from Rs 6,06,134.70 lakhs in 2012-13 to Rs 14,88,448.58 lakhs in 2022-23 with a CAGR of 9.40. The capital expenditure (CE) has increased from Rs 94,227.05 lakhs in 2012-13 to Rs 3,42,542.97 lakhs in 2022-23 with a CAGR of 13.78.

4.3.1 Expenditures as a Percentage of Total Expenditures and GSDP

We examine the trend in Revenue expenditures (RE) and Capital expenditures (CE) taken as a proportion of Total expenditures (TE) as well as GSDP (market prices) at current prices in the table below and Table A1 in Appendix).

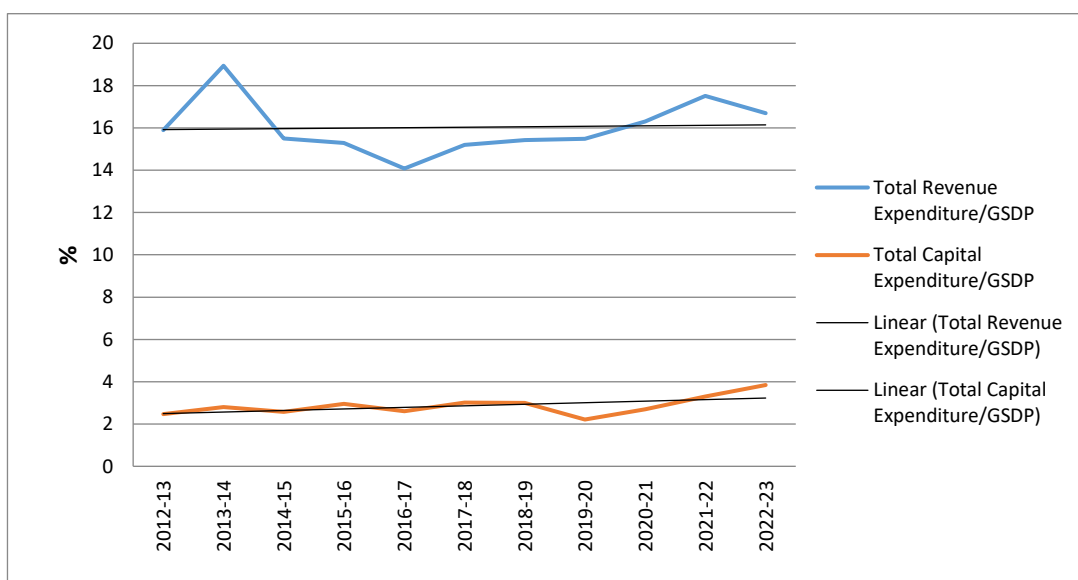
RE constitutes the bulk of the expenses for of Goa. On an average, RE as a percentage of TE was 84.8 per cent and CE as a percentage of TE was 15.13 per cent during 2012-13 to 2022-23. An encouraging fact is that RE/TE percentage decreased from 86.5 per cent in 2012-13 to 81.29 per cent in 2022-23. Similarly, CE/TE percentage increased from 13.4 per cent in 2012-13 to a peak of 18.7 per cent in 2022-23. RE/TE percentage peaked in 2013-14 (87.09 per cent) and 2019-20 (87.5). In fact 2019-20, though the RE/TE percentage peaked , however the revenue expenditure (growth rate) increased only by 4 per cent as compared to the previous year, but there was a huge decrease (-22.7 per cent) in capital expenditures (growth rate). CE/TE percentage on the other hand reached 16 per cent

Figure 4.2: Revenue and Capital expenditures as a percentage of Total Expenditures



Source: Finance Accounts, GoG, Various years.

Figure 4.3: Revenue and Capital Expenditures as a percentage of GSDP



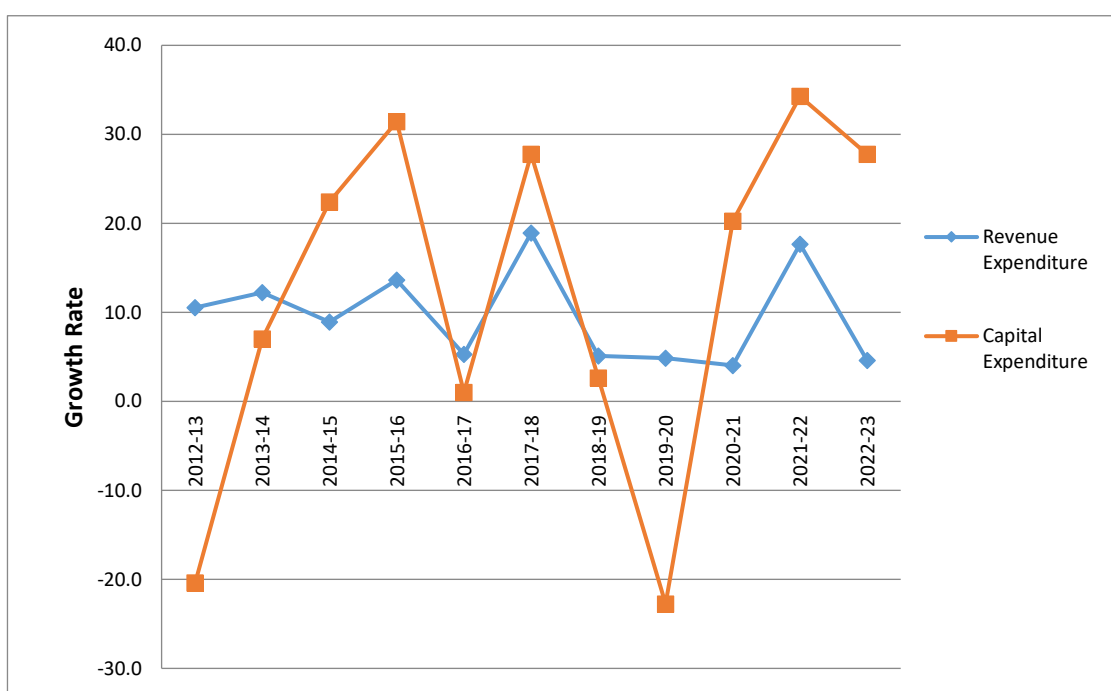
Source: Data on expenditure is from Finance Accounts, GoG, Various years, Data on GSDP is from (GoG, Various years)

Note: GSDP at market prices (current prices) with base year 2011.

On an average revenue expenditure as a percentage of GSDP was 16.03 per cent and capital expenditure as a percentage of GSDP was 2.86 per cent during 2012-13 to 2022 -23. In fact in 2021-22 and 2022-23 the capital expenditure as a percentage of GSDP comprised of 3.3 per cent and 3.84 per cent respectively. This is an encouraging fact given that it has always been below 3 per cent in the previous years of the study (except for 2017-18). RE/GSDP percentage peaked in 2013-14 at 18.9 per cent however the peak was more pronounced as GSDP growth was negative at -5.8 per cent. It had another peak at 17.5 per cent in 2021-22. In the other years of this study it has mostly been in the range of 15 to 16 per cent of GSDP.

Further we tried to understand the trend in the growth rate of the two major components of expenditure. The growth rates have been quite volatile especially for capital expenditures. In 2012-13 and 2019-20, capital expenditures witnessed a negative growth rate of -20.4 per cent and -22.7 per cent respectively (these years were immediately post the years of the mining ban). In 2019-20 while the revised estimates for capital expenditure was 4268 crore, the actuals were 1660.23 crore (39 per cent of revised estimates). The capital account general services decreased by -41.8 per cent, the social services decreased by -23.05 per cent and economic services decreased by -11.22 per cent. Capital expenditure (1660 crore) was less than the total public debt receipts (2700 crore) by 1040 crore in that year (CAG, 2020). Goa also experienced a revenue deficit of (-325.14 crore) and this may be the cause of the decline in capital expenditure.

Figure 4.4: Annual growth rates of Revenue and Capital Expenditures



Source: Finance Accounts, GoG, various years.

Capital expenditures also witnessed very high growth rates in the years 2015-16 (31.5 per cent), 2017-18 (27.8 per cent), 2021-22 (34.3 per cent) and 2022-23 (27.8 per cent). In 2020-21, though capital expenditure witnessed a growth of 20 per cent, general services on the capital account reported the highest growth at 45.65 per cent. Here, public works (general services) saw an increase of 67.01 per cent and miscellaneous general services saw a growth of 42 per cent. However capital outlay on social services witnessed a growth of only 2.68 per cent. Major sectors like education and health witnessed a steep decline of (-80.57) per

cent and (-21.99) per cent respectively. Water supply sanitation and housing saw a huge increase of 84.05 per cent. Economic services saw an increase of 23.7 per cent in 2020-21.

In terms of revenue expenditure there was high growth rates in the years 2013-14 (12.2 per cent), 2015-16 (13.6 per cent), 2017-18 (18.9 per cent) and 2021-22 (17.6 per cent).

Though the compound annual growth rate (CAGR) of capital expenditure for Goa is higher as compared to the revenue expenditure which is an encouraging fact however the CAGR for capital expenditure was higher in 2012-13 to 2016-17 (14.84) as compared to later period of 2017-18 to 2022-23 (10.34). The CAGR of revenue expenditure was higher in 2012-13 (9.97) as compared to the later period of 2017-18 to 2022-23 (7.14).

According to an analysis done by the O'herald team the share of capital expenditure to total expenditure for Goa was lower than average spending of other general category states between 2017 to 2021 (O Herald, 2023a).

Table 4.2: CAGR: Revenue and Capital Expenditure

Years	Revenue Expenditure	Capital Expenditure
2012-13 to 2016-17	9.97	14.84
2017-18 to 2022-23	7.14	10.34
2012-13 to 2022-23	9.40	13.78

Source: Finance Accounts, GoG, Various years.

Next we try to analyse the expenditures in per capita terms. Revenue Expenditure per capita increased from Rs. 41,094 in 2012-13 to Rs. 94,745 in 2022-23. Capital expenditure per capita increased from Rs. 6,388 in 2012-13 to Rs. 21,804 per capita in 2022-23 (.).

Table 4.3: Goa Per Capita Expenditures, 2012-13 to 2022-23

Year	Revenue Expenditure Per Capita	Capital Expenditure Per Capita
2012-13	41094	6388
2013-14	45782	6785
2014-15	49501	8244
2015-16	55870	10765
2016-17	58444	10802
2017-18	69088	13723
2018-19	72154	13992
2019-20	75179	10739
2020-21	77766	12840
2021-22	91023	17152
2022-23	94745	21804

Source: Expenditure data from Finance Accounts, Various Years, Data on Population (GoG, 2024b)

4.4 General, Social and Economic Services (Revenue +Capital Account)

Each of the two categories discussed above (Revenue and Capital) are further sub-categorized into three broad heads: General, Social and Economic Services.

The per capita expenditures on general services increased from Rs.13,518 in 2012-13 to 37,634 per capita in 2022-23. The per capita expenditures on social services increased from 16,224 to Rs.39,682 per capita in 2022-23. The per capita expenditures on economic services increased from 17,740 in 2012-13 to Rs.39,233 per capita in 2022-23

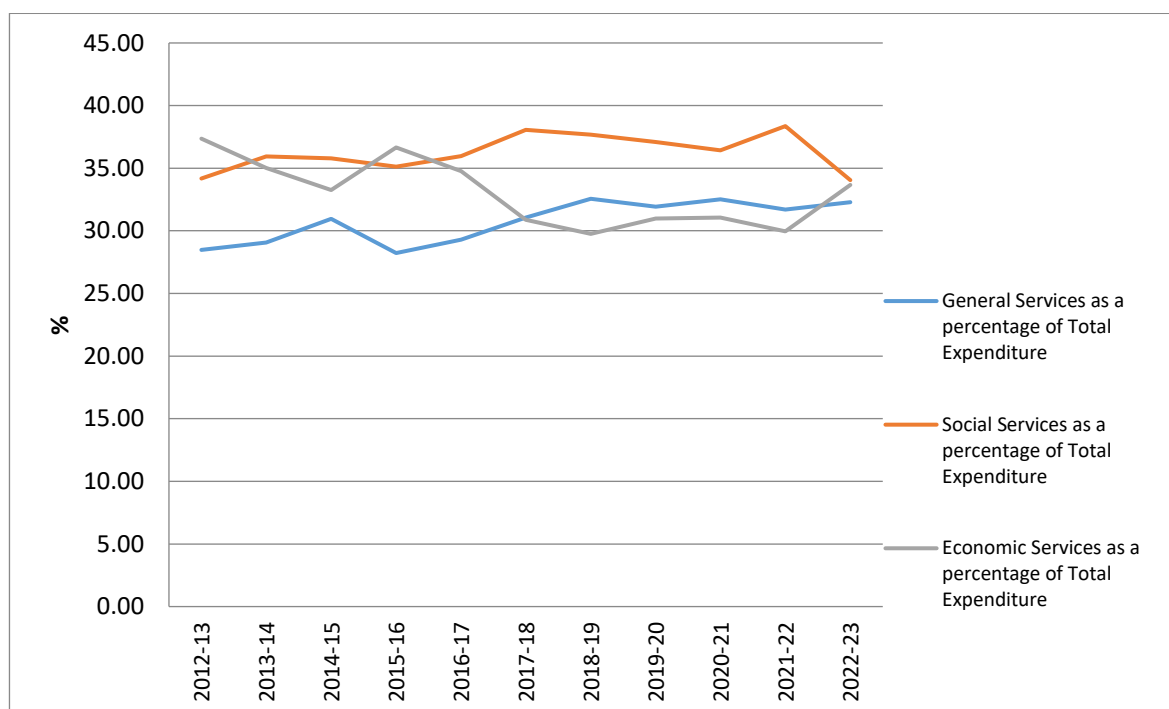
Table 4.4: Per Capita Expenditures on major Sub-Categories, 2012-13 to 2022-23

Year	General Services	Social Services	Economic Services
2012-13	13518	16224	17740
2013-14	15273	18887	18407
2014-15	17876	20663	19206
2015-16	18809	23398	24427
2016-17	20279	24899	24069
2017-18	25726	31516	25570
2018-19	28048	32462	25635
2019-20	27442	31860	26615
2020-21	29459	32999	28149
2021-22	34280	41498	32397
2022-23	37634	39682	39233

Source: Data on expenditure is from Finance Accounts, GoG, Various years.
Data on Population (GoG, 2024b)

Here we have tracked the trend in these three sub-categories as a percentage of TE as well as their CAGR. On an average, general services comprised of 30.73 per cent of total expenditure, social services comprised of 36.24 per cent and economic services comprised of 33 per cent of total expenditures during 2012-13 to 2022-23. From 2012-13 to 2016-17 economic services as a percentage of total expenditure with an average was around 35 per cent was higher than general services as a percentage of total expenditure with an average of 29 per cent. However during 2017-18 to 2021-22 general services as a percentage of total expenditures with an average of 31.95 per cent surpassed capital expenditures as a percentage of total expenditures with an average of 30.53 per cent. In 2022-23 , economic services as a percentage of total expenditure (33.66 per cent) surpassed general services share (32.29 per cent) and was almost equal to the share of social services (34.05 per cent).

Figure 4.5: Expenditure on General, Social and Economic Services (Revenue + Capital)



Source: Finance Accounts, GoG, Various years.

The CAGR has been the highest for general services from 2012-13 to 2022-23 at 11.48 followed by social services at 10.05 and lastly by economic services at 8.95. However, the CAGR was highest for social services during 2012-13 to 2016-17 at 4.67. The CAGR for social services dropped to 2.63 during 2017-18 to 2022-23 and the CAGR for economic services increased to 4.68 from 3.39 in the previous period.

Table 4.5: CAGR: General, Social and Economic Services (Revenue + Capital)

Years	General Services	Social Services	Economic Services
2012-13 to 2016 -17	4.43	4.67	3.39
2017-18 to 2022-23	4.18	2.63	4.68
2012-13 to 2022-23	11.48	10.05	8.95

Source: Finance Accounts, GoG, Various years.

Next we try to understand the major sectors to which expenditure is allocated under social services (revenue +capital). Education forms the major component of social services with an average of 15.3 per cent of total expenditure during 2012-13 to 2022-23. However, since 2020-21 onwards the education percentage of total expenditure dropped below average of 15.3 per cent (after the outbreak of Covid). Health and family welfare on an average comprises of 7.1 per cent of total expenditure from 2012-13 to 2022-23. Since 2017-18

onwards, the health expenditure share has been above its average of 7.1 per cent. On an average during 2012-13 to 2022-23, water supply and sanitation had a share of 6.4 per cent of total expenditure and social welfare and nutrition was around 5.7 per cent of total expenditure.

Table 4.6: Components of social services (revenue + capital) as a percentage of total expenditure

Year	Education, Sports, Art and Culture	Health and family Welfare	Water Supply, Sanitation, Housing and Urban Development	Welfare of SC's, ST's and other backward classes	Labour and Labour welfare	Social Welfare and Nutrition
2012-13	16.1	6.1	5.3	0.4	0.5	5.5
2013-14	16.4	5.9	5.2	0.8	0.5	6.8
2014-15	15.7	5.9	5.4	1.4	0.5	6.6
2015-16	14.9	5.7	5.6	1.3	0.5	6.9
2016-17	15.0	6.4	6.2	1.3	0.5	6.4
2017-18	15.1	7.3	8.3	0.9	0.5	5.6
2018-19	17.3	7.2	6.1	1.2	0.5	5.2
2019-20	16.3	8.5	5.9	0.8	0.5	4.9
2020-21	14.8	8.6	6.7	0.6	0.4	5.1
2021-22	13.4	8.9	10.1	0.5	0.4	4.7
2022-23	13.6	7.8	5.8	0.9	0.4	5.2
Average	15.3	7.1	6.4	0.9	0.5	5.7

Source: Finance Accounts, GoG, Various years.

Here, we analyse the sub-components of economic services (revenue + capital) as a percentage of total expenditure. Energy has the highest percentage of total expenditure as compared to all the other major sectors of the economy. On an average it comprised of around 17 per cent of total expenditure during 2012-13 to 2022-23. On an average, Transport comprised of around 5.8 per cent of total expenditure and agriculture and allied activities comprised around 3 per cent of total expenditure. However tourism being one of the most important sector of Goa's economy despite the ban in mining activities has received only 1.3 per cent share of total expenditure on an average during 2012-13 to 2022-23.

Table 4.7: Components of Economic Services (revenue + capital) as a % of Total expenditure

Year	Agriculture & Allied Activities	Rural Development	Special Areas Programmes	Irrigation & flood control	Energy	Industries & Minerals	Transport	Science, Technology & Environment	Tourism
2012-13	3.1	1.3	0.1	2.9	20.8	1.0	6.6	0.0	1.1
2013-14	3.6	1.3	0.1	3.1	16.9	1.9	6.2	0.1	1.5
2014-15	3.2	0.9	0.1	2.8	17.2	1.5	5.9	0.1	1.3

2015-16	3.5	1.4	0.1	2.2	18.6	1.6	6.7	0.1	2.2
2016-17	3.4	1.4	0.1	2.7	17.0	1.3	6.5	0.4	1.6
2017-18	3.0	1.2	0.1	2.5	14.6	0.8	6.5	0.5	1.4
2018-19	2.8	1.0	0.1	2.4	15.7	0.9	5.1	0.5	1.1
2019-20	2.6	1.2	0.1	2.6	18.0	0.6	3.9	0.6	1.1
2020-21	2.8	2.0	0.1	2.2	16.1	0.5	4.7	1.4	0.9
2021-22	2.5	2.1	0.1	1.9	14.8	0.9	5.2	1.2	1.1
2022-23	2.6	1.7	0.1	2.4	17.6	1.2	6.0	0.8	1.0
Average	3.0	1.4	0.1	2.5	17.0	1.1	5.8	0.5	1.3

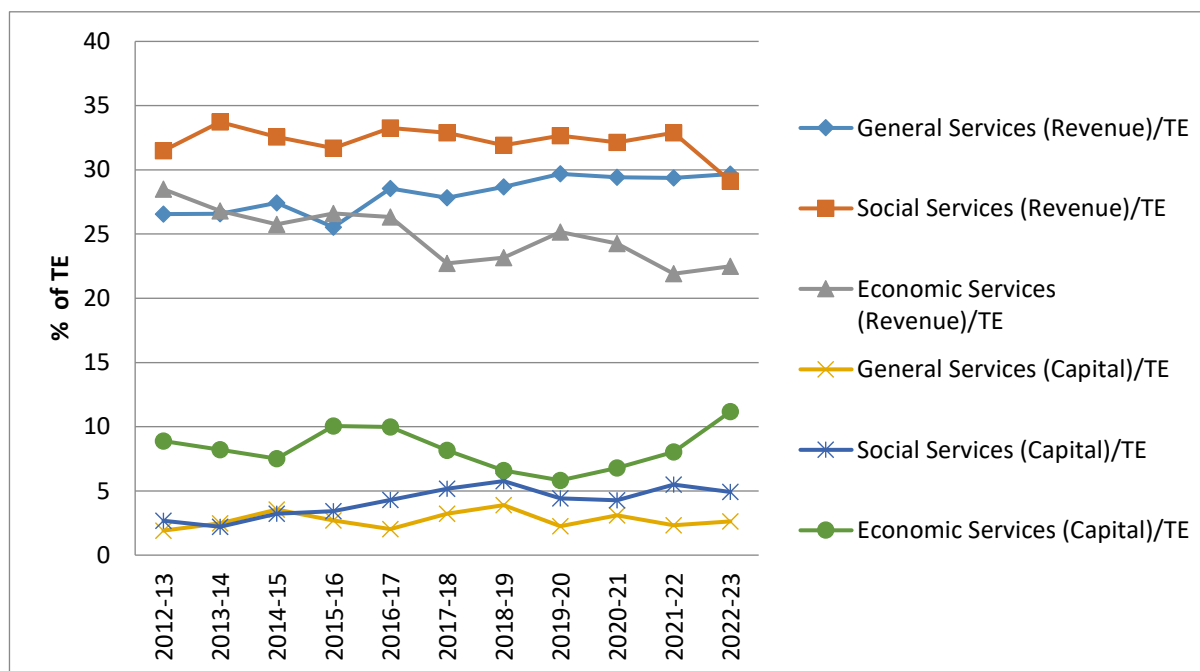
Source: Finance Accounts, GoG, Various years.

Further to get a deeper understanding of the trends, we have analysed the expenditure on General Economic and social services separately on the revenue and capital account. We have tracked the trend in these three sub-categories as a percentage of TE. On an average social services (revenue) comprised of 32.21 per cent of TE, general services (revenue) comprised of 28.12 per cent of TE and economic services (revenue) comprised of 24.88 per cent of TE during 2012-13 to 2022-23. Social services expenditures (revenue) as a per cent of TE have ranged between 31 to 33 per cent during the period of the study. However in 2022-23 the social services expenditures (revenue) as a per cent of TE dropped to 29.13 per cent from 33.88 per cent in the previous year. Economic services (revenue) ranged between 25 to 28 per cent of total expenditure during 2012-13 to 2016-17. However, from 2017-18 to 2022-23 this range dropped between 21 to 25 per cent of total expenditure. General services (revenue) as a per cent of TE have shown an increasing trend since 2016-17 onwards and have surpassed the share of economic services as a percentage of total expenditures. In fact in 2022-23, general services (revenue) were around 29 per cent of TE which is equal to the share of social services as a percentage of total expenditure in that year.

In terms of capital expenditures on an average during 2012-13 to 2022-23, economic services comprised of 8.29 per cent of TE, followed by social services at 4.17 per cent of TE and lastly followed by general services at 2.73 per cent of TE. Economic services (capital) peaked to 10.04 per cent in 2015-16 before declining again in the following years and reaching a low of 5.82 per cent in 2019-20 before beginning to rise again. In 2022-23, economic services (capital) as a percentage of TE increased to 11.16 per cent from 8.04 per cent in the previous year. A positive trend has been that social services (capital) as a per cent of TE increased from 2.67 per cent in 2012-13 to 4.92 per cent in 2022-23. In fact, social services (capital) as a percentage of TE was above 5 per cent in years 2017-18, 2018-

19 and 2020-21. General services (capital) increased from 1.91 per cent in 2012-13 to 2.62 per cent in 2022-23.

Figure 4.6: Trends in Categorized Expenditure as a proportion of Total Expenditure



Source: Finance Accounts, GoG, Various years.

4.5 Revenue Expenditure and its Components

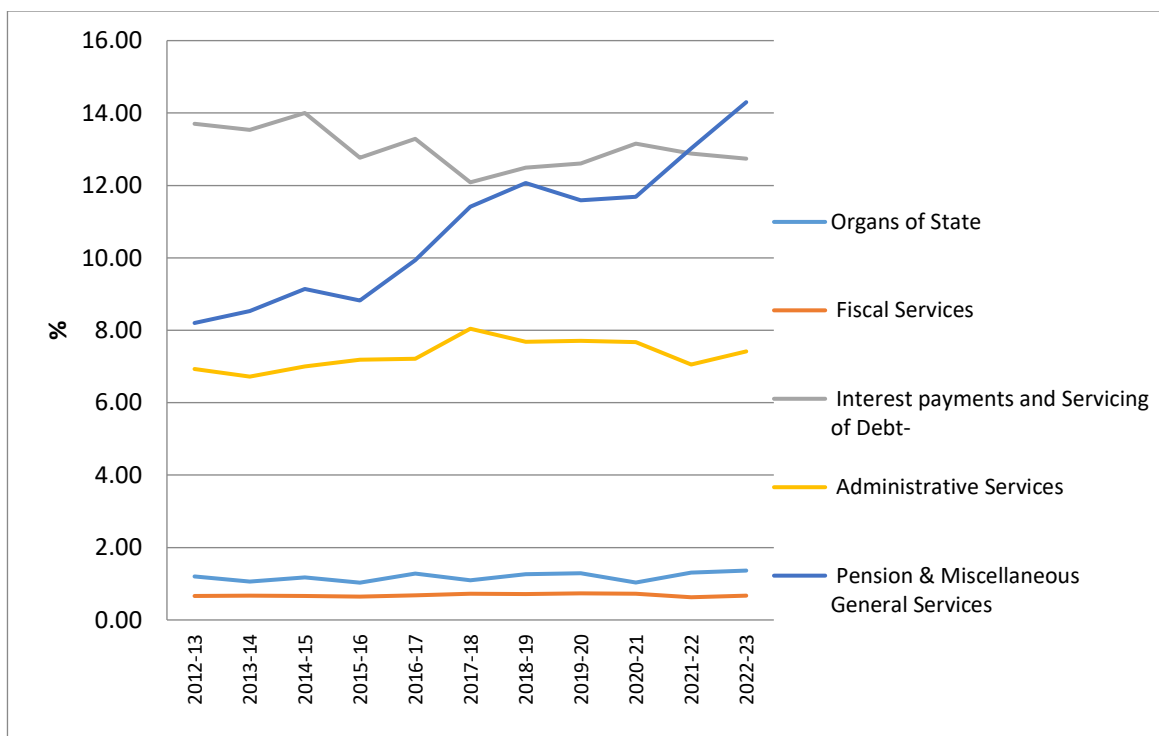
We now have a look at different components of revenue expenditures.

4.5.1 General Services (Revenue Expenditure)

The three major components of general services expenditure on the revenue account are interest payments and servicing of debt, pension & miscellaneous general services and administrative services. Interest payments & servicing of debt peaked to 14 per cent of revenue expenditure in 2014-15 but have declined and remained below 14 per cent thereafter. In 2017-18 interest payments & servicing of debt reached the lowest at 12.09 per cent during the period of the study. Pension payments as a percentage of revenue expenditure have been steadily increasing from 2012-13 onwards with minor dips in 2015-16 and 2019-20. The steep rise in pensions during 2016-17 was due to the implementation of the recommendations of the seventh central pay commission by Goa government which led to a revision in the pension payments to its 45,000 pensioners (GoG, 2016). During 2021-22 and 2022-23 pension overtook interest payments & servicing of debt as a percentage of revenue expenditure at 13.02 per cent and 14.3 per cent respectively. This is because the dearness relief to government of Goa pensioners was increased to 31% from 28% with effect from July 2021 (GoG, 2021a). The dearness relief to state government

pensioners was further increased to 34 per cent with effect from May 2022 (TOI, 2022). Administrative expenditure as a percentage of revenue expenditure have been on an average around 7.33 per cent during 2012-13 to 2022-23. During 2021-22 and 2022-23 pension payments overtook interest payments & servicing of debt as a percentage of revenue expenditure at 13.02 per cent and 14.3 per cent respectively (**Error! Reference source not found.**).

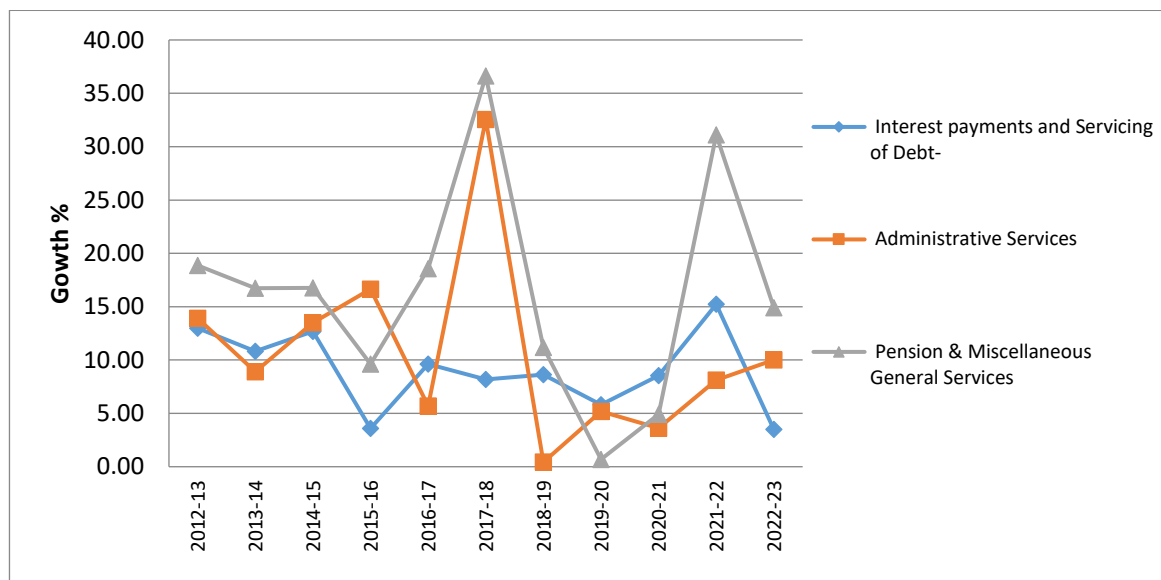
Figure 4.7: Components of General Services (RE) as a percentage of Revenue Expenditure



Source: Finance Accounts, GoG, various years.

Here we try to understand the growth patterns of three of the major components of general services. The huge increase in the growth rate of administrative services (33 per cent) and pension and miscellaneous services (37 per cent) in 2017-18 may be attributed to the implementation of the recommendations of the seventh pay commission. In 2018-19, the growth rate of administrative services dropped to 0.4 per cent and that of pension and miscellaneous services dropped to 11 per cent and further dropped to 1 per cent in the following year. In 2021-22, there was a huge peak in the growth rate of pension and miscellaneous services (31 per cent) as well as a peak in interest payments and debt servicing to 15.2 per cent. Since 2020-21, expenditure on administrative services has been on an increase.

Figure 4.8: Growth rate of three major components of general services (revenue)



Source: Finance Accounts, GoG, Various years.

The CAGR was the highest for pension & miscellaneous services at 15.65 per cent during 2012-13 to 2022-23. The CAGR for administrative services was 10.15 per cent during the same period. An encouraging fact the CAGR of administrative services dropped to 5.42 per cent in 2017-18 to 2022-23 as compared to a CAGR of 11.1 in the earlier period of the study. Another encouraging fact is that the CAGR of fiscal services dropped to 5.7 per cent in 2017-18 to 2022-23 as compared to a CAGR of 10.9 per cent in the earlier period of the study. The CAGR for interest payments was 8.6 per cent and the CAGR for organs of the state was 10.83 per cent during 2012-13 to 2022-23.

Table 4.8: CAGR of sub-components of general services (revenue)

Year	Organs of State	Fiscal Services	Interest payments and Servicing of Debt	Administrative Services	Pension & Miscellaneous General Services
2012-13 to 2016-17	11.89	10.88	9.13	11.11	15.37
2017-18 to 2022-23	11.93	5.74	8.28	5.42	12.08
2012-13 to 2022-23	10.83	9.65	8.60	10.15	15.65

Source: Finance Accounts, GoG, various years.

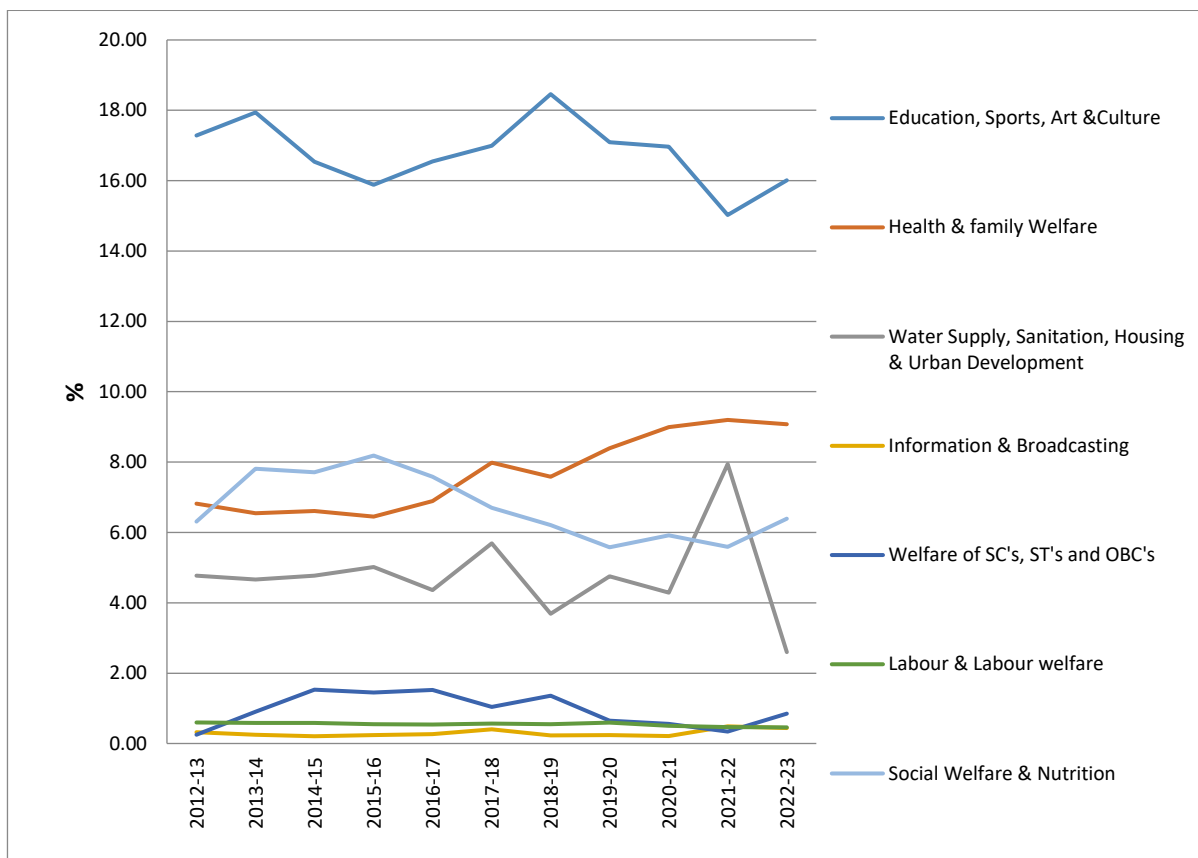
4.5.2 Social Services (Revenue Expenditure)

Next we analyse the expenditure components under social services on the revenue account. Expenditure on education, sports art and culture forms the major component of expenditure as a percentage of revenue expenditure under social services. On an average expenditure on

education as a percentage of revenue expenditure has been around 16.79 per cent. Expenditure on education peaked to 18.46 per cent in 2018-19 and then dropped to a low of 15.02 per cent in 2021-22. The peak in 2018-19 could be attributed to various factors. The Goa Government issued an order for the implementation of the recommendations of the 7th pay commission for its 55,00 plus employees with effect from January 1st 2017 (Gconnect, 2016). In 2018-19, the government had announced to revamp the educational sector in Goa. The Info Tech Corporation of Goa procured 45,000 laptops for a cost of over Rs. 85 crore to be distributed to higher secondary school students (including clearing the backlog of previous two years). Fifty more counsellors were appointed in schools, a scheme for education of children with special needs was implemented. Improvement of quality of mid-day meals to students was undertaken and Iskcon's internationally acclaimed Akshay Patra was hired to supply midday meals on a pilot basis to the Cujira school complex (TOI, 2018a).

The next two important sectors under social services are health & family welfare and social welfare & nutrition. On an average expenditure on health comprised of 7.69 per cent of revenue expenditure and expenditure on Social Welfare & Nutrition comprised of 6.73 per cent during 2012-13 to 2022-23. From 2017-18 onwards, the expenditure on health overtook the expenditure on social welfare. In 2016, the government launched the health insurance scheme for all residents called Deen Dayal Swasthya Seva (DDSS) wherein a family of up to three members would get a cover of Rs. 2.5 lakhs and a family of 4 or more members would get a cover lakhs of up to 4 lakhs per year (NT, 2016). The residents can avail this scheme for treatment in both government as well as private hospitals (Bajaj Finserv, 2024). During 2017-18 to 2022-23, while expenditure on health was steadily increasing, expenditure on social welfare witnessed a declining trend. Expenditure on another important sector that is water supply, sanitation, housing & urban development was on an average around 4.78 per cent of revenue expenditure. Expenditure on this sector peaked to 7.94 per cent of revenue expenditure in 2021-22 before dropping to 2.60 per cent in the following year. Expenditure on sectors like welfare of SC, ST and OBC's, labour welfare and information and broadcasting has been below 2 per cent as a percentage of revenue expenditure.

Figure 4.9: Components of Social Services (RE) as a percentage of Revenue Expenditure



Source: Finance Accounts, GoG, Various years.

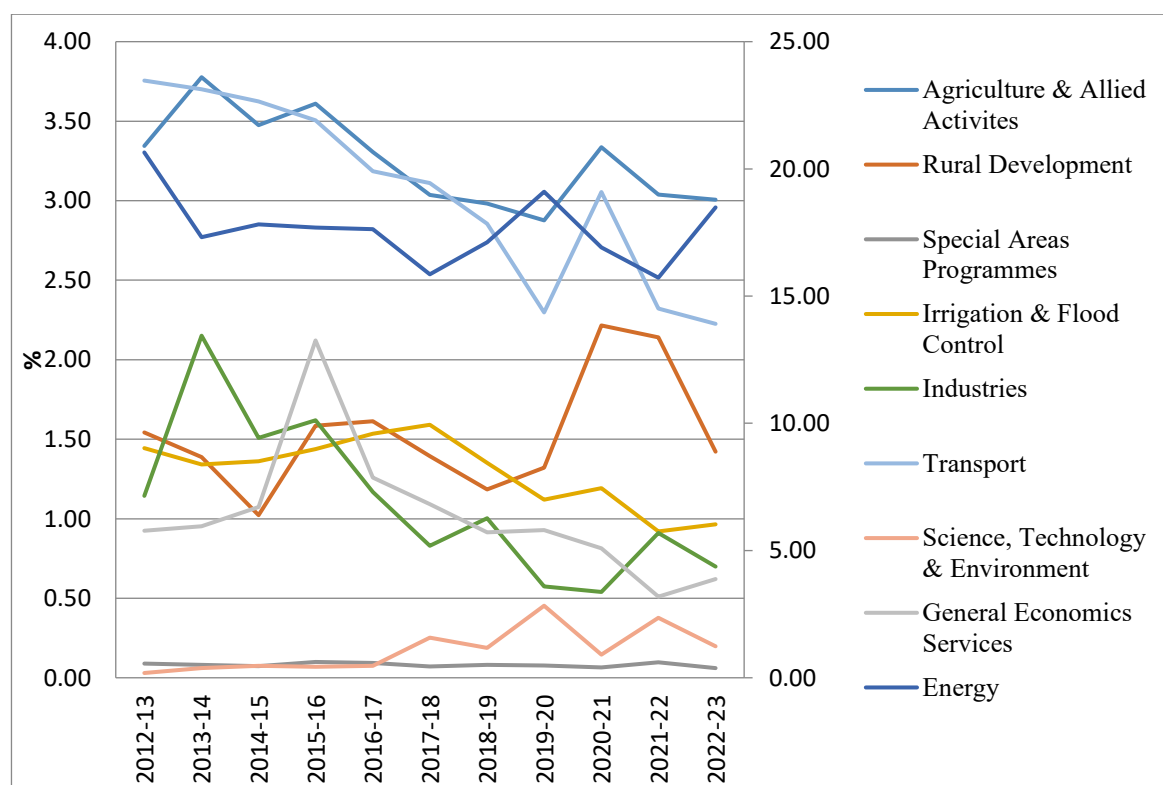
4.5.3 Economic Services (Revenue Expenditure)

Under economic services on the revenue account, energy comprises of the major component as a percentage of revenue expenditure. On an average it comprised of 17.66 per cent of revenue expenditure during 2012-13 to 2022-23. The peak of energy to 19 per cent in 2019-20 may be due to a rise in electricity consumption from 3661.47 M.kWh in 2018-19 to 3979.8 M.kWh in 2019-20 (A. Sharma, 2021). In 2020-21 and 2021-22, during covid period specially the lockdown months of April-May witnessed a huge drop in electricity demand and this may be the reason for the decline in enery revenue expenditure for energy during these years (NT, 2021).

All the other sectors including transport, agriculture, rural development and industries under economic services comprised of less than 4 per cent of revenue expenditure. Transport as percentage of revenue expenditure has shown a declining trend since 2012-13. Expenditure on roads & bridges and road transport comprised of the major components of transport expenditure. The drop in transport revenue expenditure in 2019 -20 is mainly due to negative growth in expenditure on roads and bridges and road transport by 17 per cent each. The huge peak in the transport expenditure in 2020-21 is mainly due to an increase in the growth

rate of expenditure on roads and bridges by 68 per cent and increase in road transport expenditure by 30 per cent. Again agriculture as a percentage of revenue expenditure showed a declining trend during the period of the study though it has had a few peaks in 2013-14, 2015-16 and 2020-21. In 2013-14 the peak can be attributed due to the increase in expenditure on crop husbandry by 51 per cent, dairy development by 25 per cent, fisheries by 48 per cent and forestry by 21 per cent. The peak in 2015-16 can be attributed to a general rise in expenditure in almost all the components under agriculture and allied activities. The peak in 2020-21 can be attributed mainly to an increase in expenditure on crop husbandry by 57 per cent and in fisheries by 45 per cent. Rural development as a percentage of revenue expenditure which has been below 2 per cent during the period of study peaked to 2.22 and 2.14 per cent respectively during the years when there was outbreak of covid (2020-2022). Industries as a percentage of revenue expenditure mostly witnessed a declining trend except for the peak in 2013-14 (2.15 per cent).

Figure 4.10: Components of Economic Services (RE) as a percentage of Revenue Expenditure



Source: Finance Accounts, GoG, Various years.

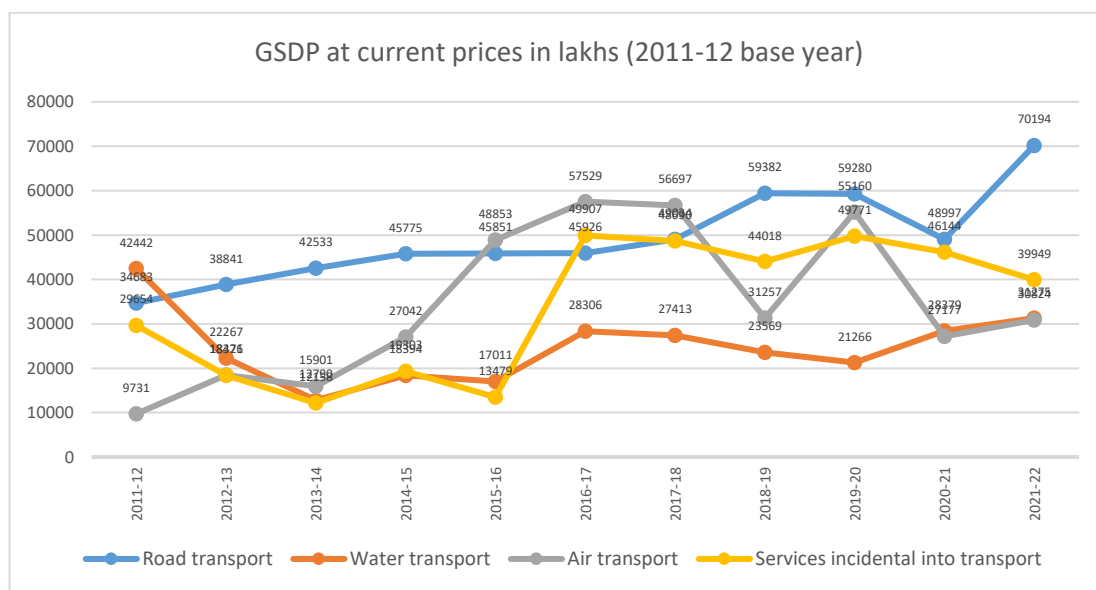
Note: Energy is on the secondary axis

4.5.4 Opportunities to reduce state transport expenditure-use of water transport

With regard to water transport, there has been ferry services in operation in the inland waters of Goa for passengers and vehicular traffic living in the islands and across the rivers which

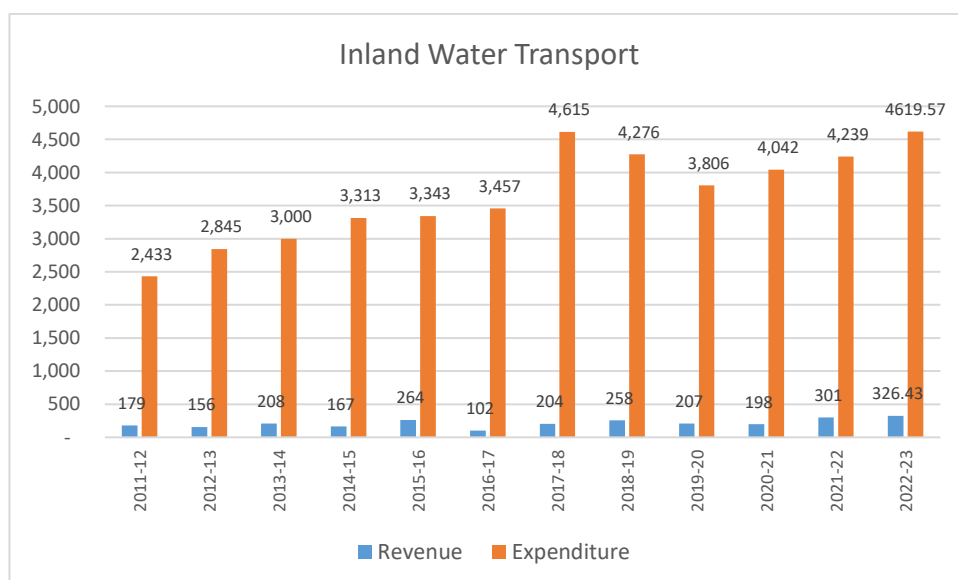
are not connected by roads and bridges managed by the River Navigation Department. The economic contribution of different modes of transport services to the Gross State Domestic Product (GSDP) from 2011–12 to 2021–22 reveals that water transport shows a declining trend from 2011–12 (Rs 42,442 lakhs) to 2015–16 (Rs 31,275 lakhs). Water transport underperforms as compared to road and airport transport, suggesting a gap and an opportunity for revival.

Figure 4.11: Economic contribution of different modes of transport services



Source: Economic Survey, GoG (Various years)

Figure 4.12: Revenue and Expenditures on inland water transport



Source: Economic Survey, GoG (Various years)

The expenditures on inland water transport was consistently high throughout the years, ranging from about Rs 2433 lakhs in 2011–12 to over Rs 4619 lakhs in 2022–23 indicating

that Government invests heavily in this sector—likely in operations, subsidies, ferry maintenance, and infrastructure upgrades.

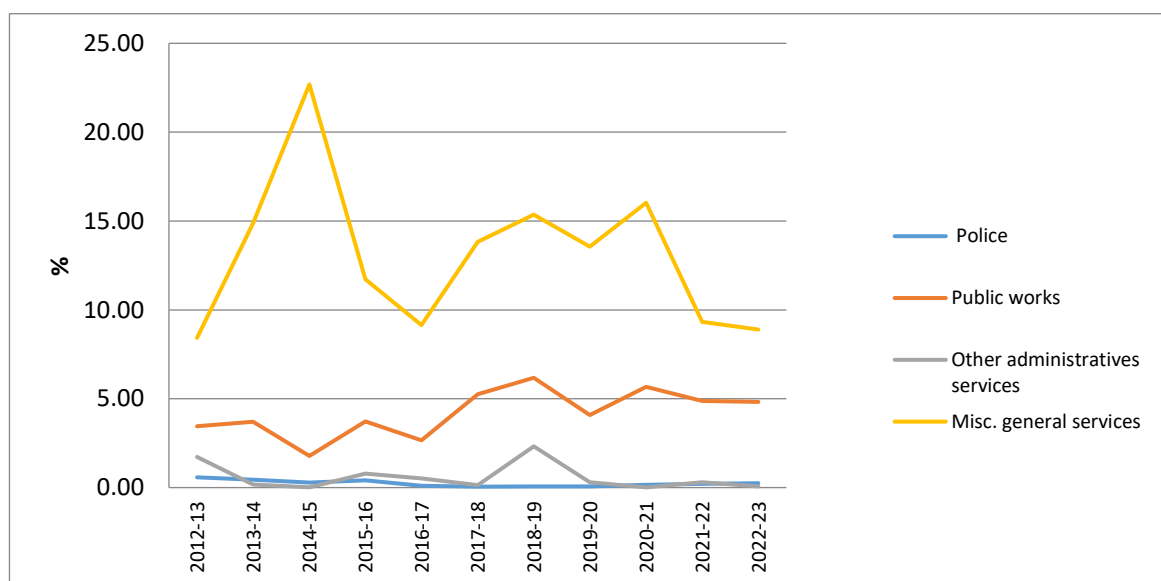
4.6 Capital Expenditure and its components

In this section we look at the capital expenditures and its components.

4.6.1 General Services (Capital Expenditure)

Under general services on the capital account, Miscellaneous general services as a percentage of capital expenditure comprised of the major component. On an average the miscellaneous general services comprised of 13.08 per cent of capital expenditure during 2012-13 to 2022-23. It had a very steep peak in 2014-15 at 22.69 per cent and then dropped to 9.15 per cent of capital expenditure. Again it had a minor peak in 2020-21 at 16.03 per cent and dropped after that and reached a low of 8.89 per cent. Capital expenditure on public works had been below 4 per cent 2012-13 to 2016-17. From 2017-18 to 2022-23 it has been closer to 5 per cent of capital expenditure

Figure 4.13: Components of General Services (CE) as a percentage of Capital Expenditure



Source: Finance Accounts, GoG, various years.

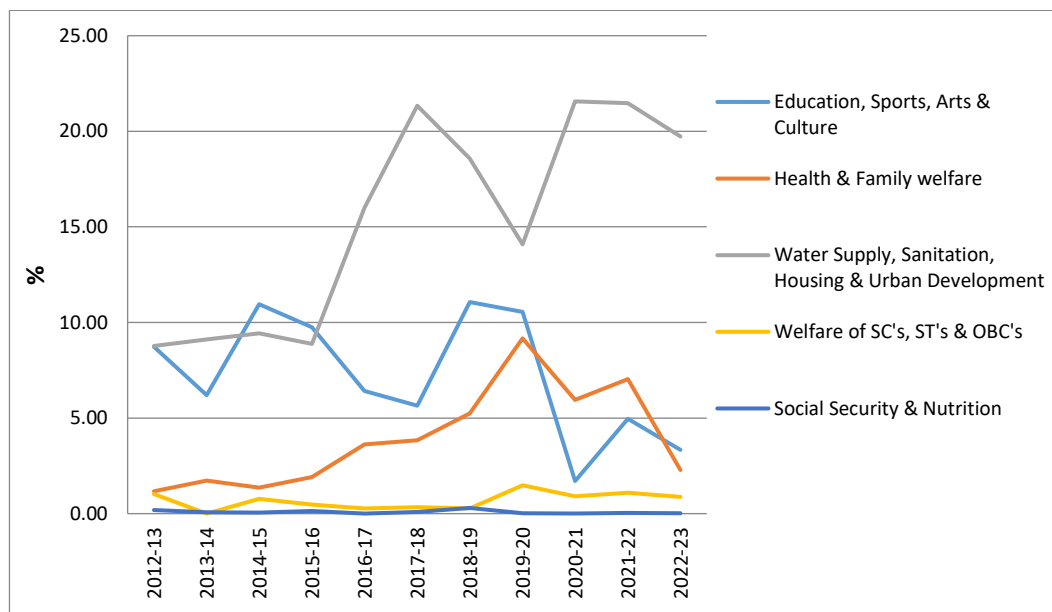
4.6.2 Social Services (Capital Expenditure)

Under social services on the capital account, water supply, sanitation housing and urban development forms the major component. On an average it accounted for 15.36 per cent of capital expenditure from 2012-13 to 2022-23. From 2012-13 to 2015-16, it was below 10 per cent. However since 2016-17 onwards it has always been above 14 per cent and peaked to 21 per cent during 2017-18, 2020-21 and 2021-22. The peak in 2020-21 is mainly because the Centres's fund allocation for Goa increased from Rs.3 crore to Rs.12 crore under the

Jal Jeevan Mission and in October 2020, Goa became the first state in the country to provide 100 per cent tap water connections in rural areas covering 2.3 lakh households (BS, 2020; Sequeira, 2020). Besides water connections, the scheme for connection of sewer was undertaken all over Goa in a phased manner and as of August 2024 the three major cities Margao , Panaji and Vasco were connected with a sewer network and a total installed capacity of 93.45 million litres per day (S. Kamat, 2024)

The next major component is education, sports, art and culture with an average of 7.21 per cent as a percentage of capital expenditure. Expenditure on education, sports, art and culture peaked above 10 per cent during 2014-15, 2018-19 and 2019-20. However in the 2020-21 it dropped drastically to 1.71 per cent of capital expenditure and has remained below 5 per cent in the next two years. The peak in 2014 may be because of the hosting of Lusofonia games which was Goa's biggest sporting international event. The state government invested Rs. 272 crore for creating world-class infrastructure and set aside a budget of Rs. 101 crore towards actual organization of the games (Mergulhao, 2014). The rise in education expenditure in 2018-19 and 2019-20 can be explained due to the introduction of the scheme for creation and enhancement of infrastructure and overall development of educational sector in Goa 2018, to promote overall development of educational institutions, to create state of art infrastructure, to purchase necessary equipment, machinery furniture etc. Under this scheme there would be an educational development capital fund and a separate revenue fund (O Herald, 2018). The foundation stone was laid for infrastructure works at the integrated school complex at Cujira – the Pandit Deendayal Upadhyaya Vidhya Sankul in 2019 (Shetye, 2019).

Figure 4.14: Components of Social Services (CE) as a percentage of Capital Expenditure



Source: Finance Accounts, GoG, Various years.

Health & family welfare expenditure on an average comprised around 3.94 per cent of capital expenditure during 2012-13 to 2022-23. From 2012-13 to 2017-18, Health and Family Welfare was below 4 per cent and from 2018-19 to 2021-22 and it was above 5 per cent of capital expenditure and peaked to 9.17 per cent in 2019-20 and 7.04 per cent in 2021-22. In 2018-19, the foundation stone for a super-speciality block in Goa Medical College was laid (Thakur, 2018). The actual work on the construction of the 500 bedded new South Goa District hospital began in December 2015 even though its foundation stone was laid in 2008 (O Herald, 2020). Construction of 2 new lecture halls with capacity of 300 seats each and one lecture hall with 600 seats at Goa Medical College began in 2019 (TOI, 2023a). But it dropped to 2.29 per cent in 2022-23. Expenditure on Welfare of SC's, ST's & OBC's and Social Security & Nutrition was below 3 per cent of total expenditure.

4.6.3 Economic Services (Capital Expenditure)

Transport forms the major component of economic services as a percentage of capital expenditure. On an average transport was 20.83 per cent in 2012-13 to 2022-23. In July, 2014 work on the new 5.13 kms long cable-stayed bridge over Mandovi began. By 2018 almost 82 per cent of the payment was done and 91 per cent of the bridge was completed (TOI, 2018). In January 2016, the foundation stone for the new Zuari bridge was laid which is India's second largest cable bridge (Mishra, 2022). The new bridge is a part of a 2,530 crore project covering a distance of 13.2 kms between Bambolim (North Goa) and Verna (South Goa) (The Hindu, 2022). Although transport to capital expenditure percentage has

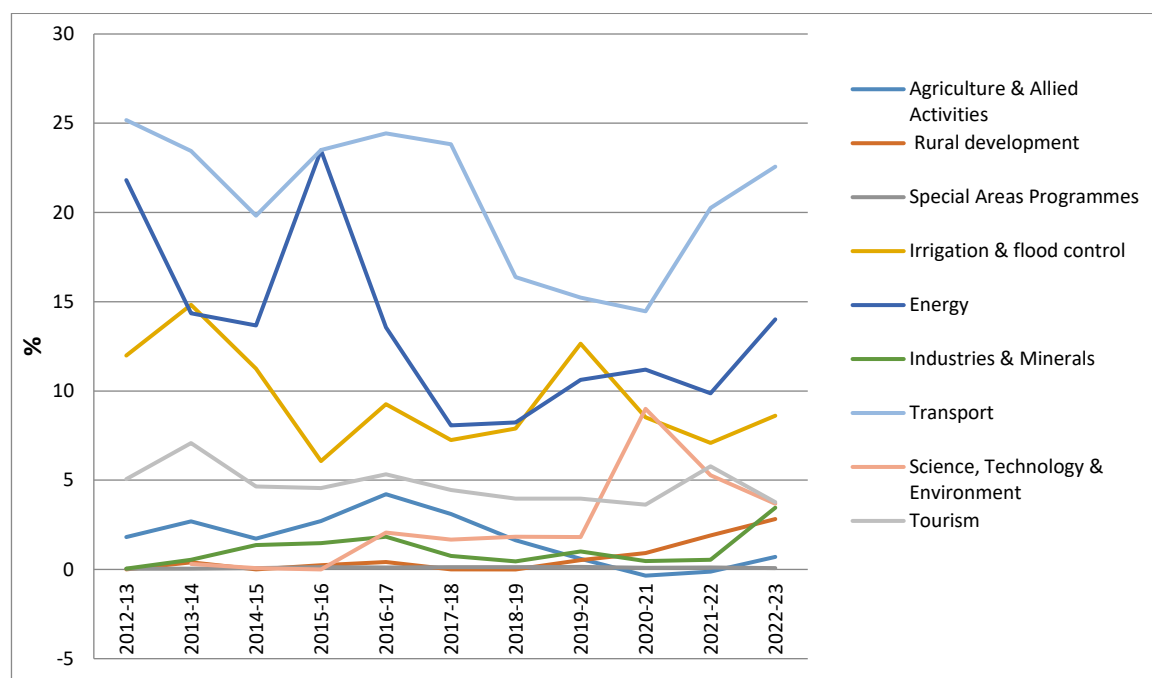
been mostly above 20 per cent, however during the years 2018-19 to 2020-21, there was a significant decline in the transport to capital expenditure percentage.

Energy on average comprised of 13.54 per cent of capital expenditure during 2012-13 to 2022-23. Energy expenditure witnessed a peak in 2012-13 at 21.81 per cent and in 2015-16 at 23.48 per cent. However it also witnessed significant lows of dropping to around 8 per cent of capital expenditure during 2017-18 and 2018-19. The next important sector has been irrigation and flood control which has been on an average around 9.58 per cent of capital expenditure.

Tourism has been on an average around 4.75 per cent of capital expenditure. In November 2016, the foundation stone for the second airport was laid and it was inaugurated in December, 2022. This could be one of the reasons for tourism expenditure having peaks above 5 per cent. Tourism department of Goa in 2021 had launched a Tourist Trade support scheme (working capital interest subvention) to support MSME's in the tourism industry that is adversely affected due to the pandemic by subsidizing working capital loans for 6-month period. Under this scheme the Government will reimburse interest up to a maximum of 5 per cent on working capital loans amounting to a maximum of Rs. 25 lakhs for 6 months in a single claim. Tourist village development scheme 2021 was also launched wherein the Tourism Department in consultation with Village Panchayat shall facilitate minimal yet enabling tourism related infrastructure development in villages to harness their tourism potential (GoG, 2021b). Agriculture & Allied Activities, Rural development, Special Areas Programmes, Industries & Minerals & Science, Technology & Environment have mostly been below 5 per cent of capital expenditure. With the exception of science, technology and environment which peaked to 9 percent in 2020-21. In 2019, the department of science and Technology was renamed as the department of Science Technology and Waste Management (TOI, 2019). Construction on the Cacora Solid Waste Management Facility began in 2020 (TOI, 2020). It is a major project under the department of Science technology and Waste Management and Goan Waste management Corporation.

Agriculture & Allied Activities reported negative expenditure in the years 2020-21 to 2021-22 and rural development reported negative expenditure in the years 2017-18 and 2018-19.

Figure 4.15: Components of Economic Services (CE) as a percentage of Capital Expenditure

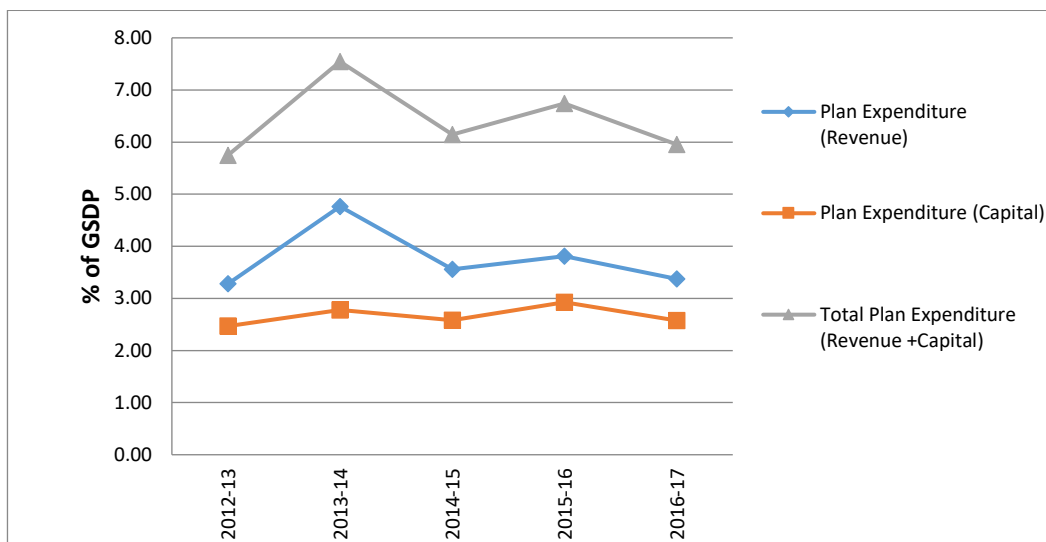


Source: Finance Accounts, GoG, Various years.

4.7 Plan and Non-Plan Expenditure

Plan Expenditures were undertaken in three sub-categories: “State Plan”, “State Share of Centrally Sponsored Schemes (CSS)”, and “Central Plan Schemes/GoI share of CSS”. In our analysis we considered Plan Expenditures as one group as further disaggregation was not relevant for this study. We first examine the distribution of expenditures under the Plan spending. As has been mentioned earlier, since the fiscal year 2017-18, the plan and non-plan classification of expenditures was done away with by the Government of India. Hence for this study we will only be looking at Plan expenditure for the years 2012-13 to 2016-17. On an average total plan expenditure comprised of 6.43 per cent of GSDP during 2012-13 to 2016-17. While plan expenditure (revenue) on average comprised of 3.76 per cent of GSDP, average plan expenditure (capital) comprised of 2.67 per cent of GSDP during 2012-13 to 2016-17. The peak in the total plan expenditures (7.54 per cent) in 2013-14 was mainly due to a rise in the plan revenue expenditures (4.76 per cent). In the last plan year (2016-17) the total plan expenditures dropped to 5.95 per cent of GSDP.

Figure 4.16: Plan Expenditures as a percentage of GSDP



Source: Data on expenditure is from Finance Accounts, GoG, various years.
Data on GSDP is from Economic Survey Goa, Various Years

In terms of non-plan expenditure on the capital account it is almost negligible. Hence total non-plan expenditure mainly comprises of expenditure on the revenue account. On an average the total non-plan expenditure has been around 12.19 per cent of GSDP during 2012-13 to 2016-17. As in the case of the plan expenditures, non-plan expenditure also witnessed a jump in expenditures in 2013-14 (14.20 per cent of GSDP). Between 2014-15 to 2016-17, the non-plan expenditures witnessed a declining trend. Non-plan expenditures (capital) as a percentage of GSDP was negative in 2014-15.

Table 4.9: Non- Plan Expenditures as a percentage of GSDP

Year	Non Plan Expenditure (Revenue)	Non Plan Expenditure (Capital)	Total Non- Plan Expenditure (Revenue +Capital)
2012-13	12.621	0.004	12.624
2013-14	14.175	0.028	14.203
2014-15	11.940	-0.003	11.936
2015-16	11.481	0.020	11.501
2016-17	10.702	0.025	10.726
Average	12.183	0.016	12.199

Source: Data on expenditure is from Finance Accounts, GoG, Various years.

Data on GSDP is from Economic Survey Goa, Various Years

Note: On the finance account book there is a totalling error for the year 2014-15 170144.72

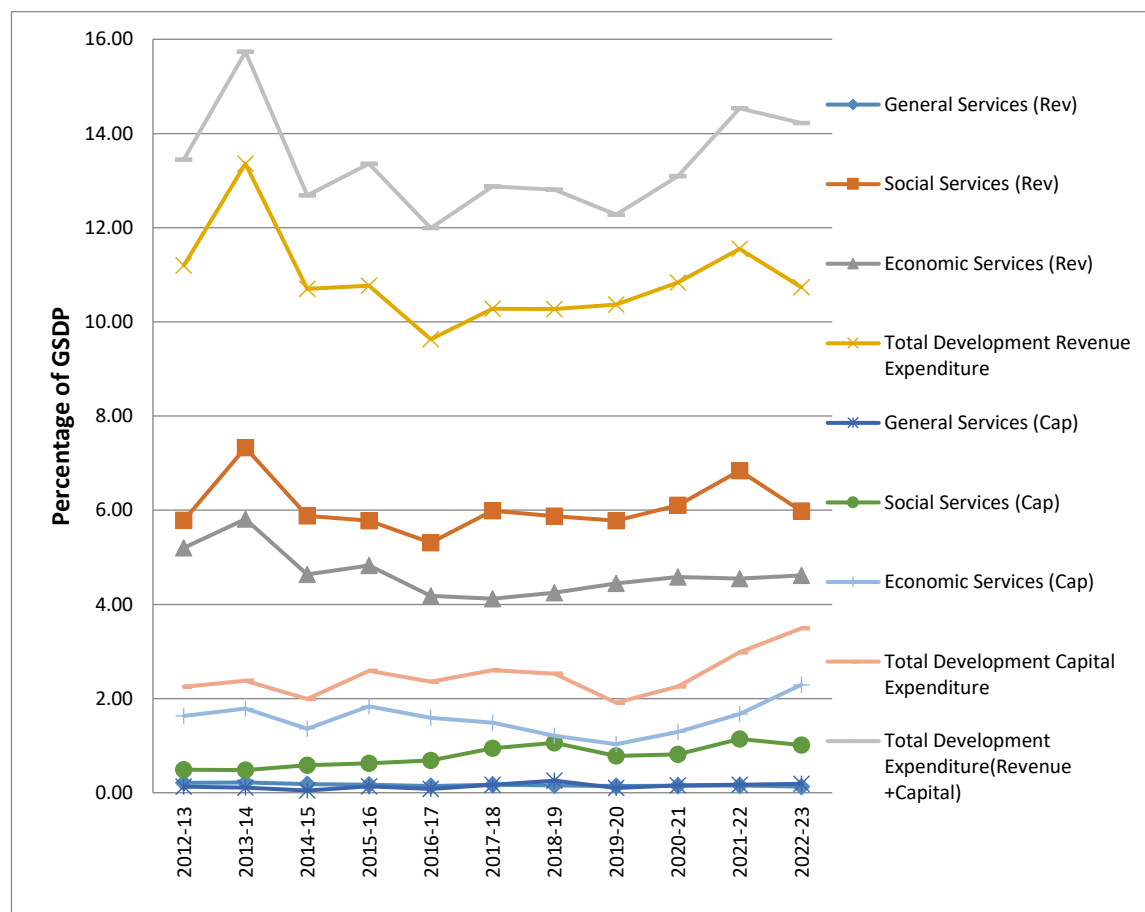
4.8 Development and Non-Development Expenditure

We now present the trends in Developmental and Non-development expenditures in Goa.

These are sub-categorized as revenue and capital account.

Total development expenditure (revenue + capital) as a percentage of GSDP has been on an average at around 13.37 per cent of GSDP during 2012-13 to 2022-23. Total development expenditure peaked in 2013-14 to 15.73 per cent of GSDP and dropped to 12.69 per cent in the following year. It remained below 14 per cent up to 2020-21. However in the years 2021-22 and 2022-23 it was around 14 per cent of GSDP. The total development revenue expenditure comprised of an average of 10.88 per cent of GSDP.

Figure 4.17: Development Expenditure as a percentage of GSDP



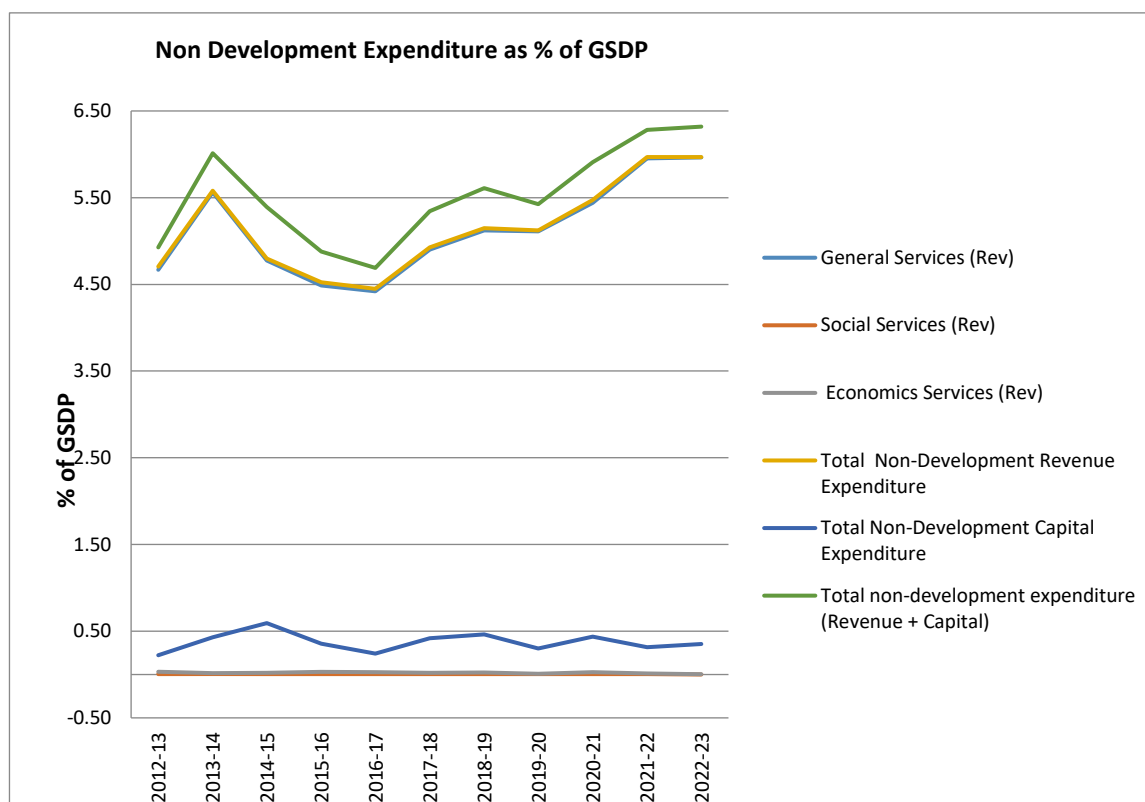
Source: Data on expenditure is from Finance Accounts, GoG, various years.
Data on GSDP is from Economic Survey Goa, Various Years

On the development revenue account, the economic services on an average comprised of 4.66 per cent of GSDP and social services comprised of 6.06 per cent of GSDP during 2012-13 to 2022-23. The only component under general services on the revenue account included under development expenditure was expenditure under public works. The total development capital expenditures comprised of an average of 2.49 per cent of GSDP during 2012-13 to 2022-23. On the development capital account, the economic services on an average comprised of 1.56 per cent of GSDP and social services comprised of 0.78 per cent of GSDP during 2012-13 to 2022-23. The components of general services on the capital account

included under development expenditure were capital outlay on public works, stationary and printing and other administrative services.

The total non-development expenditure (revenue + capital) on an average comprises of 5.5 per cent of GSDP during 2012-13 to 2022-23. It mainly comprises of the components of general services. Total non-development capital expenditure on average comprised of 0.38 per cent of GSDP and total non-development revenue expenditure on an comprised of 5.15 per cent of GSDP during 2012-13 to 2022-23.

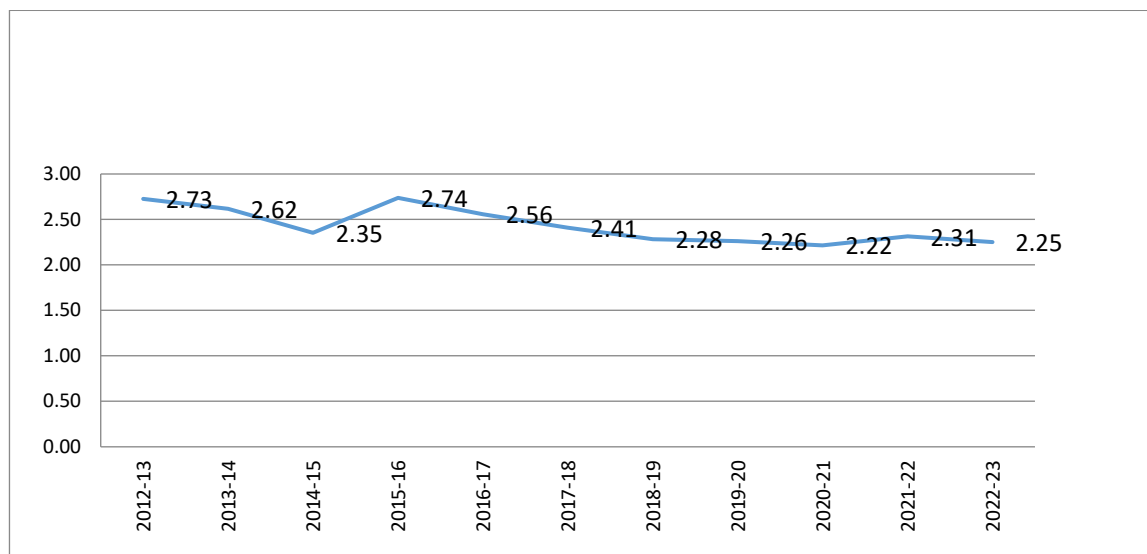
Figure 4.18: Non- Development Expenditure as a percentage of GSDP



Source: Data on expenditure is from Finance Accounts, GoG, various years.
Data on GSDP is from Economic Survey Goa, Various Years

Development expenditure consists of expenditure on social services & economic services which includes expenditure on education, health, infrastructure rural development, agriculture energy etc. While non-development expenditure consists of maintenance expenditures like administration, salaries, pensions, defence etc. The development to non-development ratio indicates the focus of government budgets towards creating new assets. The development to non-development expenditure which peaked to 2.74 in 2015-16 has been on a decline ever since. In 2022-25 the ratio dropped to 2.25.

Figure 4.19: Ratio of Development to Non- Development Expenditure



Source: Finance Accounts, GoG, various years.

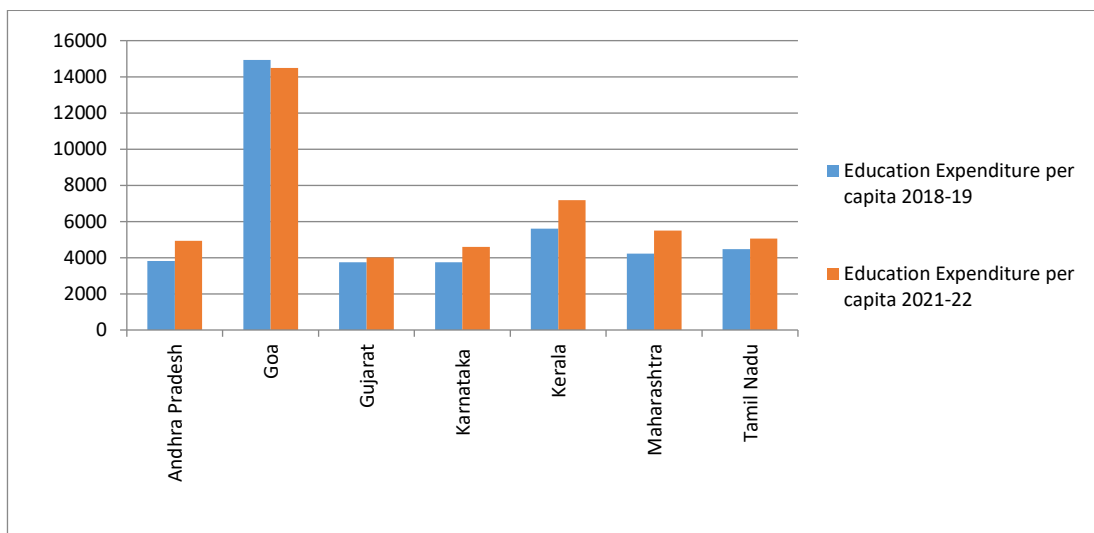
4.9 Technical Efficiency of Expenditure

In this section we have tried to link the inputs with the outcome. We have focussed on two major sectors that is health and education. We have done the analysis for seven southern and south-western states of India which are geographically located closer to Goa and also have been performing well in terms of income as in the case of Goa (ET, 2024). The states included in the study are Andhra Pradesh, Goa, Gujarat, Kerala, Karnataka, Maharashtra and Tamil Nadu.

4.10 Education

In education we analyse education expenditure as the input for the years 2018-19 and 2021-22. Goa ranks the highest in terms of per capita education expenditure at Rs. 14,937 in 2018-19 and Rs. 14489 in 2021-22. The second highest state is Kerala at Rs. 5608 in 2018-19 and Rs.7177 in 2021-22. The third highest state was Tamil Nadu at Rs. 4461 in 2018-19 and Maharashtra at Rs.5501 in 2021-22.

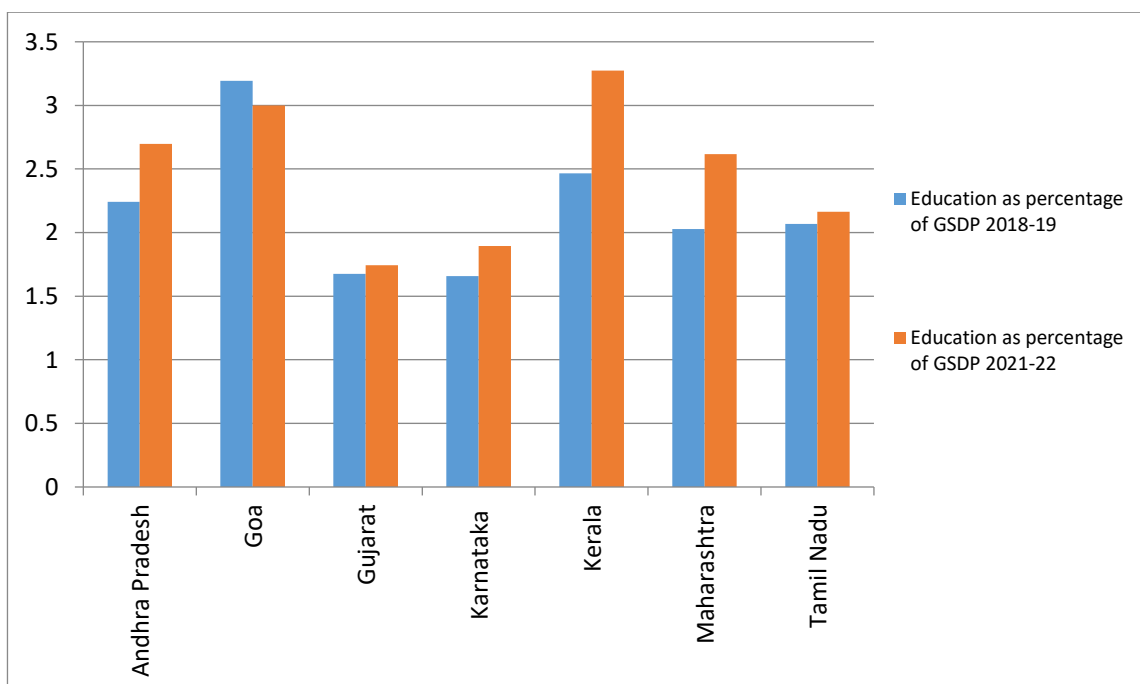
Figure 4.20: Education Expenditure per capita in in 2018-19 2021-22



Source: (RBI, various years)

In terms of education expenditure as a percentage of GSDP in 2018-19, Goa ranked the highest at 3.19 per cent in GSDP followed by Kerala (2.47 per cent) and Andhra Pradesh (2.24 per cent). Karnataka was last at 1.66 per cent. In 2021-22, Kerala ranked highest at 3.27 percent followed closely by Goa at 3 per cent and Andhra Pradesh at 2.7 per cent. Gujarat was last at 1.74 per cent.

Figure 4.21: Education Expenditure as a percentage of GSDP, 2018-19 and 2021-22



Source: (RBI, various years)

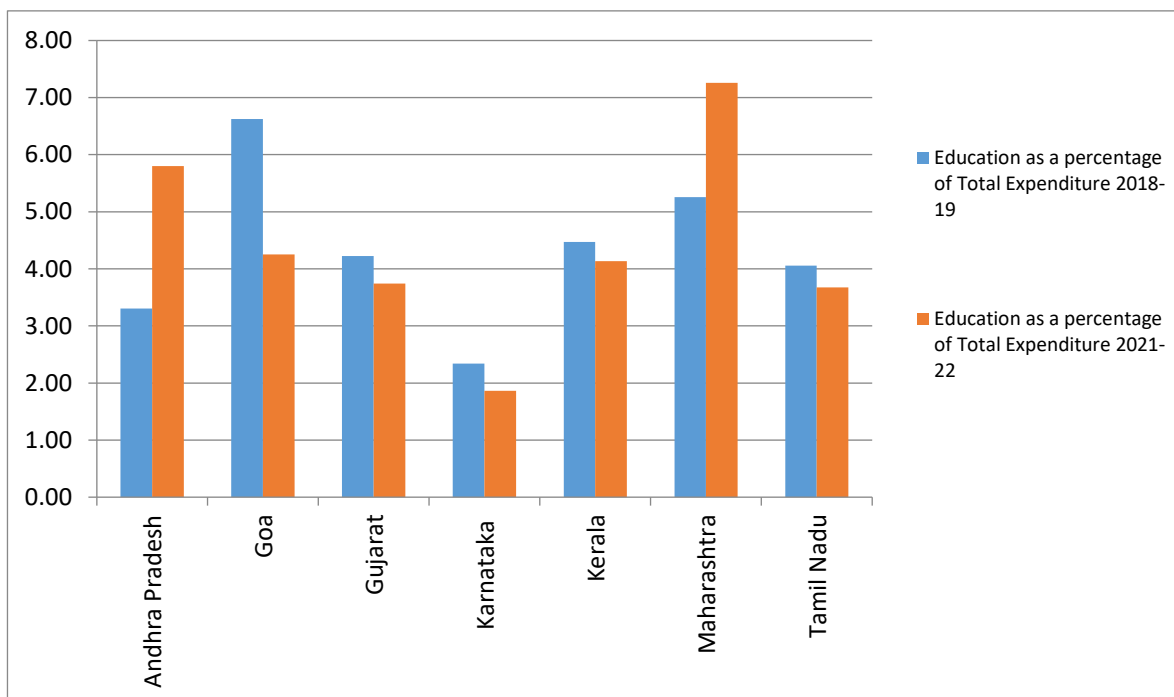
Table 4.10: Education Expenditure as a percentage of GSDP, 2018-19 and 2020-21

Rank	States	2018-19	States	2020-21
1	Goa	3.19	Kerala	3.27
2	Kerala	2.47	Goa	3.00
3	Andhra Pradesh	2.24	Andhra Pradesh	2.70
4	Tamil Nadu	2.07	Maharashtra	2.62
5	Maharashtra	2.03	Tamil Nadu	2.16
6	Gujarat	1.67	Karnataka	1.89
7	Karnataka	1.66	Gujarat	1.74

Source: (RBI, various years)

In terms of education expenditure as a percentage of total expenditure Goa ranked the highest in 2018-19 at 6.63 per cent, followed by Maharashtra at 5.26 per cent and Kerala ranked third at 4.47 per cent. Karnataka was last at 2.34 per cent. In 2021-22, Maharashtra ranked the highest at 7.26 per cent, followed by Andhra Pradesh at 5.8 per cent and Goa ranked third at 4.25 per cent . Karnataka ranked last at 1.86 per cent

Figure 4.22: Education Expenditure as a percentage of Total Expenditure, 2018-19 and 2021-22



Source: (RBI, various years)

Note: Here, total expenditure comprises of total revenue expenditure and total capital disbursements

Table 4.11: Education as a percentage of Total Expenditure

State	2018-19	State	2021-22
Goa	6.63	Maharashtra	7.26

Maharashtra	5.26	Andhra Pradesh	5.80
Kerala	4.47	Goa	4.25
Gujarat	4.22	Kerala	4.14
Tamil Nadu	4.06	Gujarat	3.74
Andhra Pradesh	3.31	Tamil Nadu	3.67
Karnataka	2.34	Karnataka	1.86

Source: (RBI, various years)

4.10.1 Outcome indicators in Education

Now we analyse some important outcome indicators in the field of education. The indicators we are analysing are Gross Enrolment Ratio(GER) for all social groups for elementary, secondary and higher secondary education levels for 2018-19 and 2021-22.

In 2018-19 Goa ranked fourth in terms of GER ratio for elementary education (1 to 8) (98.2 per cent) , second in terms GER for Secondary education (91.9 per cent) and third in terms of GER for Higher Education (71.9 per cent). In 2021-22, Goa ranked last in terms of GER for Elementary education (1 to 8) (98.2 per cent), Goa ranked sixth for Secondary education (83 per cent) and ranked third for higher education at 73.7 per cent.

Table 4.12: Gross Enrolment Ratio (GER) for all Social Groups, 2018-19

Rank	Elementary (1 to 8)		Secondary (9-10)		Higher Secondary (11-12)	
1	Karnataka	104.5	Kerala	98	Kerala	80.3
2	Maharashtra	102.5	Goa	91.9	Tamil Nadu	72.3
3	Tamil Nadu	98.3	Maharashtra	91.1	Goa	71.9
4	Goa	98.2	Tamil Nadu	90.5	Maharashtra	68.9
5	Kerala	97.8	Karnataka	83.7	Andhra Pradesh	46.9
6	Gujarat	94.4	Andhra Pradesh	79.7	Karnataka	44.4
7	Andhra Pradesh	92.9	Gujarat	76.1	Gujarat	41.2

(UDISE+, 2018)

Note: Total enrolment in a particular level of school education, regardless of age, expressed as a percentage of the Population of the official age-group which corresponds to the given level of school education in a given school year. Example: GER primary = Enrolment in class 1 to 5 ÷ projected population in age group 6- 10 years

Table 4.13: Gross Enrolment Ratio (GER) for all Social Groups, 2021-22

Gross Enrolment Ratio (GER) All Social Groups 2021-22

Rank	Elementary (1 to 8)		Secondary (9-10)		Higher Secondary (11-12)	
1	Karnataka	107.1	Kerala	97.9	Kerala	85
2	Maharashtra	104.3	Tamil Nadu	95.6	Tamil Nadu	81.5
3	Kerala	101	Karnataka	94.7	Goa	73.7
4	Andhra Pradesh	100.1	Maharashtra	93.7	Maharashtra	71.5
5	Tamil Nadu	98.8	Andhra Pradesh	85.4	Andhra Pradesh	56.7
6	Gujarat	92.4	Goa	83	Karnataka	56.6
7	Goa	91.1	Gujarat	75.2	Gujarat	48.2

Source: (UDISE+, 2021)

The second outcome indicator in the educational field we are analysing is the Pupil Teacher Ratio for primary education (1 to 5), upper primary (6-8) secondary level (9-10) and higher secondary (11-12). In 2018-19, Goa ranked sixth for Primary level (28), and fourth for upper primary level (18). For the same year Goa ranked first for secondary level (10) and higher secondary level (18). In 2021-22, Goa ranked fifth for primary level (26) and third for upper primary (16) which is an improvement as compared to 2018-19. Goa retained its first rank for secondary (10) and higher secondary level (19).

Table 4.14: Pupil Teacher Ratio, 2018-19

Rank	Primary (1 to 5)		Upper Primary (6-8)		Secondary (9- 10)		Higher Secondary (11-12)	
1	Karnataka	21	Tamil Nadu	16	Goa	10	Goa	18
2	Tamil Nadu	21	Andhra Pradesh	17	Tamil Nadu	13	Tamil Nadu	21
3	Andhra Pradesh	25	Karnataka	17	Kerala	15	Kerala	22
4	Kerala	26	Goa	18	Andhra Pradesh	16	Gujarat	28
5	Maharashtra	26	Kerala	21	Karnataka	17	Karnataka	33
6	Goa	28	Gujarat	24	Maharashtra	21	Maharashtra	37
7	Gujarat	30	Maharashtra	27	Gujarat	33	Andhra Pradesh	40

Source: (UDISE+, 2018)

Table 4.15: Pupil Teacher Ratio, 2021-22 Pupil Teacher Ratio, 2021-22

Rank	Primary (1 to 5)	Upper Primary (6-8)	Secondary (9- 10)	

							Higher Secondary (11-12)	
1	Tamil Nadu	20	Tamil Nadu	15	Goa	9	Goa	19
2	Karnataka	23	Andhra Pradesh	16	Andhra Pradesh	11	Tamil Nadu	21
3	Andhra Pradesh	25	Goa	16	Tamil Nadu	13	Kerala	22
4	Maharashtra	25	Karnataka	18	Kerala	15	Gujarat	28
5	Goa	26	Kerala	21	Karnataka	18	Karnataka	28
6	Kerala	27	Gujarat	25	Maharashtra	21	Andhra Pradesh	32
7	Gujarat	30	Maharashtra	27	Gujarat	29	Maharashtra	38

Source: (UDISE+, 2021)

NOTE Pupil-Teacher Ratio (PTR) is the average number of pupils (at a specific level of education) per teacher (teaching at that level of education) in a given schoolyear.

In 2018-19 for the Upper Primary level, Kerala had zero drop-out rate, followed by Karnataka (0.2), Tamil Nadu (0.6) and Goa (0.9) (ed by Kerala (5.5) and Goa (9).

). In the case of secondary level, Kerala had the least drop-out rate at 9.1, followed by Goa (9.4) and Tamil Nadu (13) in 2018-19. In 2021-22 Goa, Kerala and Tamil Nadu had a zero drop-out rate at the primary level. In terms of the secondary level, Tamil Nadu had a least drop-out rate at 4.5 followed by Kerala (5.5) and Goa (9).

Table 4.16: Drop-out rate: 2018-19 and 2021-22

	2018-19				2021-22			
Rank	Upper Primary (6-8)		Secondary (9-10)		Upper Primary (6-8)		Secondary (9-10)	
1	Kerala	0	Kerala	9.1	Goa	0	Tamil Nadu	4.5
2	Karnataka	0.2	Goa	9.4	Kerala	0	Kerala	5.5
3	Tamil Nadu	0.6	Tamil Nadu	13	Tamil Nadu	0	Goa	9
4	Goa	0.9	Maharashtra	13.3	Karnataka	1.1	Maharashtra	10.7
5	Andhra Pradesh	1.1	Andhra Pradesh	16.4	Maharashtra	1.5	Karnataka	14.7
6	Maharashtra	2.2	Karnataka	23.4	Andhra Pradesh	1.6	Andhra Pradesh	16.3
7	Gujarat	7.4	Gujarat	23.8	Gujarat	5	Gujarat	17.9

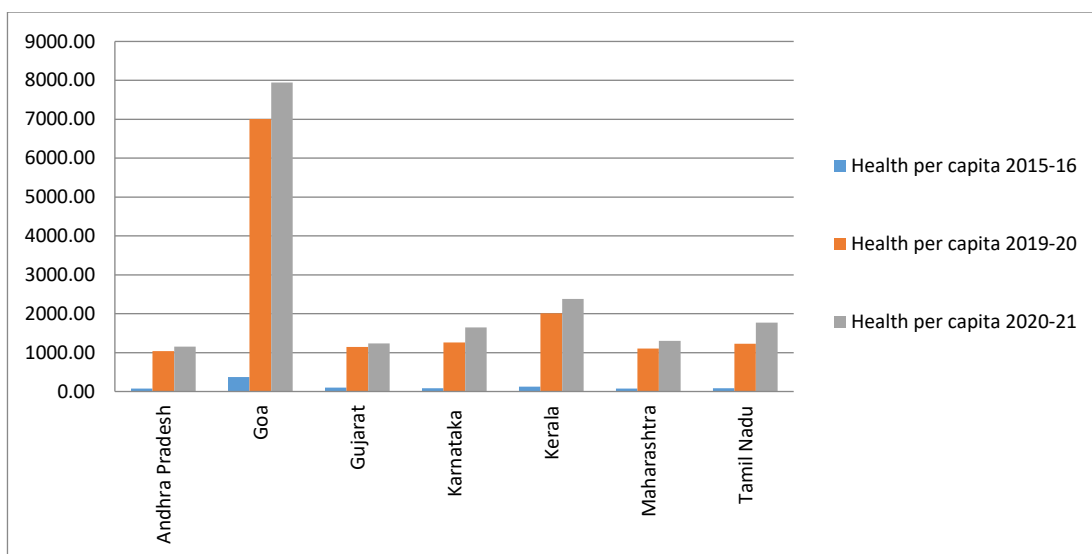
Source: (UDISE+, 2018, 2021)

Note: Dropout rate is the proportion of pupil from a cohort enrolled in a given level at a given school year who are no longer enrolled at any grade in the following school year

4.11 Health Sector

In terms of health expenditure per capita, almost all states witnessed a significant jump in 2019-20 as compared to 2015-16. In 2015-16 Goa had a per capita health expenditure of Rs. 373.59, which increased to Rs.7943.06 in 2020-21. The next highest state in terms of health expenditure per capita was Kerala at Rs.126.95 in 2015-16 which increased to Rs. 2378.65 in 2020-21. The third highest state was Tamil Nadu followed very closely by Karnataka. Tamil Nadu had a health per capita expenditure of Rs. 83.75 in 2015-16 and Rs.1767.58 in 2020-21. Karnataka had health expenditure per capita of Rs.80.88 in 2015-16 which increased to Rs.1650.86 in 2020-21.

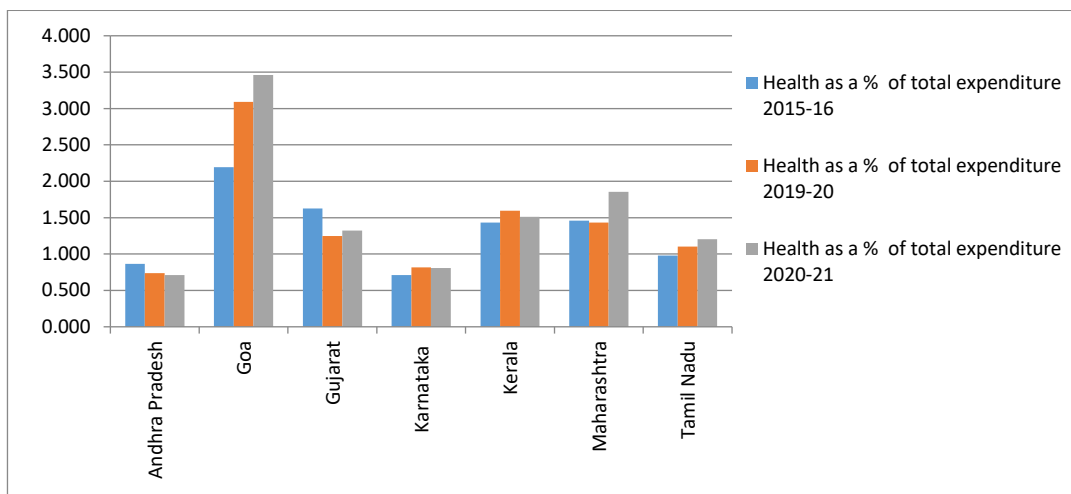
Figure 4.23: Health Expenditure per capita, 2015-16 and 2019-21



Source:(RBI, various years)

In 2015-16, Goa had the highest health expenditure as a percentage of total expenditure (2.19 per cent) followed by Gujarat (1.62 per cent), Maharashtra (1.46 per cent) and Kerala (1.43 per cent). In 2020-21, Goa again ranked first in terms of health expenditure as a percentage of total expenditure at 3.45 per cent, followed by Maharashtra at 1.86 per cent and Kerala 1.51 per cent as seen in the table below.

Figure 4.24: Health as a percentage of Total Expenditure

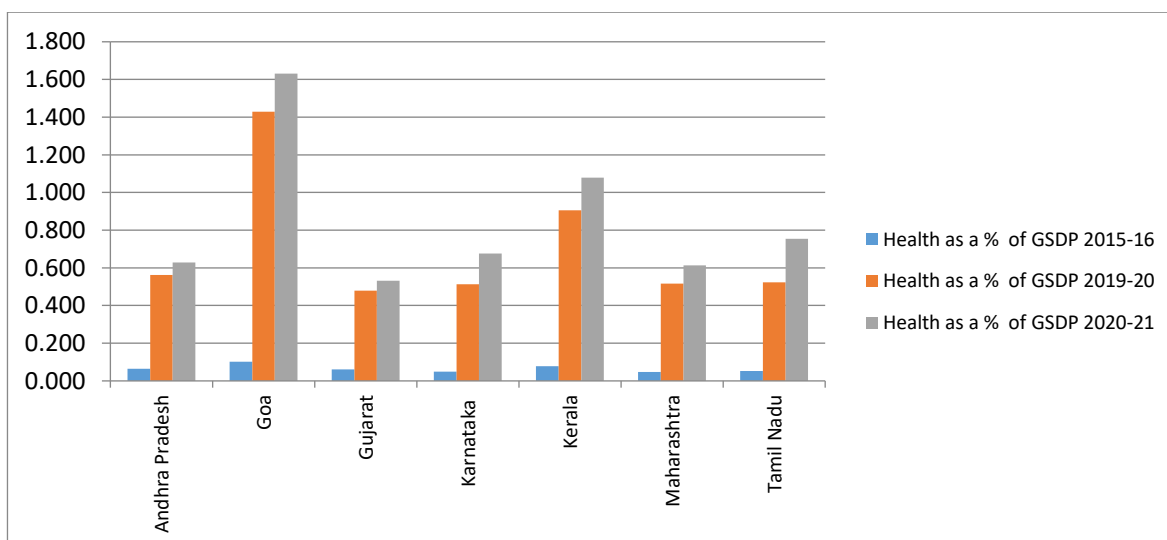


Source:(RBI, various years)

Note: Here total expenditure comprises of total revenue expenditure and total capital disbursements

Again in terms of health expenditure as a percentage of GSDP, Goa ranked the highest (0.1 per cent), followed by Kerala (0.077 per cent) and Andhra Pradesh (0.064 per cent) in 2015-16. In 2020-21, Goa ranked at the top again and witnessed an increase in health expenditure at 1.632 per cent of GSDP. The state which ranked second was Kerala with a health expenditure to GSDP percentage at 1.079 per cent and Tamil Nadu at 0.75 per cent (Figure 23).

Figure 4.25: Health Expenditure as a percentage of GSDP



Source:(RBI, various years)

4.11.1 Health outcome Indicators

Next we look at some important health indicators and compare them for two time periods 2015-16 (NFHS-4) and (NFHS-5) 2019-21. For NFHS-5 the data was collected over two years. Firstly we look at Infant Mortality Rates (IMR). Kerala ranked first with least IMR

at 5.6 in 2015-16 and 4.4 in 2019-21. Goa ranked second with an IMR of 12.9 in 2015-16 which decreased considerably to 5.6 in 2019-21. The Tamil Nadu ranked third with an IMR at 20.2 in 2015-16 and 18.6 in 2019-21.

In terms of under 5 mortality rates per 1000 live births, again Kerala had the least under 5 mortality rates which was 7.1 in 2015-16 and decreased to 5.2 in 2019-21. The second state with the least under 5 mortality rates was Goa at 12.9 in 2015-16 which decreased to 10.6 in 2019-21. Again Tamil Nadu was third with under 5 mortality rates at 26.8 in 2015-16 which decreased to 22.3 in 2019-21.

Table 4.17: Infant Mortality Rates and Under 5 Mortality Rates

Rank	Infant Mortality Rates per thousand live births				Under 5 mortality rates per 1000 live births			
	NFHS-4 2015-16		NFHS 5 2019-21		NFHS-4 2015-16		NFHS 5 2019-21	
1	Kerala	5.6	Kerala	4.4	Kerala	7.1	Kerala	5.2
2	Goa	12.9	Goa	5.6	Goa	12.9	Goa	10.6
3	Tamil Nadu	20.2	Tamil Nadu	18.6	Tamil Nadu	26.8	Tamil Nadu	22.3
4	Maharashtra	23.7	Maharashtra	23.2	Maharashtra	28.7	Maharashtra	28
5	Karnataka	26.9	Karnataka	25.4	Karnataka	31.5	Karnataka	29.5
6	Gujarat	34.2	Andhra Pradesh	30.3	Andhra Pradesh	40.8	Andhra Pradesh	35.2
7	Andhra Pradesh	34.9	Gujarat	31.2	Gujarat	43.5	Gujarat	37.6

Source:(Economic Survey, 2022)

The next indicator we analyse is the children under 5 who are stunted. Kerala had the least children with stunted growth in 2015-16 at 19.7%, followed by Goa (20.1%) and Tamil Nadu (27.1%). During 2019-21, Kerala still had the least under 5 stunted children at 23.4 per cent, although it had increased since 2015-16. Tamil Nadu saw an improvement over 2015-16 with under 5 stunted children at 25 per cent. Goa was the third least state at 25.8 per cent and actually had an increase in the under 5 stunted children as compared to 2015-16.

When we analyse the pregnant women aged 15-49 years who are anaemic, again Kerala had the least pregnant women who are anaemic in 2015-16 (22.6) as well as in 2019-21 (31.4), though it witnessed an increase in anaemic pregnant women over the previous period of study. Goa ranked second with 26.7 in 2015-16 and 41 in 2019-21. Tamil Nadu had the third least anaemic pregnant women at 44.4 in 2015-16 and Karnataka had the third least in 2019-21 at 45.7.

Table 4.18: Children with stunted growth and Pregnant Women with anaemia

Children under 5 years who are stunted (height for age)%				Pregnant Women aged 15-49 years who are anaemic			
NFHS-4 2015-16		NFHS 5 2019-21		NFHS-4 2015-16		NFHS 5 2019-21	
Kerala	19.7	Kerala	23.4	Kerala	22.6	Kerala	31.4
Goa	20.1	Tamil Nadu	25	Goa*	26.7	Goa*	41
Tamil Nadu	27.1	Goa	25.8	Tamil Nadu	44.4	Karnataka	45.7
Andhra Pradesh	31.4	Andhra Pradesh	31.2	Karnataka	45.4	Maharashtra	45.7
Maharashtra	34.4	Maharashtra	35.2	Maharashtra	49.3	Tamil Nadu	48.3
Karnataka	36.2	Karnataka	35.4	Gujarat	51.3	Andhra Pradesh	53.7
Gujarat	38.5	Gujarat	39	Andhra Pradesh	52.9	Gujarat	62.6

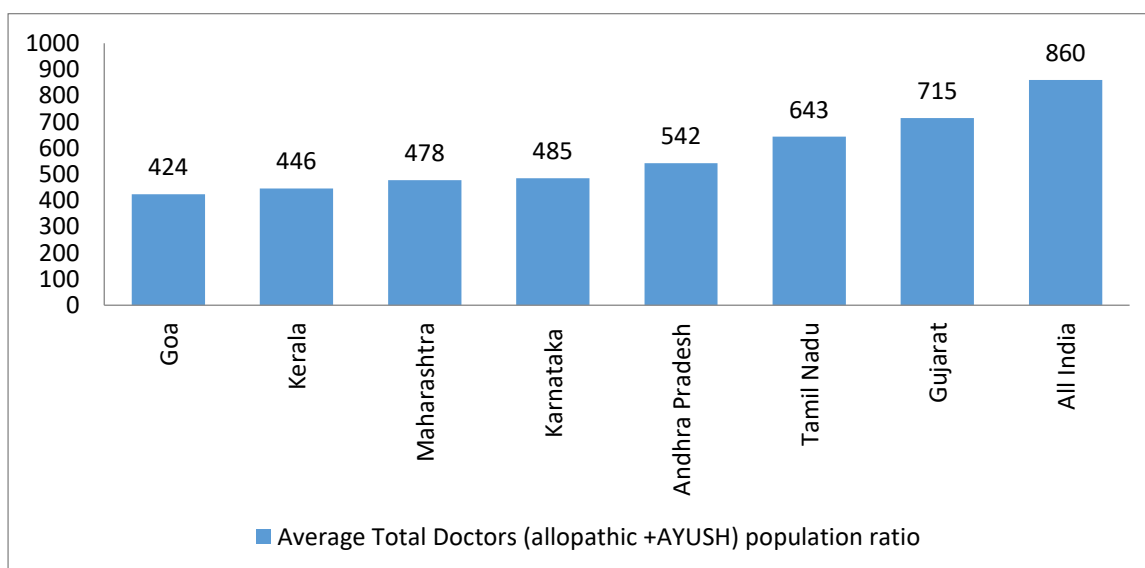
Source:(Economic Survey, 2022)

Note As per WHO stunting refers to low height for age

*Goa was based on 25-49 unweighted cases

Lastly we analyse the average total doctors to population ratio. We see that Goa ranks the highest with a ratio of 1:424, followed by Kerala with a ratio of 1: 446 and Maharashtra with a ratio of 1:478 in 2019.

Figure 4.26: Average Total Doctors (Allopathic + AYUSH) Population Ratio (As on March 2019)



Source:(MoH&FW, 2019)

4.12 Data Envelopment Analysis

For measuring the efficiency of public spending, Data Envelopment Analysis (DEA) is applied. DEA, a non-parametric statistical technique, was developed by Charnes et al.

(1978). It assumes a convex production frontier. Linear programming method is used to construct the frontier in the DEA approach. The terminology “envelopment” stems out from the fact that the production frontier envelops the set of observations. DEA is widely used in empirical studies on efficiency since it can easily deal with multiple inputs and outputs while estimating efficiency. It is also less susceptible to the misspecification problems as in the case of econometric models. A great advantage of DEA is that it does not require any prior specification (potentially erroneous) of a functional relationship between the inputs and outputs (Mohanty & Bhanumurthy, 2018).

DEA helps in decision making by calculating an efficiency score which suggests if a unit has capacity for improvement. Every firm’s efficiency score is calculated relative to an efficiency frontier. Firm’s that are situated on the frontier are like benchmarks to the inefficient firms. A DEA model can be input or output oriented. In case of an input oriented model DEA minimizes the input for a given level of output which means that it suggests by how much a firm could reduce its inputs for the given level of output. In our analysis we have used a VRS model or Variable returns to scale technology. This is optimal when units are not operating at an optimal scale (Huguenin, 2012).

4.12.1 Input Oriented Technical Efficiency

An input oriented approach of technical efficiency is used to test if a Decision Making Unit (DMU) under evaluation can decrease its inputs while maintaining the same level of outputs. Following Banker et al. (1984), it can be presented in the following manner (equation 1) (Banker et al., 1984; Mohanty & Bhanumurthy, 2018).

$$\begin{aligned}
 \phi^* &= \min \phi && \text{equation 1} \\
 \sum_{j=1}^n \lambda_j x_{ij} &\leq \phi x_{iw} && i=1,2,\dots,m; \\
 \sum_{j=1}^n \lambda_j y_{rj} &\geq y_{rw} && r=1,2,\dots,s; \\
 \sum_{j=1}^n \lambda_j &= 1 \\
 \lambda_j &\geq 0 && j=1,2,\dots,n
 \end{aligned}$$

Where, DMU_z represents one of the n DMUs under evaluation, and x_{iw} and y_{rw} are the i th input and r th output for DMU_w respectively. ϕ^* denotes the efficiency score of DMU_w. If $\phi^* = 1$ then the DMU_w is efficient. If $\phi^* < 1$, then it is inefficient.

4.12.2 Output Oriented Technical Efficiency

Output oriented models indicate whether a DMU can increase its outputs while keeping the inputs at the same levels. It can be expressed as :

$$\begin{aligned} \phi^* &= \max \phi && \text{equation 2} \\ \sum_{j=1}^n \lambda_j x_{ij} &\leq x_{iw} && i=1,2,\dots,m; \\ \sum_{j=1}^n \lambda_j y_{rj} &\geq \phi y_{rw} && r=1,2,\dots,s; \\ \sum_{j=1}^n \lambda_j &= 1 \\ \lambda_j &\geq 0 && j=1,2,\dots,n \end{aligned}$$

Where, DMU_z represents one of the n DMUs under evaluation, and x_{iw} and y_{rw} are the i th input and r th output for DMU_w respectively. Here $1/\phi^*$ denotes the efficiency score of DMU_z. If $1/\phi^* = 1$ then the DMU_z is efficient. If $1/\phi^* < 1$, then it is inefficient.

We have undertaken a DEA analysis using the above mentioned 7 states to understand the technical efficiency of public spending for Goa in the area of health and education. However we do realise that this is just a statistical analysis and it may not reflect the ground reality.

4.13 Technical Efficiency of Education Expenditure

We have used education expenditure as a percentage of total expenditure and social expenditure minus education expenditure as a percentage of total expenditure as the two inputs. The two output indicators used are GER for Elementary (1 to 8) and GER for Higher Secondary (11-12). This is on the same lines as (Mohanty & Bhanumurthy, 2018). We have undertaken an input oriented as well as an output oriented DEA analysis.

Using the input oriented DEA technique we analyse whether inputs could be reduced to produce the same level output. The results indicate that in terms of the education sector, Goa could reduce its inputs to produce the same level of output. For e.g. for GER, Goa could use around 61 per cent of education and social expenditure to produce same the level of GER as in 2018-19. Similarly in 2021-22, Goa could achieve its GER ratio using 76 per cent of the expenditure it actually incurred in that year. However an encouraging fact is that efficiency of the education expenditure has increased from 2018-19 to 2021-22.

When we analyse the output oriented DEA technique (21-2022 as compared to 2018-19.

We can see that given the inputs, in terms of GER, Goa was producing 98 per cent of the output and only 2 per cent could be enhanced in 2018-19. However in 2021-22, Goa was producing 90 per cent of the output and it could be enhanced by 10 per cent. The efficiency score decreased in 2021-2022 as compared to 2018-19.

Table 4.19: Technical Efficiency Score- Education (Input & Output Oriented Approach)

Efficiency Score- Education		
Year	Input Oriented Approach	Output Oriented Approach
2018-19	0.61	0.98
2021-22	0.76	0.90

Source: Author's calculations

4.14 Technical Efficiency of Health Expenditure

We have used health expenditure as a percentage of total expenditure as the input and IMR as the output. The DEA technique used in this study assumes that outputs are measured in such a way that “more is better.” We modified the IMR variable so that we can apply the DEA technique as done by (Mohanty & Bhanumurthy, 2018) as follows:

$IMR = (\text{Number of infant deaths during the year})/(\text{Number of live births during the year}) \times 1000$.

Therefore, we have calculated an “Infant Survival Rate” (ISR) as follows.

$ISR = (1000 - IMR) / IMR$

Using the input oriented DEA technique we analyse whether inputs could be reduced to produce the same level output. The results indicate that in terms of the health sector, Goa could reduce its inputs to produce the same level of output. For e.g. for IMR, Goa could use around 32 per cent of health expenditure to produce same the level of IMR as in 2015-16. Similarly in 2019-21, Goa could achieve its IMR ratio by using 41 per cent of the health expenditure it actually incurred in that year. When we analyse the output oriented DEA technique, we can see that given the inputs, in terms of IMR, Goa was producing 43 per cent of the output and it could be enhanced by 58 per cent with the same level of inputs in 2015-16. However in 2021-22, Goa was producing 78 per cent of the output and could enhance output by 22 per cent given the level of inputs. The efficiency score increased significantly in 2019-21 as compared to 2015-16.

Table 4.20: Technical Efficiency Score - Health (Input & Output Oriented Approach)

Efficiency Score- Health		
Year	Input Oriented Approach	Output Oriented Approach
2015-16	0.32	0.43
2019-2021	0.41	0.78

4.15 Suggestions to increase efficiency of expenditure

In order improve the efficiency of expenditures the following suggestions have been summarized:

- 1) Government needs to reduce expenditure on general services specially pension payments which have been rising very steeply during the period of study. Besides this, the government needs to reduce its interest payments and administrative expenditures so that more expenditure can be diverted towards capital spending on building assets without putting a burden on the government debt. According the Medium Term Fiscal Plan of the Government of Goa for 2023-24, they plan to borrow from low interest rate bearing instruments from NABARD, SIDBI and EDC and hence interest payments as a percentage of total revenue are expected to decrease from 2023-24 onwards (GOG, 2024b).
- 2) Government needs to reduce expenditure under miscellaneous and other expenditures. For e.g. if we look at the capital outlays on general services majority of the expenditure has been incurred on miscellaneous general services from 2012-13 to 2022-23.
- 3) In the DEA analysis done in section 4.11, we see that Goa is one of the highest in terms of expenditure on health and education, however in terms of outcome indicators there have been states like Kerala , Tamil Nadu which are bigger states with higher population that have achieved better outcome values with lower per capita expenditures. Hence, Goa being a developed state, with high per capita income and comparatively less population and area can strive to attain better outcome indicators by improving service delivery (even though its current outcome indicators are very good).
- 4) Goa government may need to divert its expenditure to certain important sectors of the economy to increase its effectiveness. During our analysis of expenditure of the government we found that tourism being one of the most important sector of Goa's economy (despite the ban in mining activities) has received only 1.3 per cent share of total expenditure on an average during 2012-13 to 2022-23.
- 5) Before undertaking major infrastructural projects in the state proper planning has to be done by government officials to match the needs of the public and to discuss practical difficulties that are likely to be occurred (even through online surveys) for better success of the projects. For e.g. Goa government spent a huge capital cost to provide sewage network and connectivity across the state since 2008, however there was poor response for availing connections by households (TOI, 2021a).

- 6) Proper monitoring of government schemes and incorporating necessary modifications for the schemes is important for preventing wasteful expenditure. For e.g. in 2015, the state government had launched a unique mobile fish stall along with four other similar vehicles. Instead of modifying this scheme or scrapping it in 2019, four more such mobile fish vans were added at a cost of 47.26 lakhs to sell subsidised fish at various locations in Goa. However it saw opposition from local vendors and as of 2022 most of these vans have turned non-functional (NT, 2022).
- 7) Completion of projects according to a well-planned time line is important to increase the efficiency of public expenditure for e.g. it was mentioned that the state governments proposal to cover all major towns with sewerage networks with suitable technology has been very slow as many of the schemes and projects where the work order was issued almost 10 years back were still incomplete as of June, 2023 due to practical difficulties (O Herald, 2023b). According to the CAG 2023 audit report for Goa there were 105 incomplete projects by the Goa Government as on March 2023 for which Rs. 216.35 crore has been spent. Out of these 105 projects there were two projects that commenced as long back as 2014-15 which remained incomplete. 88 projects were delayed by one to three years (O Herald, 2023b)..
- 8) The trend to under-utilise funds by the government departments needs to be addressed. In January 2025, twenty-four government departments had spent only 30 per cent of the funds allocated to them in the state budget 2024-25. They were urged to spend as much as possible in the remaining three months by the government questioning the quality of this expenditure (NT, 2025). It may also require proper training of government officials to undertake expenditure efficiently for their respective departments.

4.16 Summary

Revenue expenditure (RE) constitutes the bulk of the expenses for of Goa. However, since 2020-21 the percentage share of revenue expenditure to total expenditure (TE) witnessed a declining trend and the percentage share of capital expenditure (CE) showed an increasing trend. The growth rates have been quite volatile especially for CE. In 2012-13 and 2019-20, CE witnessed a negative growth rate of (-20.4) per cent and (-22.7) per cent respectively. Though the CAGR of CE during 2012-13 to 2022-23 was higher as compared to the RE which is an encouraging fact however the CAGR of CE was higher in 2012-13 to 2016-17 (14.84) as compared to 2017-18 to 2022-23 (10.34). A concerning fact is that the CAGR

was the highest for total general services at 11.48 from 2012-13 to 2022-23 as compared to the other two sectors.

On an average social services (revenue) comprised of 32.21 per cent of TE, general services (revenue) comprised of 28.12 per cent of TE and economic services (revenue) comprised of 24.88 per cent of TE during 2012-13 to 2022-23. However, general services (revenue) as a per cent of TE have shown an increasing trend since 2016-17 onwards and have surpassed the share of economic services (revenue) as a percentage of total expenditures. In fact in 2022-23, general services (revenue) were equal to the share of social services (revenue) as a percentage of total expenditure. From 2017-18 to 2022-23, economic services as a per cent of total expenditures declined as compared to the earlier period of the study. This can explain as to why the development/non- development expenditure ratio which peaked to 2.74 in 2015-16, has been on a decline ever since and in 2022-23 the ratio dropped to 2.25. In terms of general services on an average pension & miscellaneous services comprised of around 10.79 per cent and interest payments & debt servicing comprised of around 13.02 per cent of revenue expenditure during 2012-13 to 2022-23. Pension payments as a percentage of revenue expenditure has been steadily increasing and during 2021-22 and 2022-23 pension overtook interest payments & servicing of debt.

Expenditure on education, sports, art and culture forms the major component of expenditure under social services (revenue) with an average of around 16.79 per cent during 2012-13 to 2022-23. On an average expenditure on health comprised of 7.69 per cent of revenue expenditure. During 2017-18 to 2022-23, while expenditure on health (revenue) was steadily increasing, expenditure on social welfare (revenue) witnessed a declining trend. Under economic services, energy comprises of the major component as a percentage of revenue expenditure at 17.66 per cent on an average during 2012-13 to 2022-23.

Under social services on the capital account, water supply, sanitation housing and urban development comprised of the major component. Since 2016-17 onwards, it has always been above 14 per cent of capital expenditure and peaked to 21 per cent during 2017-18, 2020-21 and 2021-22. Transport comprised of the major component of economic services (capital). On an average transport comprised of 20.83 per cent of capital expenditure during 2012-13 to 2022-23

Appendix

Table A1: Expenditure under broad heads as a percentage of Total Expenditures and GSDP

Year	Revenue Expenditure (Rs. Lakhs)	Capital Expenditure (Rs. Lakhs)	Total Revenue Expenditure/ TE (%)	Total Capital Expenditure/T E (%)	Total Revenue Expenditure/GSD P	Total Capital Expenditure/GSD P
2012-13	6,06,134.70	94227.05	86.55	13.45	15.90	2.47
2013-14	680327.74	100822.36	87.09	12.91	18.94	2.81
2014-15	741024.99	123410.95	85.72	14.28	15.50	2.58
2015-16	841955.71	162226.95	83.84	16.16	15.29	2.95
2016-17	886597.82	163872.77	84.40	15.60	14.08	2.60
2017-18	1054289.39	209407.29	83.43	16.57	15.20	3.02
2018-19	1108283.72	214914.23	83.76	16.24	15.42	2.99
2019-20	1162266.5	166023.84	87.50	12.50	15.49	2.21
2020-21	1209265.48	199667.21	85.83	14.17	16.31	2.69
2021-22	1422688.27	268093.04	84.14	15.86	17.52	3.30
2022-23	1488448.58	342542.97	81.29	18.71	16.70	3.84

Appendix A2: Trends in Categorized Expenditure as a proportion of Total Expenditure

Year	General Services (Revenue)/TE	Social Services (Revenue)/TE	Economic Services (Revenue)/TE	General Services (Capital)/TE	Social Services (Capital)/TE	Economic Services (Capital)/TE
2012-13	26.56	31.50	28.49	1.91	2.67	8.87
2013-14	26.58	33.72	26.80	2.48	2.21	8.22
2014-15	27.42	32.56	25.74	3.54	3.22	7.52
2015-16	25.53	31.70	26.62	2.69	3.42	10.04
2016-17	28.56	33.26	26.33	2.02	4.29	9.98
2017-18	27.83	32.88	22.72	3.23	5.18	8.16
2018-19	28.67	31.92	23.17	3.89	5.77	6.58
2019-20	29.68	32.66	25.16	2.26	4.42	5.82
2020-21	29.41	32.14	24.27	3.10	4.28	6.79
2021-22	29.36	32.88	21.91	2.33	5.49	8.04
2022-23	29.67	29.13	22.50	2.62	4.92	11.16

Note for the year 2012-13 there is an error on the Finance Account book where economic services on the revenue account reported is 199529.24, that is a minor difference of 0.33. In 2014-15 economic services on the capital account reported in the finance accounts had a difference of 0.01

Chapter 5 Deficits

The fiscal deficit is considered to be the best indicator of fiscal health of the state as it is the gap between what the state spends and what the state receives by way of revenue, sale of assets, recovery of loans and other non-debt capital receipts. The two more indicators of deficits are the revenue deficit and the primary deficit which are in a way connected to the notion of fiscal deficit. These two notions have different implications for the state of fiscal affairs and the state of the economy. In this chapter, we outline how the measures of different concepts of deficits have moved over time reflecting the underlying conditions in both the realms, revenue collection consisting of mainly tax and non-tax revenue receipts other than grants-in-aid and expenditure, both revenue and capital outlay made on the three heads, Economic, Social and General. Capital outlay is different from total capital expenditure which includes repayment of loans and transactions with the public accounts and contingency funds.

In view of the very nature of the accounting system which consists of consolidated account, transfers to contingency fund and public accounts, we need to spell out the different components of fiscal deficit, both from the uses side which means how the borrowed resources have been deployed by the state government and how the different sources of borrowing have financed the fiscal deficit. An analysis of both sides of the fiscal deficit helps us to understand and assess the fiscal health of the State of Goa as they have different sets of implications for the state of the economy (from the uses side) and the future of the debt trajectory and its sustainability.

5.1 Defining deficits

The broad components of the fiscal data as given in the Finance Account of both the sides are given below to take a quick stock of how fiscal deficit is defined and to know why the magnitude of the fiscal deficit does not warrant often simplistic explanations due to the transactions with Contingency Fund and Public Accounts.

Revenue Receipts (RR) + Receipts recorded under Internal debt (RID) + Loans from the Centre (RLoC) + Recovery of loans (RLo) + Inflow from the Transfer to Contingency Fund (RTCF) + Receipts from Contingency Fund (RCF) + Receipts under small savings/provident fund (RPF) + Receipts from Public Accounts (R_{Pub}) + Opening balance (OB) = Revenue Expenditure (RE) + Capital outlay (CO) + Disbursement under Internal Debt (DID) + Repayment of loans taken from Centre (DLoC) + Disbursement of Loans

$(DLo) + \text{Disbursement to Transfer to Contingency Fund (DTCF)} + \text{transfer to Contingency Fund (DCF)} + \text{Disbursement to Savings/PF (DPF)} + \text{Disbursement to Public accounts (DPub)} + \text{Closing Balance (CB)}.$

$\text{Revenue Deficit (RE-RR)} + \text{Capital outlay (CO)} + \text{Advances of loans (DLo - RLo)} + (\text{DTCF} - \text{RTCF}) = \text{net borrowing under Internal debt (RID - DID)} + \text{net borrowing from Centre (RLoc - DLoC)} + \text{net borrowing from savings/PF (RPF - DPF)} + \text{net inflow from public account (RPub - DPub)} + \text{uses of cash balances (OB - CB)}.$

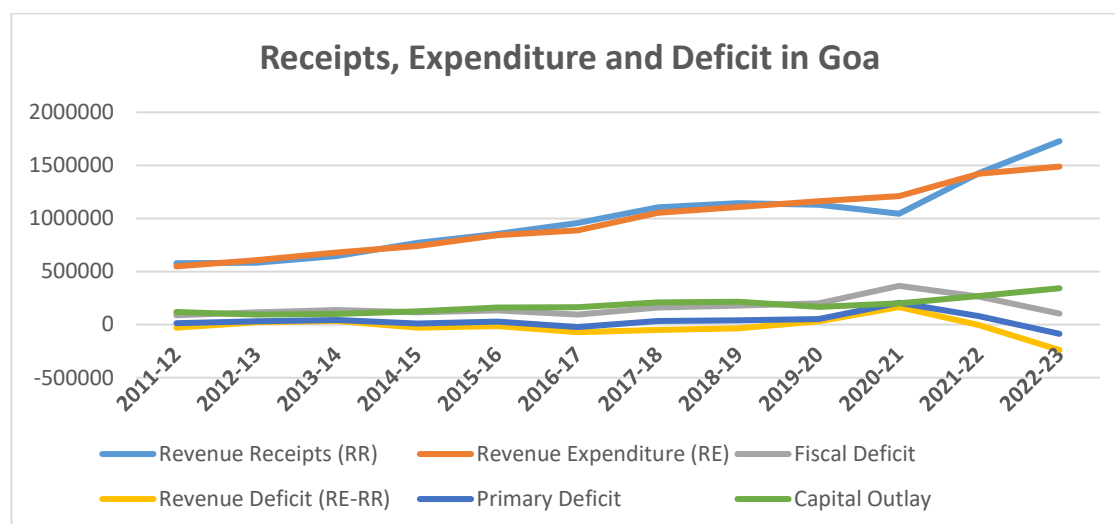
From the left hand side, it is clear that the borrowed resources are to be used to finance if there is any deficit in the revenue account (RD) and then it can fund capital outlay and account for net loans advanced by the state government. If RD is zero, then the entire amount of borrowed resources could be devoted to capital outlay and loans and advances which is supposedly meant for capital formation. A surplus in the revenue account adds to the pool of borrowed resources.

From the financing side, only three components are genuine borrowing at an interest rate which add to the debt stock of the state government, ie, the components included under the Internal debt which includes market borrowing, loans from the Centre and the provident fund account. All these are in net terms. The rest of the transactions are adjustments which do not add to the debt stock.

5.2 The trends in deficits

The trends in the deficit would reflect the underlying trends in expenditure and receipts with components as noted above and fiscal deficit is therefore the compulsion of the government to resort to borrowing (net).

Figure 5.1: Receipts, Expenditures and Deficits in Goa



Source: Finance Accounts, GoG, Various Years

The state has had a fluctuating trend in RD during the period under study. The Revenue account turned into a surplus in 2021-22 which witnessed a sudden rise in 2022-23. This is reflected in the compression of the FD significantly from 3.23 percent to 1.15 percent in terms of GSDP and therefore only a marginal rise in capital outlay from 3.30 to 3.84 in terms of GSDP during the same period. In the Post-Covid year 2020-21, the Revenue Deficit (RD) turned into 2.23 percent of GSDP. This was only to be expected which also pushed the FD from 2.66 up to 4.90 while maintaining the CO at a stable level. In the past, in 2012-13 and in 2013-14, the FD went up beyond 3 percent of GSDP as the deficit in the revenue account emerged after recording a surplus in 2011-12. So a rise in revenue deficit raises fiscal deficit, and an emergence of surplus in the revenue account compresses fiscal deficit while the CO is being maintained at a steady level.

Table 5.1: Uses of Fiscal Deficit (as percentages of GSDP)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Fiscal Deficit	2.08	3.01	3.77	2.40	2.46	1.48	2.32	2.49	2.66	4.92	3.23	1.15
Revenue Deficit (RE-RR)	-0.70	0.57	0.98	-0.58	-0.24	-1.11	-0.74	-0.49	0.43	2.23	-0.07	-2.69
Capital Outlay (CO)	2.79	2.47	2.81	2.58	2.95	2.60	3.02	2.99	2.21	2.69	3.30	3.84

Net Lending (DLo-RLo)	-0.01	-0.03	-0.02	-0.01	-0.01	-0.01	0.04	0.00	0.01	0.00	0.00	0.00

Source: Finance Accounts, GoG, Various Years

The table below depicts how the FD has been financed during the period. The reliance on Internal Debt was heavy in the same two years 2012-13 and 2013-14, which was 2.78 percent and 2.34 percent in terms of GSDP respectively. The reliance on the other two sources, loans from the Centre and Withdrawal from small savings and provident fund (PF) continued to remain low throughout the period under study. Loans from the Centre turned, in fact, negative during 2017-18 to 2019-20. The state repaid to the Centre more than the Centre borrowed. Withdrawal from public accounts and utilisation of cash balances do not reveal any definite trend over the years with the magnitudes changing sign arising out state's exigencies. The fiscal deficit dropped significantly in 2022-23 to 1.15 percent from 3.23 in the previous year which reduced dependence on market borrowing from 2.0 to 0.96 percent.

Table 5.2: Composition of Financing Fiscal Deficit (as a proportion of GSDP)

	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20	2020 -21	2021 -22	2022 -23
Internal Debt (RID-DIR)	0.46	2.78	2.34	1.52	2.41	1.57	1.77	2.27	2.30	3.98	2.00	0.96
Loans (RLoC-DLoC)	0.15	0.36	0.35	0.37	0.15	0.10	-0.01	-0.03	-0.07	1.19	1.13	0.56
Savings/PF (RPF-DPF)	0.40	0.39	0.32	0.23	0.21	0.19	0.34	0.15	0.10	0.05	-0.03	-0.07
Withdrawal Pub Acc (R Pub-D Pub)	1.26	-0.55	0.81	-0.38	-0.19	-0.32	0.40	0.12	0.41	-0.40	0.13	-0.13
Opening bal - Closing bal (OB-CB)	-0.20	0.03	-0.05	0.25	0.12	-0.06	-0.17	-0.01	-0.09	0.09	0.00	-0.16
Fiscal Deficit	2.08	3.01	3.77	2.40	2.46	1.48	2.32	2.49	2.66	4.92	3.23	1.15
Primary Deficit	0.34	0.83	1.20	0.23	0.50	-0.39	0.48	0.57	0.71	2.77	0.97	-0.97

Notes: Transfer to contingency fund : Rs 20000 for the year 2014-15; Transfer to contingency fund : Rs 7000 for the year 2015-16

Source: Authors' calculations based on Finance Accounts, GoG, Various Years

Table 5.3: A Comparison of Different notions of Deficits

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Fiscal Deficit	2.08	3.01	3.77	2.4	2.46	1.48	2.32	2.49	2.66	4.92	3.23	1.15
Rev Deficit	-0.7	0.57	0.98	-0.58	-0.24	-1.11	-0.74	-0.49	0.43	2.23	-0.07	-2.69
Primary Deficit	0.34	0.83	1.2	0.23	0.5	-0.39	0.48	0.57	0.71	2.77	0.97	-0.97
RD/FD	-33.8	18.8	26.1	-24.2	-9.8	-74.8	-31.7	-19.8	16.3	45.3	-2.3	-233.3
CO/FD	134.5	82.1	74.5	107	120	175.3	130	119.9	83.2	54.7	102.2	333.1
Notes: Transfer to contingency fund : Rs 20000 for the year 2014-15; Transfer to contingency fund : Rs 7000 for the year 2015-16												

Source: Authors' calculations based on Finance Accounts, GoG, Various Years

Capital outlay exceeded fiscal deficit whenever there were surpluses in the revenue accounts. In the years 2012-13, 2013-14, 2019-20 and 2020-21, revenue deficit had to be financed which led to a compromise with capital outlay to fall below the FD, the extent of borrowed resources. In the last year 2022-23, the surplus in the revenue account was significantly high which was used in reducing the FD and CO as a proportion of FD became very high.

Chapter 6 Debt: An Analysis of Trends

In this Chapter, we focus on the debt build-up of the state, the composition of borrowing and debt outstanding during the period under study. This is followed by a discussion of the costs of borrowing for two of the three components, internal debt and loans from the Centre.

In the table below, we show the debt outstanding in terms of GSDP.

Table 6.1: Debt Outstanding as percentages of GSDP

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Internal Debt	14.7	19.1	22.6	18.5	18.5	17.7	17.9	19.5	21.0	25.2	25.0	23.8
Loans & Advances from the Centre	1.5	2.1	2.5	2.3	2.1	2.0	1.8	1.7	1.5	2.7	3.6	3.9
Public Debt	16.2	21.2	25.2	20.8	20.6	19.7	19.6	21.2	22.5	28.0	28.7	27.6
Small Savings, PF,	3.46	4.24	4.82	3.86	3.55	3.30	3.34	3.37	3.33	3.42	3.09	2.74
Total Debt	19.68	25.41	29.97	24.64	24.16	22.98	22.96	24.55	25.84	31.37	31.74	30.37

Source: Finance Accounts, various issues.

The total outstanding debt in terms of GSDP increased from 19.68 percent in 2011-12 to 30.47 in 2022-23, a rise by nearly 10 percentage points. In terms of component wise growth, the Internal Debt grew from 14.7 percent to 23.8 percent while loans and advances from Centre grew from 1.5 percent to 3.9 percent. The sum of these two components, the total public debt rose from 16.2 percent to 27.6 percent. The share of Small savings and PF fell from 3.46 percent of GSDP to 2.74 percent.

In the table below, we show the trajectories of borrowing and repayment for each of the three components of public debt and the debt build up over time as the new amount gets

added to the debt outstanding at the beginning of the period. $D_t = D_{t-1} + \text{Borrowing} - \text{repayment}$

6.1 State Borrowing and Debt Build-up

Table 6.2: Components of State Borrowing and Debt Build-up

State Borrowing and Debt Build-up: Borrowing and Disbursement of													
Debt Outstanding as on 31st March 2011		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
6003- Internal Debt outstanding	605793	622643	728633	812611	885226	1017638	1116239	1238802	1401885	1574570	1869718	2032117	2117405
Internal Debt: Additions		32361	137089	119895	213144	406023	321222	308281	491821	376591	667214	414695	205506
Internal Debt: Discharge during		12796	31099	35917	140530	273611	222621	185718	328738	203906	372065	252297	120217
Loans & Advances from the Centre	55622	64593	78447	90841	108377	116782	123303	122308	120072	114841	203275	295038	344586
Loans fr Centre: Additions		21290	16661	14984	20288	11156	9187	7803	7043	4568	98274	101287	57275
Loans fr Centre: Discharge during		15034	2807	2589	2752	2752	2665	8798	9280	9798	9840	9524	7728
Public Debt Outstanding	661415	687237	807080	903453	993603	1134419	1239542	1361110	1521956	1689411	2072994	2327155	2461991
Small Savings, PF, etc. Outstanding	129541	146656	161677	173185	184357	195649	207899	231493	242177	249565	253393	251043	244540
Small Savings, PF, etc. Additions		32016	33203	34675	36604	39009	39165	55480	45380	44448	42967	41579	41147
Small Savings, PF, etc. Discharge		14901	18182	23166	25432	27718	26915	31887	34696	37060	39139	43929	47649

Total Debt & Other interest bearing	790956	833892	968757	1076638	1177960	1330068	1447442	1592603	1764133	1938976	2326387	2578198	2706531

Source: Finance Accounts, various issues.

The share of market loans in total internal borrowing went down from 77.3 percent to 65.7 percent. Loans from NABARD increased from 22.7 to 24.3. The dependence on ways and means advances from the RBI has been substantially reduced in the recent years from very high levels during pre-Covid and during the Covid period. The share of public debt as a percent of total borrowing increased significantly from 62.6 percent in 2011-12 to 86.5 percent in 2022-23. Out of this, the share of internal borrowing in total borrowing rose from 37.8 percent to 67.6 percent during the period. This is associated with a fall in the share of loans from the Centre from 24.9 percent to 18.8 percent. This is because of the fall in loans for the plan schemes during the recent years.

Table 6.3: Composition of borrowing related to Public Debt and Other Interest-bearing obligations

Composition of Debt in terms of percentages												
Description of debt	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20	2020 -21	2021 -22	2022 -23
6003-Internal Debt of the State Government												
101-Market Loans	77.3	83.9	82.6	37.5	35.7	41.1	58.4	47.8	69.0	50.3	48.2	65.7
103-Loans from LIC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105-Loans from NABARD	22.7	8.3	8.9	7.0	3.0	3.3	4.1	2.2	1.4	3.7	12.1	24.3
108-Loans from NCDC	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109-Loans from Other Institution	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4
110-Ways and Means Advances from Reserve Bank of India	0.0	0.0	4.4	50.1	57.2	55.6	37.5	50.0	29.5	46.0	39.7	2.6
111-Special Securities issued to NSSF of Central Govt	0.0	6.3	4.1	5.4	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Total, 6003 - Composition of borrowing of Internal Debt	100	100	100	100	100	100	100	100	100	100	100	100
Internal borrowing as a % of total borrowing	37.8	73.3	70.7	78.9	89.0	86.9	83.0	90.4	88.5	82.5	74.4	67.6
Loans and Advances given by the Central Government												
Total, Non-Plan Loans	45.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total, Loans for State/Union Territory Plan Schemes	55.0	97.2	100.4	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0
Total, Loans for Central Plan Schemes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total, Loans for Centrally Sponsored Plan Schemes	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total, ways and Means Advances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Loans for State/Union Territory with Legislature Schemes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0
Total- 6004, Loans and Advances from Central Government	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Loans taken from Central govt as a % of total borrowing	24.9	8.9	8.8	7.5	2.4	2.5	2.1	1.3	1.1	12.2	18.2	18.8
Total E - Public Debt borrowing as a % total borrowing	62.6	82.2	79.5	86.4	91.4	89.4	85.1	91.7	89.6	94.7	92.5	86.5

Total, (a) Small Savings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total, (b) Provident Funds	98.7	98.6	98.5	98.5	98.5	98.4	98.8	98.5	98.4	98.4	98.3	98.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total, 8011 - Insurance and Pension Funds	1.3	1.4	1.5	1.5	1.5	1.6	1.2	1.5	1.6	1.6	1.7	1.8
Total, 8012 - Special Deposits and Accounts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total, (c) Other Accounts	1.3	1.4	1.5	1.5	1.5	1.6	1.2	1.5	1.6	1.6	1.7	1.8
Total, I - Small Savings, Provident Funds, etc	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Loans from small savings and PF as a % total borrowing	37.4	17.8	20.5	13.6	8.6	10.6	14.9	8.3	10.4	5.3	7.5	13.5
Total Borrowing	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Finance Accounts, various issues.

Under small saving and provident fund scheme, only provident fund has contributed mainly followed by a very limited contribution from insurance and pension funds and with no contribution from small savings. Associated with a rise in the share of public fund in total borrowing, the share of PF declined from 37.4 percent to 13.5 percent.

The issue is whether the rise in debt to GDP ratio is sustainable. In the table below, Table 7.5, we try to make some tentative observations about debt sustainability based on three indicators, effective rate of interest on debt outstanding, interest payment as a percentage of revenue receipts, and repayment of loans as a share of revenue receipts.

Table 6.4: Select Indicators of Debt sustainability

Select Indicators of Debt sustainability												
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Effective rate of interest on debt	9.29	9.96	9.50	9.64	9.12	8.86	8.80	8.69	8.30	8.20	7.88	7.36

Interest payment/Revenue Receipts	12.72	14.21	14.27	13.49	12.57	12.32	11.53	12.10	12.97	15.23	12.83	10.97
repayment of Loans/Revenue Receipts	7.39	8.91	9.56	21.94	35.56	26.37	20.48	32.59	22.20	40.33	21.40	10.16

Source: Finance Accounts, various issues.

We observe that the effective rate of interest on debt outstanding declined from 9.29 to 7.36 percent during the period under study. Interest payment as a share in revenue receipts declined during the period from 12.72 to 10.97 percent. The buoyancy in revenue is responsible for this. Repayment of loans went up from 7.39 percent to 10.16 percent during the period. This is good because it reins in debt build up. A comfortable fiscal position has helped the state of Goa to resort to higher repayment of loans.

According to Domar Debt sustainability condition,

$$D_t = (1+\alpha)D_{t-1} - p_t$$

where $\alpha = (r-g)/(1+g)$ and p is primary balance. If it is negative, it indicates deficit and it is positive, it indicates that the primary balance is in surplus. Effective interest rate is 'r' and the real growth rate is 'g'. The growth rate of Goa's GSDP has remained rather modest. The nominal growth rate hovering around 8 to 9 percent, the real growth rate should be around 4 to 5 percent. This is rather low because consumption is pretty high in Goa while the manufacturing base is low. Even if the effective interest rate on outstanding debt has come down, the α is still positive. However, the surplus in the primary account is pulling down the debt build-up. The only way to pull the debt to GSDP ratio down is to borrow less and repay more as the fiscal situation is expected to remain comfortable for the state of Goa.

In the tables below, we show the cost of borrowing on the debt outstanding as on 31 March 2013.

Table 6.5: Cost of borrowing from the Market and other Financial Institutions

2012-13 (Amount o/s as on 31st March 2013)											
Rate of Interest (Percent)	Market Loans bearing interest	LIC	HUDCO	NCD	PFC	NABARD	Special Securities Issued to NSSF of the Central Government	SIDBI	Others	Total	share in Total
4.00-4.99										-	0.00%
5.00-5.99	11621.5									11621.5	1.59%
6.00-6.99	19080.8					28684.06				47764.8	6.56%
7.00-7.99	54896.2					10870.82				65767.0	9.03%
8.00-8.99	255000.0			4.97						255004.9	35.00%
9.00-9.99	35000.0		26.6	9.45	754.2		265385.4			301175.6	41.33%
10.00-10.99		32.40		19.7	346.0		35649.2			36047.3	4.95%
11.00-11.99	0.15			7.03	5156.2					5163.4	0.71%
12.00-12.99		94.8			3351.3					3446.1	0.47%
13.00-13.99	20.0	1346.8			1213.5					2580.3	0.35%
Floating Rate				61.9						61.9	0.01%
UT Loans										-	0.00%
Total	375618.6	1474.0	26.6	103.1	10821.3	39554.8	301034.6		-	728633.2	100.00%

Source: Finance Accounts, various issues.

In the table below, we show the cost of borrowing for different components of debt for the debt outstanding as on 31 March 2023. The increased reliance on NABARD led to a fall in the effective cost of borrowing.

Table 6.6: Cost of borrowing from the Market and other Financial Institutions

2022-23 (Amount o/s as on 31st March 2023)											
Rate of Interest (Percent)	Market Loans bearing interest	LIC	HUDCO	NCD	PFC	NABARD	Special Securities Issued to NSSF of the Central Government	SIDBI	Others	Total	share in Total
2.00-2.99						24,895.64				24,895.64	1.18
3.00-3.99						4,283.47				4,283.47	0.20
4.00-4.99						64,045.37		798.00		64,843.37	3.06
5.00-5.99	5,400.0					51,740.26		14,464.81		71,605.07	3.38
6.00-6.99	4,67,500.0					718.95				4,68,218.95	22.11
7.00-7.99	7,69,500.0									7,69,500.00	36.34
8.00-8.99	4,70,000.0									4,70,000.00	22.20
9.00-9.99	89,000.0						1,41,990.02			2,30,990.02	10.91
10.00-10.99				11.22			10,002.71			10,013.93	0.47
11.00-11.99	0.15			11.96						12.11	0.00
12.00-12.99										-	0.00
13.00-13.99										-	0.00

Floating Rate					3,042.75					3,042.75	0.14
UT Loans										-	0.00
Total	18,01,400.1	-	-	23.18	3,042.7	1,45,683.6	1,51,992.7	15,262.8	-	21,17,405.3	100.0

Source: Finance Accounts, various issues.

Table 6.7: Cost of borrowing from the Centre as on 31 March 2022

Composition of loans from the Centre in terms of cost of borrowing: 2022		
Rate of Interest (%)	Loans and Advances from the Central Government (Amount o/s as of 1st April....)	Share in Total
2022		
4.00-4.99		0.00
5.00-5.99		0.00
6.00-6.99		0.00
7.00-7.99	6,263.86	1.82
8.00-8.99	1,009.70	0.29
9.00-9.99	18.00	0.01
10.00-10.99		0.00
11.00-11.99		0.00
12.00-12.99	47.44	0.01
13.00-13.99		0.00
Floating Rate	45,784.16	13.29
Interest free loans	78,145.00	22.68
Un matuared loan (a)	1,98,193.04	57.52
UT Loans (b)	15,124.48	4.39
Total	3,44,585.68	100.00
(a) It includes Rs. 1,68,691.00 lakh (2020-21 Rs. 84,000.00 lakh & 2021- 22 Rs. 84,691.00 lakh) Back to Back Loan in lieu of shortfall in GST Compensation.		
(b) Loans pertaining to Ex-U.T. of Goa Daman & Diu.		
Source: Finance Accounts, various issues/		

Source: Finance Accounts, various issues.

The table above and the table below show the rate of interests for different components of borrowing from the Centre.

Table 6.8: Cost of borrowing from the Centre as on 31 March 2012

Composition of loans from the Centre in terms of cost of borrowing: 2022

Rate of Interest (%)	Loans and Advances from the Central Government (Amount o/s as of 1st April....)	Share in Total
2012		
4.00-4.99		0.00
5.00-5.99		0.00
6.00-6.99		0.00
7.00-7.99	28,288.49	45.72
8.00-8.99		0.00
9.00-9.99	6,498.04	10.50
10.00-10.99	26.05	0.04
11.00-11.99	10.07	0.02
12.00-12.99	287.91	0.47
13.00-13.99	18.63	0.03
Floating Rate	14,515.66	23.46
*	(2,715.53)	-4.39
UT Loans	14,948.54	24.16
Total	61,877.86	100.00
Due to misclassification of repayment NSSF under M.H. 6004-01-101-02-55 instead of M.H. 6003-01-111-01-55 for the financial year 2011-12		

Source: Finance Accounts, various issues.

6.2 Debt Maturity profile

In this section, we look at how the maturity profile of different components of borrowing under the head 'Market Loans' have changed over the years during the period under consideration. We can think of an average maturity profile (AMP) for a particular year combining different components of borrowing being weighted by the year of maturity period of each of the borrowings during that year. We have used a weighted average method to calculate the average maturity of debt using the below mentioned formula:

$$AMP_t = \frac{B_1*(t_1) + B_2*(t_2) + \dots + B_n*(t_n)}{B_1 + B_2 + \dots + B_n}$$

Where: AMP_t is the average maturity period for the loans taken in year t with weights being the shares of each borrowing in total borrowing.

B_i represents the amount of loan taken for the i th component in year t

(t_i) denotes that B_i amount of borrowing would mature after i^{th} year.

Effective rate of interest on borrowing

Market loans is one of the major component of internal debt. We have calculated the effective rate of interest and compared it against its average maturity. The below mentioned formula has been used to calculate effective rate of interest.

$$ERoI_t = \frac{B_1 * RoI_1 + B_2 * RoI_2 + \dots + B_n * RoI_n}{B_1 + B_2 + \dots + B_n}$$

So RoI is weighted by the shares of each borrowing in total borrowing.

Where: ERoI is the effective rate of interest in year t .

B_i is the i^{th} component of loans taken in year t

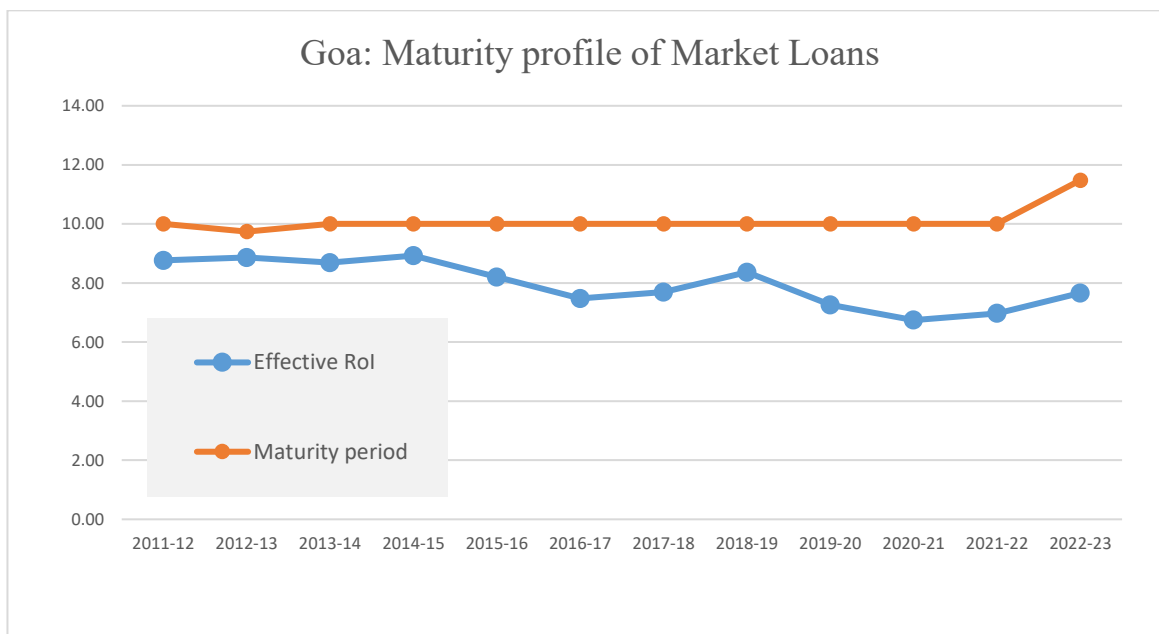
RoI_i is the rate of interest in year t on the i^{th} component of borrowing.

The below graph displays the maturity profile of market loans. It is observed that the average maturity period has been 10 years, except in 2022-23 it went above 10 years. The effective rate of interest was stable at around 8% for the first four years, i.e. from 2011-12 to 2014-15, after which it showed a declining trend; however, in 2018-19 and from 2021-22 it has been increasing.

Table 6.9: Maturity profile and Effective Interest rate for Market Loans

	Effective RoI	Maturity period
2011-12	8.77	10.00
2012-13	8.86	9.74
2013-14	8.69	10.00
2014-15	8.93	10.00
2015-16	8.20	10.00
2016-17	7.48	10.00
2017-18	7.69	10.00
2018-19	8.36	10.00
2019-20	7.26	10.00
2020-21	6.74	10.00
2021-22	6.97	10.00
2022-23	7.66	11.48

Figure 6.1: Goa: Maturity profile of Market Loans



Note: The Finance Accounts gives detailed information regarding borrowing (flow figure), only for Market loans. Therefore, maturity period and interest rate could not be calculated for other loans.

6.3 Details of Externally Aided Projects

The table below shows the five Externally Aided projects of the Government of Goa. Corresponding to the two components of the aids, grants and loans, shown below the approved amount and the amount received.

Table 6.10: Externally Aided projects

Details of Externally Aided Projects (In Rs lakh)					
		Approved		Received	
Aid Agency	Scheme/Project	Loans	Grants	Loans	Grants
Japan International Co-op. Agency (JICA)	Goa Water Supply & Sewerage Project	423,750.00	92,000.00	320,235.78	289,637.72
World Bank	National Cyclone Risk Mitigation Project-II	-	22,450.00	-	2,416.00
World Bank	Hydrology Project Phase-II	1,831.00	6,800.00	5,454.72	-

World Bank	Vocational Training Improvement Project	-	4,900.00	-	2,358.37
World Bank	Expansion of I.T.I.s. under Centre of Excellence (Skilled Development Project under World Bank)	-	14,759.28	-	10,771.70
* Information awaited from Department of Water Resources.					

Source: Finance Accounts, various issues.

6.3.1 Goa's debt servicing obligations and strategies for sustainable debt management

The Debt to GSDP ratio of Goa is expected to rise during the period of our projection by nearly 5 percentage points from 30.5 to 35.8 percent. Though the difference between the state economy's growth rate and effective rate of interest of debt outstanding remains positive pulling the ratio down as per the Domar Debt Sustainability condition, but it is the high primary deficit albeit declining, which raises the ratio of Debt to GSDP. In terms of debt-sustainability indicators, the effective rate of interest on debt outstanding and interest payment in terms of revenue receipts decline but the repayment of loans as a share of revenue receipts rise. The maturity profile of market loans component has risen too. The most important way to achieve debt sustainability would be to reduce the primary deficit and bring the fiscal deficit down to 3 percent of GSDP as the state is projected to maintain surplus in the revenue account. Though the revenue from mining slumped, the revenue growth mainly attributable to GST compensation has helped the state to maintain a stable and even a rising tax revenue in terms of GSDP. It can be inferred that it has been the state's sustained high profile of capital outlay in the past which has contributed to the expansion of state's infrastructure facilities but at the expense of rising debt to GSDP ratio. But in view of the paramount importance of the State FRBM and the imperative of bringing the debt to GSDP ratio down, the state must explore the possibility of moderating the capital outlay to a reasonable level while prioritizing achieving debt sustainability in the coming years.

Chapter 7 Implementation of the FRBM Act and commitment towards targets.

7.1 Goa FRBM Act, 2006

As per the recommendations of the Twelfth Finance Commission, the Goa Fiscal responsibility and Budget Management Act (GFRBM) was enacted and came in to effect in May 2006. The act was meant to increase fiscal prudence and stability through progressive elimination of deficits and greater transparency in government fiscal management in a medium term framework. In compliance with act, the GFRBM Rules were made in November 2007 (GoG, 2006). The GFRBM act was further amended three times as follows (CAG, 2022)

- a)GFRBM (First Amendment) Act, 2014.
- b) GFRBM (Amendment) Act, 2021
- c) GFRBM (Amendment) Ordinance, 2022

As per the GFRBM Act, 2006 and Rules 2007, the government had to prepare an annual Medium Term Fiscal Plan (MTFP) along with Budget. The MTFP had to put forth three-year rolling targets for the following indicators:

- 1) Revenue deficit as a percentage of aggregate revenue receipts.
- 2) Fiscal deficit as a per cent of GSDP
- 3) Outstanding total liabilities as a per cent of GSDP
- 4) Ratio of interest payment to total revenue receipts.

However the state government has not prepared any MTFP since 2011-12 to 2022-23 (CAG, 2022). However MTFP has been prepared for the year 2023-24 and rolling targets for the necessary fiscal indicators have been set except for interest payments as a percentage of total revenue receipts (CAG, 2024b).

7.2 Fiscal targets as per GFRBM Act and its compliance by the government

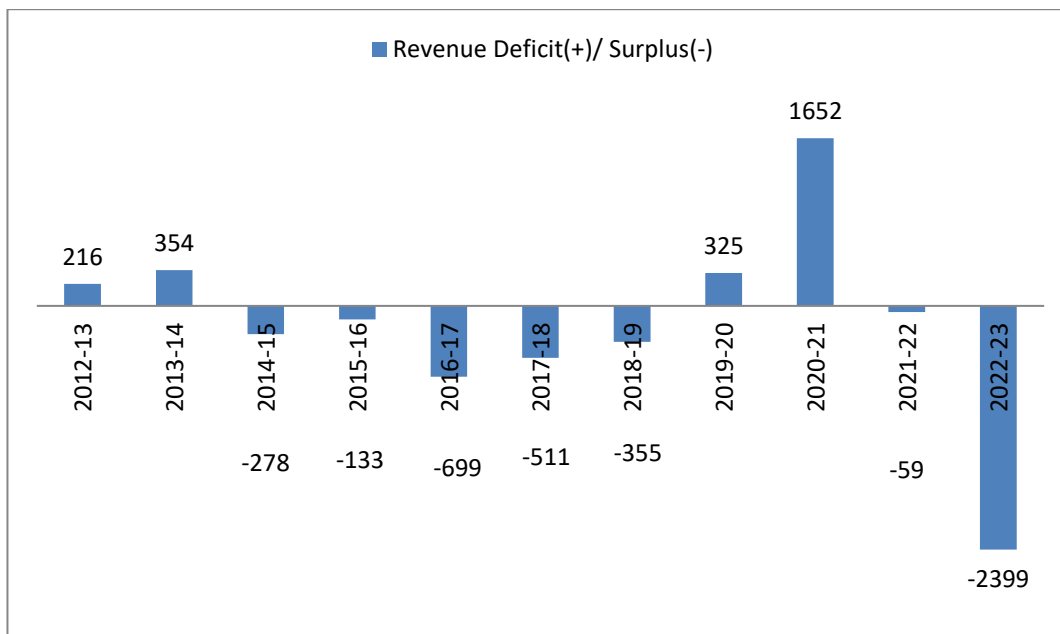
7.2.1 Revenue Deficit

According to the GFRBM Act, 2006 and Rules, 2007 Goa government had to attain a zero revenue deficit by March 2009 and thereafter to maintain it (GoG, 2006). Similarly, the Goa FRBM (First Amendment) Act, 2014 required that the government should eliminate the revenue deficit from 2014-15 and should maintain this hereafter or generate surpluses

(CAG, 2022). A revenue surplus means that the Goa government does not need to borrow to fund the expenses which do not contribute to increase in the assets.

Goa was not able to attain the GFRBM targets of zero revenue deficit in the years 2012-13, 2013-14, 2019-20 and 2020-21 (Figure 7.1 & Table 7.1).

Figure 7.1: Goa Revenue Deficit (+)/surplus (-) Rs. Crore, 2012-13 to 2022-23



Source: Finance Accounts, GoG, Various years.

The deficit in the years 2012-13 and 2013-14 were mainly due to the blanket ban on the extraction and transportation of mining ore by the Supreme Court in October 2012 (P. Kamat, 2018). In 2010-11 and 2011-12 contribution of mining sector to GSDP was close to 20 and 17 per cent respectively which fell drastically to a low of about 5.5 per cent in 2012-13 and almost nil in 2013-14 (GoG, 2014). Mining was partially revived in 2014 in Goa wherein 88 mining leases in the State were renewed with a maximum annual extraction of 20 million tonnes (prior to the ban iron ore production was 45-50 million tonnes) but poor international ore prices and environmental clearance issues have not allowed mining to reach the annual cap of 20 million tonnes (P. Kamat, 2018). In March 2018, for the second time the Supreme Court put a ban on all mining activities and transportation of iron ore in Goa. The ban continued in 2019. In 2020, the Supreme court permitted the transportation of iron ore that had already been extracted from Goan mines (The Indian Express, 2020).

Another important sector which contributes to largely to Goa's GSDP is the tourism sector. As per the report prepared by the Goa Tourism Department, the tourism industry is estimated to be 16.43% of nominal GSDP (direct contribution) and approximately 35% of states population are directly employed in the tourism sector (GTDC, 2020). In 2019, 9.37

lakhs international tourists and 71.27 lakh domestic tourists visited Goa. However in 2020-21 there was covid outbreak and lockdowns imposed in India and the world and the international tourists reduced to 3 lakhs and domestic tourists reduced to Rs.26.7 lakhs in 2020. International tourist dropped to 22,128 however domestic tourists increased to 33 lakhs in 2021. During the peak of covid in 2021-22 along with mining ban and total slump in international tourists the government managed to have a revenue surplus of Rs. -59 crores. In 2022, International tourist increased to 1.6 lakhs and domestic tourists increased to 72 lakhs (same as pre-covid period for domestic tourists) (DPSE, 2024). In 2022-23 there was a huge revenue surplus of Rs.-2399 crore against the estimate of Rs -434 crore revenue surplus.

The CAG in its state finances audit report, 2022-23 found that revenue expenditure amounting to Rs.169 crore was either unpaid or partially paid which resulted in revenue surplus being slightly overstated and revised figure of revenue surplus would stand at Rs.-2231 crore (Sequeira, 2024). Despite this achieving a huge revenue surplus during post-covid period is commendable. Here Government surpassed its own tax revenue projections by 25.41 per cent as well as curtailed revenue expenditure to 88% of the budgetary estimates. In 2022-23, 68 per cent of state government revenue comprised of its own tax and non-tax revenue (CAG, 2024b). Besides better budgetary practices partial revival of the tourism sector and efforts to revive the mining sector may have contributed to the huge surplus. In December 2022, the government completed the first phase of e-auction of mining blocks with four companies winning bids for extraction of ore (BS, 2022).

Table 7.1: Goa Revenue Deficit (+)/ Surplus(-) (Rs. Crore) and GFRBM Target

Year	Revenue Deficit(+)/ Surplus (-)	Achievement of GFRBM target of Zero Revenue Deficit
2012-13	215.9136	NO
2013-14	353.5056	NO
2014-15	-278.4447	YES
2015-16	-132.6802	YES
2016-17	-698.9872	YES
2017-18	-510.6297	YES
2018-19	-355.1433	YES
2019-20	325.1449	NO

2020-21	1652.3611	NO
2021-22	-59.3847	YES
2022-23	-2399.2081	YES

Source: Finance Accounts, GoG, Various years.

Note: Revenue Deficit = Revenue Expenditure – Revenue Receipts

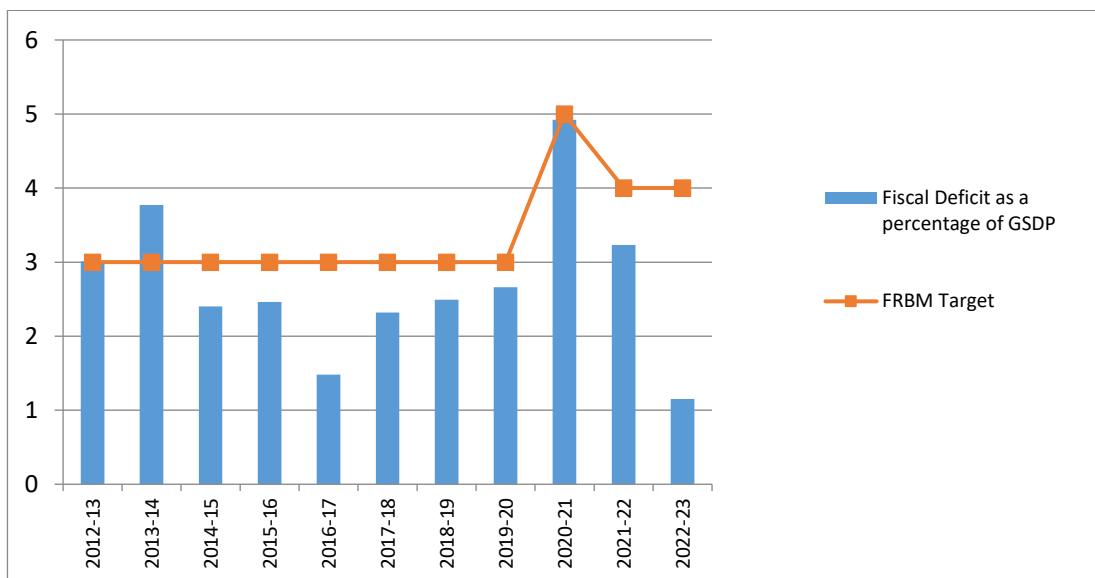
7.2.2 Fiscal deficit

The gap between the total expenditure and total non-debt receipts of the state results in fiscal deficit. According to the GFRBM Act, 2006 the fiscal deficit to GSDP ratio should be reduced to 3 per cent and to be maintained thereafter. Similarly, the Goa FRBM (First Amendment) Act, 2014 required that the fiscal deficit should be reduced to 3 per cent of GSDP by 2013-14 and thereafter to maintain this ratio or reduce it further. However the GFRBM (Amendment) Act, 2021 increased the fiscal deficit to GSDP ratio to 5 per cent for 2020-21. This target was again revised to 4 per cent in 2021-22 onwards.

In 2012-13, despite the mining ban and having a revenue deficit of 215 crores, Goa was able to restrain its fiscal deficit to 3.01 per cent (though it went slightly above the FRBM limit of 3 per cent) (Figure 7.2). However in this year there was a negative growth in the capital outlay by (-20 per cent). In 2013-14, it had a fiscal deficit of 3.77 per cent of GSDP which was above the FRBM target of 3 per cent. From 2014-15 to 2019-20, Goa's fiscal deficit as a percentage of GSDP was within the limit of 3 per cent. In 2019-20, despite revenue deficit of 325 crores, Goa was able to attain a fiscal deficit of 2.66 per cent of GSDP. However, in this year there was negative growth in capital outlay by (-22.7) per cent. In 2020-21, though Goa's fiscal deficit jumped to 4.92 per cent of GSDP, it was still within the revised FRBM target of 5 per cent. In 2020-21, despite a huge revenue deficit of -1652 crores, the capital outlay increased by 20 per cent. In 2021-22, the fiscal deficit dropped to 3.23 per cent of GSDP which was well within the revised FRBM target of 4 per cent and in 2022-23 the fiscal deficit as a percentage of GSDP dropped to a low of 1.15 per cent.

Despite being within the limit of fiscal deficit, CAG has repeatedly asked the government to caution about the increasing debt and to prepare a roadmap for the repayment of debt (TOI, 2023b).

Figure 7.2: Goa: Fiscal Deficit as a percentage of GSDP



Source: Finance Accounts, GoG, Various years

Table 7.2: Fiscal Deficit as a percentage of GSDP and FRBM Target

Year	Fiscal Deficit as a percentage of GSDP	FRBM Target (%)	Achievement of FRBM target
2012-13	3.01	3	NO
2013-14	3.77	3	NO
2014-15	2.4	3	YES
2015-16	2.46	3	YES
2016-17	1.48	3	YES
2017-18	2.32	3	YES
2018-19	2.49	3	YES
2019-20	2.66	3	YES
2020-21	4.92	5	YES
2021-22	3.23	4	YES
2022-23	1.15	4	YES

Source: Finance Accounts, GoG, Various years.

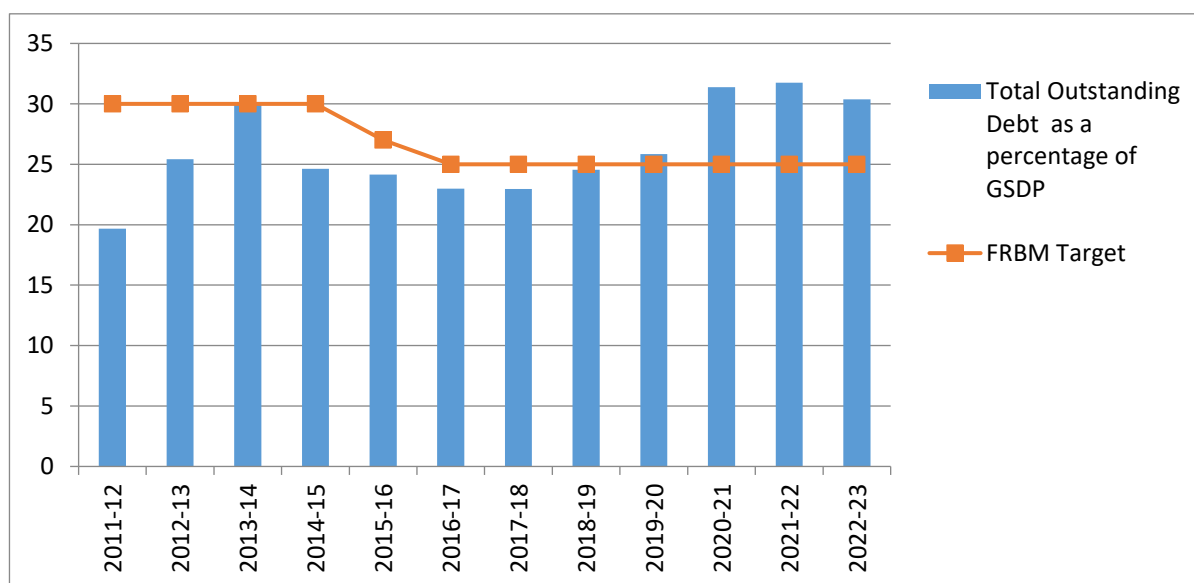
7.2.3 Total liabilities (Total Outstanding Debt)

According to the GFRBM Act, 2006 the total liabilities as a percentage of GSDP should not exceed 30% by March 2009 and to be maintained thereafter. The Goa FRBM (First Ammendment) Act, 2014 required the total outstanding debt to GSDP should be reduced to 27 per cent by March 2015 and thereafter to be maintained below 25 per cent. Here total

outstanding debt includes public debt and public account liabilities. Public debt includes internal debt and loans and advances from the Government of India. Public account liabilities under small savings fund, GPF, reserve funds etc.

As can be seen in the figure below, Goa was able to achieve the GFRBM target for the years 2012-13 to 2018-19. However from 2019-20 to 2022-23, Goa was not able to achieve the GFRBM target of total outstanding debt of less than 25 per cent of GSDP. Goa's outstanding debt increased to 29.97 per cent in 2012-13, as this was the first year post the mining ban (though it was just within the GFRBM target of 30 per cent). In this year Goa witnessed a negative growth in GSDP to the tune of (-5.8) per cent. Again in 2019-20, the outstanding debt increased to 25.84 per cent which was above the GFRBM target of less than 25 per cent. Again this was the first year post the second mining ban in 2018. However, in 2020-21 the outstanding debt jumped to 31.37 per cent and increased further to 31.74 per in cent 2021-22 and decreased slightly to 30.37 per cent in 2022-23. The main reason for the jump in outstanding debt being the mining ban, covid outbreak, slump in tourism and major infrastructural projects (including Mopa international airport, new Zuari bridge) undertaken by the government during these years.

Figure 7.3: Goa: Total Outstanding debt as a percentage of GSDP



Source: Finance Accounts, GoG, Various years.

Table 7.3: Total Outstanding Debt and FRBM Target

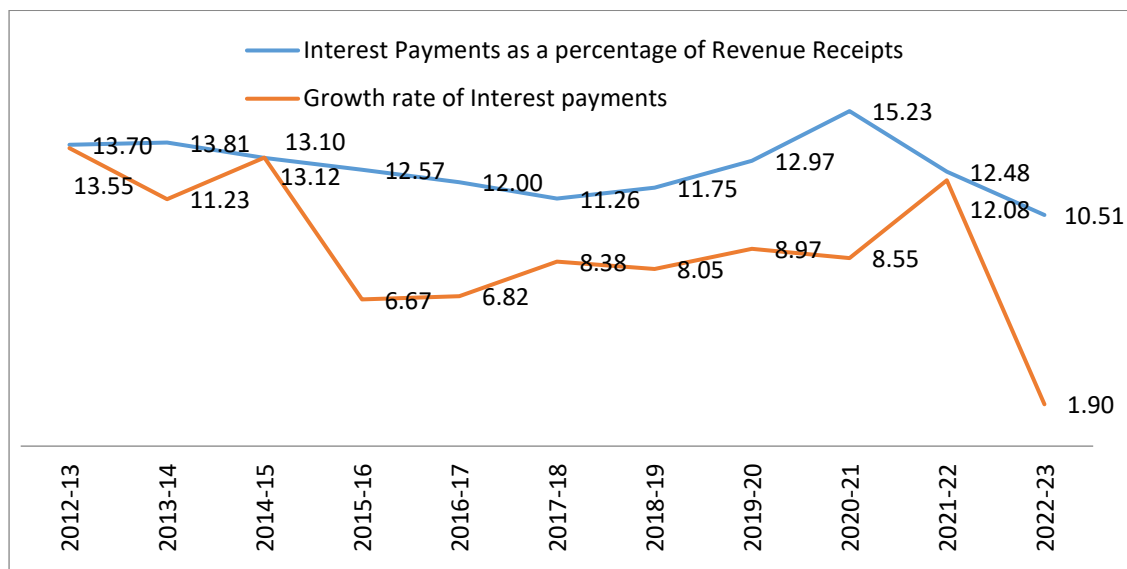
Year	Total Debt & other interest bearing (outstanding debt) (Rs. lakh)	Growth rate in Outstanding Debt (%)	Total Debt & Other interest bearing (outstanding debt) as a percentage of GSDP	FRBM Target (%)	Achievement of FRBM target
2012-13	968757	16.2	25.41	30	YES
2013-14	1076638	11.1	29.97	30	YES
2014-15	1177960	9.4	24.64	30	YES
2015-16	1330068	12.9	24.16	27	YES
2016-17	1447442	8.8	22.98	< 25	YES
2017-18	1592603	10.0	22.96	< 25	YES
2018-19	1764133	10.8	24.55	< 25	YES
2019-20	1938976	9.9	25.84	< 25	NO
2020-21	2326387	20.0	31.37	< 25	NO
2021-22	2578198	10.8	31.74	< 25	NO
2022-23	2706531	5.0	30.37	< 25	NO

Source: Finance Accounts, GoG, Various years.

7.2.4 Interest Payments

According to the GFRBM Act, 2006 the interest payments to total revenue receipts ratio should not exceed 20% by March 2009 and to be maintained thereafter. As can be seen in the figures below interest payments as a percentage of revenue receipts from 2012-13 to 2022-23 has been below 16 per cent which is well within the specified limit of 20%. In 2020-21, though interest payments as a percentage revenue receipts peaked to 15.23 per cent, the growth rate in interest payments (8.55 per cent) was marginally lower than that of the previous year (8.97 per cent). The peak is more pronounced due to a negative growth of revenue receipts by (-7.6) per cent during that year. Outstanding debt increased by 10 per cent in in 2019-20 and by 20 per cent in 2020-21. Hence the peak in the growth rate of interest payments in 2021-22. In 2022-23 interest payments growth rate dropped drastically to 1.90 per cent even though the outstanding debt in the previous year grew by 10.8 per cent.

Figure 7.4: Interest Payments as a percentage of total revenue receipts



Source: Finance Accounts, GoG, Various years.

Table 7.4: Goa: Interest Payments as a percentage of Revenue Receipts and FRBM Target

Year	Interest Payments (Rs. Lakh)	Total Revenue Receipts (Rs. Lakh)	Interest Payments as a percentage of Revenue Receipts	Growth rate of Interest payments	Growth rate of Revenue Receipts	Achievement of GFRBM target : interest payments/ total revenue receipts ratio should not exceed 20%
2012-13	80071.44	584543.3	13.70	13.55	1.12	YES
2013-14	89066.6	644977.2	13.81	11.23	10.34	YES
2014-15	100753.3	768869.5	13.10	13.12	19.21	YES
2015-16	107469.9	855223.7	12.57	6.67	11.23	YES
2016-17	114803.2	956496.5	12.00	6.82	11.84	YES
2017-18	124428.4	1105352	11.26	8.38	15.56	YES
2018-19	134445.3	1143798	11.75	8.05	3.48	YES
2019-20	146509.3	1129752	12.97	8.97	-1.23	YES
2020-21	159037.2	1044029	15.23	8.55	-7.59	YES
2021-22	178253.4	1428627	12.48	12.08	36.84	YES
2022-23	181644.3	1728369	10.51	1.90	20.98	YES

Source: Finance Accounts, GoG, Various years.

Component wise break-up of interest payments and interest rates on State Government Liabilities is given in the tables below. Interest payments are mainly incurred on internal

debt which comprised of 79 per cent of the interest payments in 2017-18 and increased to 85 per cent in 2022-23. The main component of internal debt in terms of interest payments are market loans which comprised of 68 per cent of interest payments on internal debt in 2017-18 and increased to 87 per cent in 2022-23. The state has increasingly resorted to market loans despite the fact that the interest rate on market borrowing is higher as compared to other financial institutions like NABARD, SIDBI and EDC. The interest rate on market borrowings was 7.7 per cent however loans from NABARD had an interest rate of 4.35%, SIDBI had an interest rate of 4.98 per cent and EDC provided zero interest rate loans in 2022-23. The special securities to NSSF had an interest rate of 9.5 per cent in 2022-23 which is very high. The National small savings fund comprised of 27 per cent of interest payments on internal debt and decreased to 11 per cent in 2022-23 which is a positive thing. Loans from Centre had an interest rate of 5.37 per cent. Interest payments on Loans from Central Government have been less than two per cent of the total interest payments. Interest rate on Small Savings Provident Funds was around 7.1 per cent in 2022-23. Interest payments on deposits, small savings comprised of 20 per cent of the total interest payments in 2017-18 which reduced to 14 per cent in 2022-23.

Table 7.5: Component -wise break up of Interest Payments (Rs.Crore)

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Interest Payments	1,244.00	1344	1465	1590	1783	1816
A) Internal Debt	981.00	1080	1188	1328	1497	1548
<i>Interest payments on internal debt to total interest payments</i>	78.9	80	81	84	84	85
Ai) Market Loans	669.00	792	934	1096	1279	1340
Percentage of interest on market loans to interest on internal debt	68.20	73.33	78.62	82.53	85.44	86.56
Aii) National Small Savings Fund (NSSF)	265.00	242	221	189	184	165
<i>Percentage of interest on NSSF to interest on internal debt</i>	27.01	22.41	18.60	14.23	12.29	10.66
B) Loans from GOI	18	16	19	23	20	21
<i>Percentage of interest payments on GOI loans to total interest payments</i>	1.45	1.19	1.30	1.45	1.12	1.16
C) Deposits, Small Savings and PF etc.	245.00	248	258	239	266	247
<i>Percentage of interest payments on deposits, small savings PF to total interest payments</i>	19.69	18	18	15	15	14

Source: CAG, Various Years

Table 7.6: Weighted Average Interest Rates on State Government Liabilities

Category	2022-23 (actuals)
Market Borrowings	7.70%
Loans from Centre	5.37%
Special Securities issued to NSSF	9.50%
Borrowings from Financial Institutions/Banks	
Economic Corporation Development Limited (EDC)	0.00%
SIDBI	4.98%
National Cooperative Development Corporation (NCDC)	11%
NABARD	4.35%
WMS/OD Funds,etc. issued to from RBI	6.50%
Small Savings Provident Funds etc.	7.10%
Reserve Funds/Deposits	3.35%
Other liabilities	0.00%

Source: (GOG, 2024b)

From 2018-19 to 2022-23, interest payments (actuals) have been below the projections of the Fourteenth and Fifteenth Finance commissions as well as the budgetary estimates of the Goa government.

Table 7.7: Interest payments: actuals, budget estimates and Finance Commission Assessments

Year	Assessment of Finance Commissions for Goa	Budget Estimates/Revised Estimates of Government of Goa	Actuals	Percentage of actuals to Budget	Percentage of actuals to Assessment of FC-14 & FC-15
2018-19	1697	1372	1344	97.96	79.20
2019-20	1935	1512 (RE)	1465	96.89	75.71
2020-21	1664	1756	1590	90.55	95.55
2021-22	1914	1894	1783	94.14	93.16
2022-23	2087	1988	1816	91.35	87.01

Source:(FC, 2014) CAG, Various Years

7.2.5 Outstanding Guarantees

Guarantees are liabilities contingent on the Consolidated Fund of the state in cases of default by borrowers for whom guarantees have been extended by the state government.

As per the GFRBM Act, 2006 the government should Cap the total outstanding guarantees within the specified limit under the Goa State Guarantees Act, 1993. According to the Goa State Guarantees (Fourth Amendment Act), 2005 the limit up to which the State Government shall extend to the giving of guarantees (including guarantees given before the

commencement of this Act) as provided in clause 1 of Article 293 of the Constitution of India shall be to the sum of Rs.800 crores. According to the Goa State Guarantees (Fifth Amendment) Act, 2015 Rs. 800 crores was substituted by Rs. 1500 crores.

As can be seen in the table below outstanding guarantees for the state have been well within the specified limit of Rs. 800 crores from 2012-13 to 2014-15. Similarly, the outstanding guarantees have been within the revised limit of Rs.1500 crore for the years 2015-16 to 2022-23.

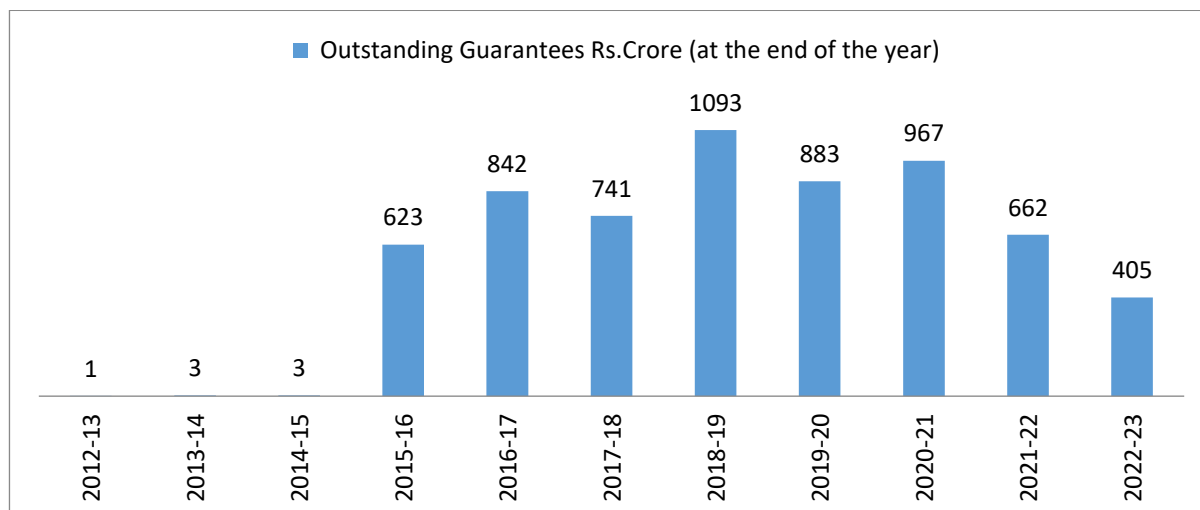
Table 7.8: Total Outstanding Guarantees (at the end of the year)

Year	Outstanding Guarantees (at the end of the year) Rs. Crore	GFRBM target	Achievement of GFRBM target
2012-13	1.2267	The ceiling limit of Rs. 800 crores	YES
2013-14	2.9274		YES
2014-15	3.3706		YES
2015-16	622.5509	The ceiling limit Rs. 1500 crores	YES
2016-17	841.9141		YES
2017-18	740.9423		YES
2018-19	1092.898		YES
2019-20	882.8493		YES
2020-21	967.182		YES
2021-22	662.3982		YES
2022-23	404.9189		YES

Source: Finance Accounts, GoG, Various years.

The outstanding guarantees were almost negligible from 2012 to 2014-15. In 2015-16 there was a huge jump in outstanding guarantees to Rs. 623 crore which increased to Rs. 842 crore in the following year. The outstanding guarantees peaked to 1093 crores in 2018-19. The outstanding guarantees decreased from Rs.662 crore in 2021-22 to Rs. 405 crore in 2022-23 which is due to the fulfilment of debt obligations by the borrowing entities.

Figure 7.5: Total Outstanding Guarantees (at the end of the year) Rs. Crore



Source: Finance Accounts, GoG, various years.

State Government has exempted the borrowing institutions from payment of guarantee fee. During 2018-19 to 2022-23 no amount was paid by the state government on account of invocation of guarantees.

The state government set up a Guarantee redemption fund to meet the payment obligations arising out of guarantees issued. The entire amount of the fund is reinvested in government securities. In 2021-22 the fund could cover 53 per cent of the amount guaranteed at the end of that year. In 2022-23 due to reduction in the amount of total outstanding guarantees, the fund could cover 99 per cent of the guaranteed amount.

Table 7.9: Closing Balance under the guarantee redemption fund

Year	Amount (Rs. Crore)	Percentage of Outstanding guarantees at the end of that year	Amount paid by state government due to invocation of guarantees
2018-19	309.24	28 per cent	Nil
2019-20	330.52	37 per cent	Nil
2021-22	350	53 per cent	Nil
2022-23	401	99 per cent	Nil

Source: CAG, Various Years

Guarantees have been issued to the Goa Infrastructure development corporation including for the construction of the Mandovi bridge and the sewage and infrastructure development

corporation. Besides this guarantees are issued to government employees for construction of houses.

Table 7.10: Guarantees undertaken by the state government on behalf of the institutions

2022-23	1) Rs 222 Crore(55 per cent) pertaining to loans from Bank of Maharashtra availed for construction of Mandovi Bridge 2) Rs. 82 crore (20 per cent) for loans sanctioned to Government employees by Bank of India for construction/purchase of houses.
2021-22	1) Rs. 272 crore (41 per cent) pertained to loans from Bank of Maharashtra availed for construction of Mandovi Bridge 2) Rs. 204 crore (31 per cent) for loans sanctioned to Government employees by Bank of India for construction/purchase of houses.
2019-20	1) 461 crore (52.21) per cent pertained to Goa State Infrastructure Development Corporation. 2) 49 crore (5.54 per cent) pertained to Sewage and Infrastructure Development Corporation. 3) 318 crore (36.01 per cent) to Bank of India for loans to the Housing Development Finance Corporation and government employees for construction/purchase of houses and motor cars.
2018-19	1) Rs. 496 crore (45.38 per cent) pertained to Goa State Infrastructure Development Corporation. 2) Rs.173 crore (15.83 per cent) pertained to Sewage and Infrastructure Development Corporation. 3) Rs. 269 crore (24.61 per cent) pertaining to Bank of India and Housing Development Finance Corporation for loans to government employees for construction/purchase of houses and motor cars.

Source: CAG, Various Years

As can be seen in the table below, more than half of the total outstanding guarantees were issued to State Public Sector Enterprises (SPSE). In 2020-21 there was a peak in the guarantees issued to SPSEs and it comprised of 70 per cent of the total outstanding guarantees. In 2021-23 the total amount (in rupees) of outstanding guarantees issued to SPSEs decreased considerably

Table 7.11: Total Outstanding Guarantee commitments to State Public Sector Enterprises

Year	No. of SPSE	Amount (Rs. Crore)	Percentage of outstanding liabilities issued to SPSEs as a ratio of total outstanding liabilities of the government.
2016-17	3	534.42	63
2017-18	3	416.63	56
2018-19	3	549.46	50
2019-20	3	499.85	57
2020-21	3	677.67	70
2021-22	2	385.44	58
2022-23	2	303.9	75

Source: CAG, Various Years

7.3 Medium Term Fiscal Plan (MTFP) 2024

In this section we have summarized the major strategy of the MTFP for Goa for the year 2024-25 (GOG, 2024b). The Goa government envisages having a revenue surplus of -0.58 per cent of GSDP in 2025-26 and a revenue surplus of -0.66 per cent of GSDP in 2026-27. Similarly it plans to have a fiscal deficit as a per cent of GSDP of 2.81 per cent in 2025-26 and 2.54 per cent in 2026-27. However, the outstanding debt as a percentage of GSDP is targeted to be around 30.62 per cent and 29.9 per cent which is still above the GFRBM target of less than 25 per cent.

Table 7.12: Goa: Rolling targets of Fiscal Indicators under MTFP

Fiscal Indicators	2022-23	2023-24 (RE)	Budget Estimates 2024-25	Target for two years	
				2025-26	2026-27
Revenue Deficit as Percentage of GSDP	-2.56	-0.7	-1.4	-0.58	-0.66
Revenue Deficit as Percentage of Total Revenue Receipt	-13.54	-3.33	-7.83	-5.14	-3.33
Fiscal Deficit as Percentage of GSDP	1.1	3.84	2.59	2.81	2.54
Total Outstanding Liabilities as Percentage of GSDP	33.11	31.57	31.11	30.62	29.9

Source: (GOG, 2024b)

In this section we summarize the strategy of the government in order to achieve the fiscal targets under the MTFP.

Following is the Strategy Priority of the government for the ensuing year, 2025:

1. Seek maximum possible assistance from Central Government.
2. Increase capital expenditure especially in Infrastructure spending for long term growth.
3. Attract investments in the State, thereby generating greater employment opportunities.
4. Increase production and income in Agriculture and allied sectors.
5. Upgrade education and skill sets as per latest industry and global Scenario.
6. Sustainable development.

7.3.1 Revenue receipts projections

Following are the revenue projections by government of Goa on the basis on which it has prepared the fiscal targets for its MTFP plan

- 1) A 13.85% growth has been assumed on GST collections and a nominal growth is assumed on VAT collections due to electrification of Konkan Railway route and less diesel consumption due to completion of major infrastructure projects (Zuari Bridge, Mopa Airport).
- 2) A 15.81% growth is assumed for excise due to rationalization of excise duty of high end liquor. Hence own tax revenue is expected to increase.
- 3) A 9.84% growth for Registration and Stamp duty collections is projected.
- 4) Due to commencement of mining activities it is assumed own non-tax revenue will continue to grow.
- 5) More efforts will be taken in plugging in revenue leakages as there is very less scope to increase the taxes.
- 6) Basic fees/charges will be revised with nominal annual incremental clause. No major change in respect of charges for public utility,
- 7) To reduce the increasing expenditure on salaries and pension payment, it is essential to re-orient the staff pattern and staff size as per changing public needs through effective utilization of technologies.
- 8) Due to buoyant revenues, revenue surplus is projected to be of Rs. 1,720.19 crores in 2024-25.

7.3.2 Expenditure projections

- 1) No special securities will be issued to NSSF in 2023-24

- 2) Under the scheme for special assistance for states (50 years interest free loan) it is assumed to receive Rs.450 crore from the Centre in 2024-25.
- 3) Resorting to low interest rate borrowing from NABARD, SIDBI and EDC and hence interest payments as a percentage of total revenue is expected to decrease from 2023-24 onwards. Interest payments for 2024-25 are expected to be around Rs.2050.35 crore
- 4) The receipts from Small Savings, Provident Fund are assumed to saturate as majority of employees are recruited under the New Pension Scheme.
- 5) The major subsidies are expected to rise for agriculture, housing loans for beneficiaries, incentives for renewable energy and rural development purposes. The subsidies for the 2024-25 are estimated at Rs. 839.78 crores which is a huge jump from 299.5 crore in 2022-23.
- 6) Expenditure on salaries is expected to rise due to increase in D.A. and new recruitment of staff. The provision of Rs. 4989.15 crores has been made during 2024-25.
- 7) Expenditure on pension is expected to increase due to retirement of government staff and increase in D.A, due to Court directions to increase pension of some of the already retired pensioners and notification of the Voluntary Retirement Scheme. Hence a provision of Rs. 2359.88 crore has been made during 2024-25 for expenditure on pensions (an increase of 36.32%).

7.4 Summary

Goa did not have any annual Medium Term Fiscal Plan (MTFP) since 2011-12 to 2022-23. However, MTFP has been prepared for Goa for the year 2023-24. Goa was not able to attain the GFRBM targets of zero revenue deficit in the years 2012-13, 2013-14, 2019-20 and 2020-21 which can mainly be attributed to the mining ban in 2012 and in 2018, as well as the slump in tourism and outbreak of covid in 2020-2021. Despite these major challenges to the economy, the government managed to have a huge revenue surplus of Rs.-2399 crore in 2022-23. Goa was not able to attain the GFRBM target of 3 per cent of fiscal deficit in the years 2012-13 and 2013-14. In 2020-21, though Goa's fiscal deficit jumped to 4.92 per cent of GSDP, it was still within the revised GFRBM target of 5 per cent. In terms of outstanding debt, Goa was not able to achieve the GFRBM target of total outstanding debt of less than 25 per cent of GSDP from 2019-20 to 2022-23. Since 2020-21 onwards the outstanding debt as a percentage of GSDP has been above 30 per cent. Interest payments as a percentage of revenue receipts have been below 16 per cent from 2012-13 to 2022-23 which is well within the specified limit of 20%. Most of the interest payments were

undertaken on market loans. Outstanding guarantees has been well within the specified limit of Rs. 800 crores from 2012-13 to 2014-15 and within the revised limit of Rs.1500 crore for the years 2015-16 to 2022-23. Hence, since 2021-22 Goa had achieved all the FRBM targets for the various fiscal indicators except for the outstanding debt.

Chapter 8 State's Transfer to Urban and Local Bodies

8.1 Introduction

The 73rd and the 74th Constitutional amendments devolved powers and functions to the urban and rural local bodies. The Schedule XI of the 73rd Constitutional amendment and Schedule XII of the 74th Constitutional amendment devolved 29 and 18 subjects respectively to the rural and the urban local bodies. Devolution of powers and functions to become effective require devolution of finances. The local bodies along with their own sources revenues receive finances from state and central government. The Article 243-I of the 73rd amendment and 234-Y of the 74th amendment made provision for establishment of State Finance Commission to review the financial position of the Panchayats and Municipalities respectively and to make necessary recommendations. 'To make the local government function as self-government institution, the legislature of a State is required to both empower the rural and urban local governments to levy, collect and appropriate certain taxes, duties, tolls and fees, etc., and also assign to them the revenues of certain state level taxes subject to such conditions as are imposed by state government' (Alok, 2021). Fiscal decentralisation, 'is the fiscal empowerment of lower tiers of government which involves the devolution of taxing and spending powers along with the arrangements for rectifying mismatches in resources and response' (Oommen, 2006).

The rural local bodies in Goa were governed by the Goa, Daman and Diu Village Panchayat Regulation, 1962, this was amended in 1994 to incorporate provisions of the 73rd Constitutional Amendment Act, 1992. The Goa Panchayat Raj Act, 1994 provided for two tier Panchayat Raj system since the population of the state is less than 20 lakh. The two tier panchayat raj system consists of Village Panchayat (VP) at Village level and Zilla Panchayats (ZP) at district level. At present there are 191 Panchayats in Goa, of which 102 panchayats are located in North Goa District and 89 in South Goa district. The First Finance Commission (FFC) was constituted by the government of Goa in April 1999 under the Chairmanship of V.A. Pai Panandikar. It submitted its report in June 1999. The committee of ministers constituted to review the recommendations of the FFC accepted 15 out of 26 recommendations, 2 recommendations were partly accepted and 9 recommendations were rejected (The State of Panchayats, 2007-08, p. 101).

8.1.1 Categories of Panchayats

Table 8.1: Organization pattern of Panchayats in Goa

Category	Population	Wards	No. of VPs	Staffing pattern
A	>8000	11	36	3 clerks and 1 Peon
B	>5000 and <8000	9	48	2 clerks and 1 Peon
C	>2000 and < 5000	7	96	1 clerks and 1 Peon
D	>1500 and < 2000	5	11	1 clerks and 1 Peon

Source: 3rd State Finance Commission Goa, Government of Goa. Porvorim.

The panchayats in Goa are divided into A, B, C, D category based on their population size. Panchayats with the population of 1500 to 2000 have 5 wards and categorised under D category. Panchayats with the population from 2000 to 5000 have 7 wards and categorised into C category. Similarly panchayats with a population from 5000 to 8000 have 9 wards and are falling in the B category of panchayats. The Panchayats with a population more than 8000 have 11 wards and categorised into A category of panchayats.

8.2 Existing structure of fiscal devolution

The existing structure of fiscal devolution consists of five broad categories:

- i) **Own Tax Revenue:** Taxes assigned by statute to them and which are levied by them. As per the Goa Panchayat Raj Act, 1994 and Rules (Section 153), the VPs can impose various taxes, rates, etc. (GPRA. 1994)
- ii) **Assigned Taxes:** The taxes which are statutory assigned to the local bodies but collected by the State Government and made over to the local bodies
- iii) **Shared Taxes :** Taxes which are assigned to the State and collected by them but a share of the proceeds is disbursed among local bodies
- iv) **Non- tax Revenue:** Income from sources such as property, license fees, etc.
- v) **Grants-in-aid:** from Government either tied or untied (SFC, GoG, 2024)

The above Five categories together determine the total income of the VPs. Before proceeding to get an idea of the different income sources of the VPs it is important to have to know the overall fiscal health of the VPs. The Table 1 depicts the total income of the VPs in Goa.

Table 8.2: Total income of the Village Panchayats (in lakhs)

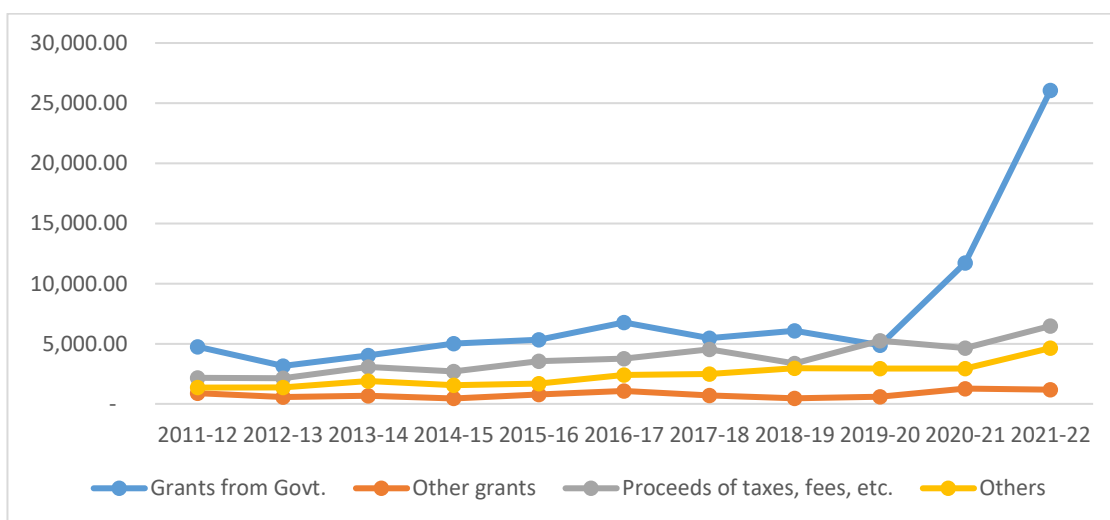
Year	Grants from Govt.	Other grants	Own income	Others	Total
2011-12	4,741.80	876.52	2,158.76	1,355.90	9132.98

2012-13	3,156.59	567.06	2,133.30	1,359.50	7216.45
2013-14	4,016.57	681.56	3,069.17	1,889.12	9656.42
2014-15	5,011.96	451.18	2,699.01	1,563.05	9725.20
2015-16	5,323.17	794.65	3,553.91	1,677.87	11349.60
2016-17	6,761.10	1,068.12	3,773.90	2,412.40	14015.52
2017-18	5,454.87	707.30	4,539.41	2,487.06	13188.64
2018-19	6,070.48	468.33	3,360.58	2,969.88	12869.27
2019-20	4,875.35	606.12	5,246.81	2,939.68	13667.95
2020-21	11,723.92	1,273.78	4,641.00	2,939.68	20578.37
2021-22	26,062.15	1,183.23	6,476.23	4,639.12	38360.73

Source: Statistical Handbook of Goa of various years

Table 1 depicts the total grants, own income, other income and total income of the Village Panchayats between 2012 to 2022. Compared to the own income and other income the total grants received by the Village Panchayats are always higher (Figure 1). From 2020 onwards there is a drastic increase in the total grants received by the Village Panchayats while there is moderate increase in the own income and other income of the Village Panchayats. Between 2019-20 to 2020-21 the total grants increased by 137 percent which further increased by 109.62 percent in 2021-22.

Figure 8.1: Income of Village Panchayats (in lakhs)



Source Statistical Handbook of Goa of various years

The total income has increased substantially over the ten years, from Rs. 9132.98 lakhs in 2011-12 to a peak of Rs. 38,360.73 lakhs in 2021-22. This represents an approximately 432 percent increase in total income over the period, indicating a strong upward trend in the financial capacity of Village Panchayats. The data indicates that Village Panchayats are increasingly reliant on government grants, especially in recent years. While own income is

growing, it still constitutes a smaller proportion of total income, especially compared to grants.

The income of the VPs has shown an increase over last ten years correspondingly the expenditure of the VPs have also increased during these years.

Table 8.3: Expenditure of VPs (Rs. In Lakh)

	Admin.	Sanitation & Public health	Public works	Planning & dev.	Education & culture	Social welfare	Misc.	Others	Total
2011-12	1,581.01	343.78	4,243.16	74.84	170.89	102.28	910.52	0.44	7426.92
2012-13	1,819.31	424.60	3,106.51	51.10	111.90	100.74	767.91	-	6382.07
2013-14	2,399.59	637.67	4,262.04	115.76	105.55	78.87	966.45	64.94	8630.87
2014-15	2,458.66	546.38	2,637.35	28.07	75.69	41.99	703.34	192.78	6684.26
2015-16	2,726.52	729.91	3,302.81	95.74	115.34	80.31	841.37	131.10	8023.10
2016-17	2,894.90	1,195.39	4,669.23	59.50	126.82	91.46	977.05	196.34	10210.69
2017-18	3,310.30	947.26	5,495.63	96.92	109.79	88.47	1,122.35	271.62	11442.34
2018-19	3,108.38	1,266.40	4,380.29	608.67	131.75	80.81	1,670.16	292.48	11538.94
2019-20	3,626.81	1,852.74	5,682.01	78.65	155.21	125.96	1,480.32	311.40	13313.10
2020-21	4,147.79	2,383.52	4,689.15	147.43	110.59	102.52	1,790.95	284.09	13656.04
2021-22	4,671.54	2,690.09	8,554.94	149.11	323.78	211.94	2,508.87	370.53	19480.80

Note: Admn-Administration; dev.-development; Misc.- Miscellaneous

Source Statistical Handbook of Goa of various years

The Table shows that, total expenditure of the VPs is categorized into different sectors such as Administration, Sanitation & Public Health, Public Works, and others. The total expenditure increased from 6,382.07 lakhs in 2012-13 to 19,480.8 lakhs in 2021-22, showing a more than 200 percent growth. The expenditure pattern reflects growing responsibilities of VPs, particularly in sectors like public infrastructure and health.

Administration consistently accounts for a large share of total expenditure. VPs expenditure in administration is more compared to other expenditures followed by public works. Expenditure in sanitation and public health increased significantly, from 424.60 lakhs in 2012-13 to 2,690.09 lakhs in 2021-22. The sharpest growth occurred between 2019-20 and 2020-21, which could be related to the COVID-19 pandemic. Expenditure in public works is the largest in the table and grew from 3,106.51 lakhs in 2012-13 to 8,554.94 lakhs in 2021-22, showing a 175 percent increase. Planning and development expenditure remained relatively low and volatile compared to other sectors. The expenditure on education and culture is relatively small. Expenditure in social welfare has been fluctuating. The total expenditure has more than tripled over the decade, reflecting the growing role and capacity of Village Panchayats in rural governance.

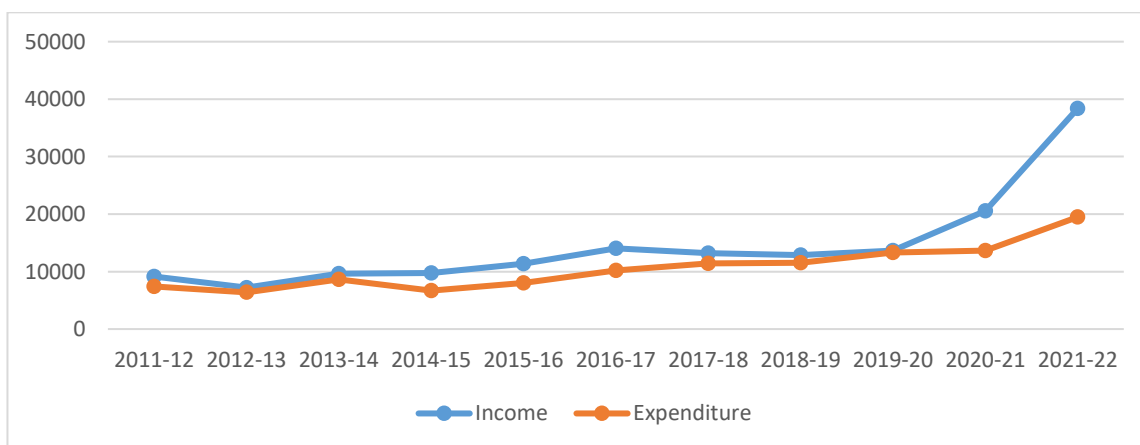
Table 8.4: Total income and expenditure of the Village Panchayats (in lakhs)

Year	Income	Expenditure	Deficit (-)/ Surplus (+)
2011-12	9132.98	7426.92	1706.06
2012-13	7216.45	6382.07	834.38
2013-14	9656.42	8630.87	1025.55
2014-15	9725.20	6684.26	3040.94
2015-16	11349.60	8023.10	3326.5
2016-17	14015.52	10210.69	3804.83
2017-18	13188.64	11442.34	1746.3
2018-19	12869.27	11538.94	1330.33
2019-20	13667.95	13313.10	354.85
2020-21	20578.375	13656.04	6922.335
2021-22	38360.73	19480.80	18879.93

Source: Statistical Handbook of Goa of various years

The Table presents the total income, expenditure, and the resulting deficit (-)/surplus (+) for Village Panchayats from 2011-12 to 2021-22. The total income of Village Panchayats has grown significantly, from Rs. 9132.98 lakhs in 2011-12 to 38,360.73 lakhs in 2021-22, indicating a strong upward trend. Similarly, the expenditure has also increased, from 6,382.07 lakhs in 2012-13 to 19,480.8 lakhs in 2021-22. Throughout the years, Village Panchayats consistently generated a surplus, meaning their income exceeded their expenditures every year. Panchayats experienced positive financial balances (surpluses) in most years.

Figure 8.2: Income and expenditure of Village Panchayats



Source: Statistical Handbook of Goa of various years

There has been a notable rise in total income over the years especially after 2019-20. The expenditure has grown steadily alongside income, though at a slower pace until recent years.

8.2.1 Source of Own Tax Revenue of VPs

Table 8.5: Sources of tax revenue (In Cores)

Years	Property/ House Tax	%	Other Tax Revenue	%	Octroi*	%	Own Tax Revenue	%
2011-12	7.98	41.13	1.38	7.11	10.04	51.75	19.39	100
2012-13	6.95	33.99	1.66	8.12	11.84	57.9	20.45	100
1013-14	9.63	42.91	2.08	9.27	10.73	47.88	22.44	100
2014-15	10.68	60.07	2.93	16.48	4.17	23.45	17.78	100
2015-16	14.82	52.95	1.14	4.07	12.03	42.98	27.99	100
2016-17	12.09	36.97	4.1	12.54	16.51	50.49	32.70	100
2017-18	12.89	36.11	6.54	18.32	16.27	45.57	35.70	100
2018-19	14.37	59.14	9.93	40.86	--	--	24.30	100
2019-20	15.02	57.95	10.9	42.05	--	--	25.92	100
2020-21	15.76	67.29	7.66	32.71	--	--	23.42	100
2021-22	17.29	50.69	16.82	49.31	--	--	34.10	100
2022-23	22.06	49.94	22.11	50.06	--	--	44.17	100
Total	159.54	48.58	87.25	26.57	81.59	24.85	328.36	100

* Since 2018 Octroi is part of GST

Source: 3rd State Finance Commission Goa. (2024) Government of Goa. Porvorim.

The above table indicates that the property/House Tax is the largest contributor, accounting for 48.58 percent of the total tax revenue (Rs.159.54 crore). Its share peaked in 2020-21 (67.29 percent) but fluctuated significantly over the years. The Other Tax Revenue contributing 26.57 percent overall (Rs.87.25 crore), this source showed substantial growth in recent years, reaching 50.06 percent in 2022-23. Octroi contributed 24.85 percent (Rs.81.59 crore) overall but has been phased out from 2018-19 onward, reflecting a structural shift in tax policy. Since 2018 Octroi became part of GST. Total revenue increased consistently, from Rs.19.39 crore in 2011-12 to Rs.44.17 crore in 2022-23, demonstrating an expanding revenue base despite the phasing out of octroi. This data reflects a shift in reliance towards Property/House Tax and Other Tax Revenue, showcasing evolving strategies in local tax generation.

Table 8.6: Grants to VPs in lieu of Octroi (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12			132.15	132.15
2012-13		1032.15	1032.15	956.83
2013-14	N	1032.15	1032.15	1032.10
2014-15	N	1032	1032	307.26
2015-16	N	1050	1050	1050.00

2016-17	N	1400	1400	1400.00
2017-18	N	1400	1400	1400.00
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source : Finance Accounts Vol II from 2011-12 to 2022-23

The Table shows yearly grants allocated to Village Panchayats (VP) as compensation for Octroi, measured in lakh rupees, across the years 2011-12 to 2017-18. From 2011-12 to 2017-18, the budget allocation consistently increased from Rs.132.15 lakh to Rs.1400 lakh. Expenditure typically aligns closely with the budget allocation, except in 2012-13 and 2014-15, where it was notably lower at Rs.956.83 lakh and Rs.307.26 lakh, respectively.

The state government had collected octroi (assigned tax) centrally and distributing to the eligible rural local bodies (62 VPs) (3rd State Finance Commission Goa. 2004). Since the imposition of the GST in the year 2017 the sources of revenue of local bodies like octroi, taxes on entertainment, taxes on advertisement have become the part of GST. This created huge revenue loss to the VPs.

The 3rd SFC recommended budget provision of Rs. 50.00 crore per year with an annual increment of the 10% every year during the award period (2024-25 to 2028-29) to compensate the local bodies in lieu of revenue forgone due to implementation of GST (3rd State Finance Commission of Goa, 2024).

8.2.2 Sources of non-tax revenue

Table 8.7: Sources of Non-Tax revenue (In Crore)

Year	Sale of Goods and Services	%	Fees, Fines and Misc.	%	Interest Received	%	Rent & Royalty	%	Others including indirect Tax	%	Non Tax Revenue Total	%
2011-12	8.78	36.50	11.28	46.89	2.66	11.08	0.98	4.09	0.35	1.45	24.05	100
2012-13	8.52	37.59	8.50	37.46	4.13	18.18	1.18	5.19	0.36	1.58	22.68	100
2013-14	13.39	38.43	13.89	39.85	5.67	16.28	1.23	3.53	0.66	1.90	34.85	100
2014-15	9.83	34.62	10.64	37.48	5.64	19.83	1.70	5.97	0.60	2.11	28.40	100
2015-16	2.38	7.01	22.43	66.00	4.90	14.43	2.55	7.49	1.72	5.07	33.98	100
2016-17	2.21	4.99	27.74	62.63	6.66	15.03	4.18	9.43	3.50	7.91	44.29	100
2017-18	2.37	4.99	27.01	56.94	6.90	14.55	6.56	13.82	4.60	9.69	47.44	100
2018-19	2.6	5.45	30.01	61.19	9.28	18.92	5.07	10.35	2.00	4.09	49.05	100
2019-20	1.21	2.39	36.62	72.20	7.42	14.63	4.10	8.08	1.37	2.70	50.73	100
2020-21	9.96	22.82	21.13	48.41	7.97	18.25	3.57	8.18	1.02	2.34	43.65	100
2021-22	37.43	47.97	27.81	35.64	9.25	11.86	3.54	4.53	0.00	0.00	78.03	100
2022-23	52.29	45.23	44.27	38.29	13.53	11.70	5.52	4.78	0.00	0.00	115.61	100
Total	151.06	26.37	281.33	49.12	84.02	14.67	40.17	7.01	16.19	2.83	572.78	100

Source: 3rd State Finance Commission Goa. (2024) Government of Goa. Porvorim.

The Table indicates that, the Fees, fines, and miscellaneous receipts account for the largest share i.e., 49.12 percent of the total Rs.572.78 crore, showing consistent dominance, peaking in 2019-20 at 72.20 percent. Interest received contributes 14.67 percent overall, with fluctuating annual shares and a peak of Rs.13.53 crore in 2022-23. Sale of Goods and Services accounts for 26.37 percent of total revenue, with a sharp increase in 2021-22 (Rs. 37.43 crore, 47.97 percent) and 2022-23 (Rs.52.29 crore, 45.23 percent), indicating enhanced service delivery. Rent and royalty contribute 7.01 percent to overall non-tax revenue, its share fluctuates annually, peaking in 2017-18 at Rs. 6.56 crore (13.82 percent).

Overall Growth of non-tax revenue shows significant growth, rising from Rs.24.05 crore in 2011-12 to Rs. 115.61 crore in 2022-23, reflecting diversification in revenue sources and enhanced revenue collection efficiency.

8.2.3 Grants-in-aid to VPs by state Government

The total grants released to the Village Panchayats under various categories during the last five years is Rs.98473.19 lakh' (Economic Survey Goa, 2023-24).

To attain self-sustainability, empowering villages and reviving rural economy government has started 'Swayampurna Goa Programme' in the year 2020. It was launched on 1st October 2020. During its first phase it involved 10 focal points:

1. 'Toilet for all
2. Electricity for all
3. Tap water connection to all
4. Housing for all
5. Eligible persons under Dayanand Social Security Scheme
6. Eligible persons under Deen Dayal Swasthya Seva Yojana
7. Eligible persons under Griha Aadhar
8. PM Kisan, Krishi Card, Kisan Credit card to all farmers (Agriculture /Horticulture/ Dairy/ Fisheries/ Poultry)
9. Aids to divyangs and senior citizens
10. Financial Inclusion (Bank account & Insurance – PM Jeevan Jyoti & PM Suraksha Bima Yojana' (Economic Survey Goa, 2023)'.

8.2.3.1 Matching Grants from state government

Matching grants are released to the Village Panchayats in proportion of the taxes collected by the Panchayats. An amount of Rs. 645.02 lakh has been released to 190 Village Panchayats to mobilize their resources for the year 2016-17. (Economic Survey. 2016-17). The below table indicates the eligibility to avail the matching grants by the VPs.

Table 8.8: Matching grants to the VPS

Sr. No	Eligibility	Financial Allocation
1	Panchayats with annual income upto Rs. 50,000	200% of the taxes collected subjected to a minimum of Rs. 20,000
2	Panchayats with annual income above Rs. 50,000/- upto Rs.1,00,000/-	Rs.1,00,000/- and 150% of the additional income from taxes above Rs. 50,000/-
3	Panchayats with annual income over Rs.1,00,000/- upto Rs. 2.00,000/-	Rs.1,50,000/- and 100% of the additional income from taxes above Rs.1,00,000/-
4	Panchayats with annual income over Rs.2,00,000/- upto Rs.5.00,000/-	Rs.1,75,000/- and 50% of the additional income from taxes above Rs.2,00,000/-
5	Panchayats with annual income above Rs.5.00,000/-	Rs.4,25,000/- only

Source: Directorate of Panchayat website: <https://panchayatgoa.gov.in/schemes.aspx>

Table 8.9: Status of the Matching Grants (in Lakh)

Year	Grants Released	Grants Utilised	% of Utilization
2011-12	460	459	100.11
2012-13	568	565	96.47
2013-14	563	556	98.97
2014-15	68	80	97.77
2015-16	1114	1088	98.86
2016-17	612	583	101.90
2017-18	491	499	100.00
2018-19	540	535	100.00
2019-20	512	508	99.33
2020-21	288	296	100.00
2021-22	632	626	100.37
2022-23	642	664	100.48
Total	649	646	99.53

Source: 3rd Finance Commission Goa. Government of Goa. Porvorim.

The Table 9 highlights the status of matching grants over 12 years, showcasing grants released, utilized, and the percentage of utilization. Total grants released amounted to Rs.6,490 lakh, of which Rs.6,460 lakh were utilized, reflecting an overall utilization rate of 99.53 percent. Utilization rates were consistently high, often exceeding or meeting 100 percent, suggesting efficient fund use and alignment with released grants. Notable years, like 2016-17 (101.90 percent) and 2022-23 (100.48 percent), indicate instances where utilization surpassed the release due to adjustments or carryovers. The data underscores strong fiscal management and effective deployment of matching grants in the given period.

Table 8.10: Assistance to Village Panchayats by state government, (in Lakh)

North Goa		
Year	Amount released	Expenditure incurred
2019-20	1600	283.12
2020-21	900	263.05
2021-22	413	298.73
2022-23	400	295.47
2023-24	249.24	--
South Goa		
2019-20	1600	230.32
2020-21	900	263.88
2021-22	557	229.91
2022-23	400	276.92
2023-24	249.24	42.94

Source: Economic Survey (2023-24). Government of Goa

The Table presents the assistance provided to Village Panchayats in both North and South Goa, showing the amount released and expenditure incurred over five years (2019-20 to 2023-24). The highest release for North Goa was in 2019-20 (Rs.1600 lakh), with expenditures ranging from Rs. 263.05 lakh to Rs. 295.47 lakh over the following years. However, expenditure figures for 2023-24 are not yet available.

Similarly, for South Goa Rs.1600 lakh was released in 2019-20, with a significant reduction in the amount released in subsequent years, dropping to Rs.249.24 lakh by 2023-24. Expenditure was relatively consistent, with 2023-24 showing a sharp decrease to Rs.42.94 lakh, indicating a lower utilization of funds that year.

Overall, both regions received substantial funds, with expenditures fluctuating across the years, especially in South Goa during the latest period. The assistance given to the VPs by the state government has witnessed a steady decline since 2019-20 as revealed from Table

7. Overall, both in North Goa and South Goa the VPs experienced reduced allocations over the years, with expenditures generally maintaining steady levels despite these decreases. The amount released by the state government to the VPs is higher compared to the expenditure incurred.

Table 8.11: Salaries to elected members (Non-plan)

Year	South Goa	North Goa	Total
2011-12	106.65	189.92	296.57
2012-13	204.44	371.71	576.15
2013-14	222.77	347.67	570.44
2014-15	213.84	358.10	571.94
2015-16	213.36	436.65	650.01
2016-17	213.73	380.42	594.15
2017-18	220.57	376.43	597.00
2018-19	218.88	384.53	603.41
2019-20	312.56	253.28	565.84
2020-21	499.40	494.66	994.06
2021-22	355.75	352.12	707.87
2022-23	465.28	493.83	959.11

Source: Finance Account of various years

The Table 11 presents the salary grants paid to elected members in South Goa and North Goa from 2011-12 to 2022-23 under the Non-Plan category. The total salary expenditure has fluctuated over these years, for both the districts. Initially, North Goa consistently had higher expenditures than South Goa, peaking in 2015-16. However, by 2020-21, South Goa's salaries surpassed North Goa's significantly, leading to the highest total of Rs. 994.06 crore in that year.

8.2.3.2 Grants for Rural Garbage Disposal Scheme (RGDS)

‘Under Rural Garbage Disposal Scheme 2005, funds are provided to the village panchayats for acquisition of land for garbage sites and for development of garbage collection site and other facilities required for disposal of garbage for which an amount of ` 99.00 lakh has been released to various panchayats in the State’ (Economic Survey 2016-17). Under the Rural garbage Disposal Scheme the villages affected by the plastic garbage menace are eligible to get financial assistance from the state government. Under the scheme, annual financial assistance of `1,00,000/- is provided to the Panchayats for disposal of plastic garbage, (Economic Survey 2016-17).

Table 8.12: Amount sanctioned under RGDS (in lakh per annum)

	Tupe of locality	Amount sanctioned
1	Door to door garbage collection in Panchayat	2
2	Airport	7
3	Panchayats in coastal belt with tourism	5
4	Sub-urban panchayats	5
5	VP with weekly village market and with annual income Rs. 25 lakh	3
6	Best performing villages	5

Source: Compilation from Economic Survey. (2021-22)

The RGDS allocates funds based on the specific waste management needs and characteristics of each locality type, with amounts ranging from 2 lakh to 7 lakh per annum. This differentiation suggests a targeted approach that considers factors like tourism, income, and local infrastructure. The funding under RGDS is structured to support waste management based on specific demands, promoting hygiene and environmental standards that align with each locality's needs. It is evident that, higher allocation is made to airports and tourism-heavy areas and best performing villages. The village panchayats that fall under the Funnel Zone receive additional grants from the state government to keep the village free from garbage dumps/black spots. 'Funnel Zone is an imaginary flight path extending outwards and upward from either side of the run way of the airport which extended to the radius of 12 km.' (3rd State Finance Commission, 2024. P.72). Funnel zone has to be free from garbage dump.

Table 8.13: Grants to Rural Garbage Disposal Scheme (RGDS) (In Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12			100.00	5.46
2012-13			100.00	5.01
2013-14		100.00	100.00	31.00
2014-15	N	200.00	200.00	158.00
2015-16	N	158.00	158.00	190.00
2016-17	N	195.00	195.00	190.00
2017-18	N	200.00	200.00	191.00
2018-19	N	1010.00	1010.00	460.50
2019-20	N	1005.00	1005.00	139.20
2020-21	N	1305.00	1305.00	194.70
2021-22	N	1502.00	1502.00	161.40
2022-23		350.00	350.00	76.50
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The above table shows the total amount released under RGDS for the last five years and the expenditure incurred. The total amount released in 2011-12 was Rs.100 lakh which has increased to Rs.1010 lakh in the year 2018-19 which further increased to Rs. 1502 in the year 2021-22. The budgeted allocation has drastically reduced to Rs. 350 lakh for the year 2022-23, the reason for which could be the underutilization of funds in the previous years. Compared to the amount allocated the expenditure is very meagre. While the allocation of funds has increased drastically since 2018-19 the expenditure is not equal to the amount sanctioned. Major problem in VPs is many of the VPs have failed to identify land for the storage, segregation and treatment of waste. This could also be one of the reason for underutilization of funds by the VPs sanctioned under the RGDS.

The government has implemented the RGDS by Gazette Notification dated 25th January 2018 in order to provide grants to the VPs for acquiring land for garbage site (3rd State Finance Commission, 2024). For the first three years 98 percent of the expenditure was born by the state government and remaining 2 percent by VPs. After three years the entire cost was to be born by the VPs. The 3rd Finance Commission observed that under Fifteenth Finance Commission Rs. 74.715 crore is earmarked for garbage management and as on 31st March 2023 the utilization of this fund is 20 percent which is not satisfactory. The 3rd State Finance Commission further added that the local bodies lack necessary capacity and technical support and recommends that the local bodies may take the assistance of departments like Public Works Department, WRD and Corporations like GWMC for the timely utilization of central finance.

8.2.3.3 Economically weaker panchayats

The powers and functions of the panchayats are limited and some VPs which are not capable to deliver their duties, for which the government has extended its financial support, have been designated as financially/economically weaker panchayats (3rd Finance Commission of Goa, 2024, p.86). Financially weaker village panchayats are released grants for the payment of salaries to the village panchayat staff, salaries and other allowances to elected representatives of Panchayats / Zilla Panchayats. During the year 2016-17, grants amounting to ` 408.92 lakh have been released to 90 weaker panchayats (Economic Survey. 2016-17. P.93).

Table 8.14: The Pattern of assistance is as follows:

(a) Panchayat having annual income	Govt. grants	Popular contribution
(b) Upto Rs.3.00 lakhs	100% of project cost	NIL
(c) Between Rs.3.00 lakhs to Rs.4.00lakhs	75% of project cost	25%
(d) Between Rs.4.0lakhs to Rs.5.00lakhs	50% of project cost	50%<
(e) Above Rs.5.00lakhs	NIL	NIL

Source: Directorate of Panchayat website: <https://panchayatgoa.gov.in/schemes.aspx>

VPs whose annual income (excluding grants and accrued interest of the State and Centre) is not more than Rs.25.00 lakh is classified as weaker VP. Out of 191 VPs, 102 VPs i.e., 53.40 % are classified as weaker panchayats ((3rd Finance Commission of Goa, 2024).

Table 8.15: Financial Assistance to weaker panchayats for payment of salaries (NP) (in Lakh)

Year	Non-plan
2011-12	226.65
2012-13	305.65
2013-14	338.00
2014-15	10.40
2015-16	916.49
2016-17	519.38
2017-18	866.10
2018-19	997.17
2019-20	589.15
2020-21	1,349.57
2021-22	978.85
2022-23	1,394.59

N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan
Source: Financial Accounts for various years

Table 8.16: Financial assistance for village Panchayats for infrastructure Development (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2012-13		1,050.00	1,050.00	619.15
2013-14		600.00	600.00	571.31
2014-15	N	700.00	700.00	329.46
2015-16	N	800.00	800.00	791.32
2016-17	N	1,200.00	1,200.00	1,177.34
2017-18	N	1,000.00	1,000.00	561.45

2018-19	N	1,600.00	1,600.00	1,485.55
2019-20	N	1,600.00	1,600.00	1,345.14
2020-21	N	3,000.00	3,000.00	2,083.60
2021-22	N	2,000.00	2,000.00	2,590.00
2022-23	N	1,750.00	1,750.00	3,197.48
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts from 2011-12 to 2022-23

The Table 17 outlines the financial assistance provided to Village Panchayats for infrastructure development from 2012-13 to 2022-23, with amounts in lakh rupees. Over the years, the funds released and expenditure incurred show notable trends. In 2012-13, Rs.1050 lakh was released, with an expenditure of Rs.619.15 lakh which is just half of the amount released. Funding increased in 2016-17 to Rs. 1,200 lakh, and a substantial amount of it was spent (Rs.1,177.34). since 2021-22, spending was more compared to the released amount, with Rs.2000 lakh allocated and Rs.2590.00 lakh spent. In 2022-23, funding slightly reduced to Rs.1,750 lakh, with an expenditure increased to Rs.3197.48 lakh, indicating an increased spending for infrastructure development.

Table 8.17: Strengthening of Panchayats (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12			130.97	138.08
2012-13		216.30	216.30	175.51
2013-14		216.30	216.30	183.86
2014-15	N	240.00	240.00	195.19
2015-16	N	195.19	195.19	205.34
2016-17	N	422.00	422.00	303.70
2017-18	N	293.56	293.56	486.52
2018-19	N	358.61	358.61	487.02
2019-20	N	821.50	821.50	580.20
2020-21	N	1003.00	1003.00	622.42
2021-22	N	760.49	760.49	775.08
2022-23	N	1291.00	1291.00	1010.25
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The Table illustrates the allocation and expenditure trends for the Strengthening of Panchayats scheme from 2011-12 to 2022-23. Over the years, the plan outlay and budget allocation steadily increased, with notable growth in later years, such as Rs.1291 lakh in 2022-23. Expenditure also generally rose, indicating improved utilization of funds,

particularly from 2017-18 onwards, where spending often exceeded allocation (e.g., Rs.486.52 lakh expenditure in 2017-18 against a Rs. 293.56 lakh allocation). This trend highlights increased investments in panchayat infrastructure and activities, with utilization peaking at Rs.1010.25 lakh in 2022-23, reflecting consistent emphasis on decentralization and rural governance development.

Table 8.18: Training of officials of VP (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12			14.50	13.41
2012-13			30.00	7.19
2013-14		30.00	30.00	20.25
2014-15	N	40.00	40.00	15.76
2015-16	N	15.76	15.76	3.43
2016-17	N	40.00	40.00	5.26
2017-18	N	13.77	13.77	2.07
2018-19	N	15.00	15.00	8.91
2019-20	N	10.00	10.00	
2020-21	N	20.00	20.00	
2021-22	N	3.00	3.00	
2022-23	N	3.00	3.00	15.00
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table 18 highlights the allocation and expenditure for the training of officials of VP over 2011-12 to 2022-23. Despite regular budget allocations, expenditures have consistently been lower, reflecting underutilization of funds. For example, in 2012-13, only Rs.7.19 lakh was spent out of Rs.30 lakh allocated, and in 2016-17, Rs.5.26 lakh was utilized against Rs.40 lakh. Notably, 2022-23 saw a rare case where expenditure exceeded allocation, with Rs.15 lakh spent against a Rs.3 lakh allocation. This indicates inconsistencies in fund utilization, suggesting challenges in implementing training programs effectively for panchayat officials.

8.2.4 State government funding for the schemes

8.2.4.1 Goa Gram Samruddhi Yojana

The Goa Gram Samruddhi Yojana provides funds upto Rs. 25 Lakh for the creation of infrastructure assets such as Panchayat Ghar, village community halls, rural roads, etc., which should be approved by the committee approved under GGSY. Any demand for more

than prescribed limit needs approval by the government. Under Goa Gram Samrudhi Yojana 'An amount of ` 1087.83 lakh has been spent during the financial year 2021-22 upto February 2022' (Economic Survey. 2021-22. P.91).

Table 8.19: Projects Sanctioned and completed under GGSY

Year	Projects Sanction ed	Projects Completed	Expenditure (Rs. in lakh)
2019- 20	92	57	1091.91
2020- 21	183	45	825.53
2021- 22	182	60	1108.74
2022- 23	112	65	932.95
2023- 24(till Dec 2023)	135	16	814.82

Source: Economic Survey Goa 2023-24. Government of Goa

The table shows the number of projects sanctioned increased between 2019-20 to 2023-24. The major rise in the sanctioned project was between 2020-21. There is a recurring gap between the number of projects sanctioned and those completed. The number of projects completed fluctuated significantly over the years corresponding to a decline in the expenditure. The completion rate was highest in 2022-23, with 65 of 112 projects completed (around 58%), suggesting improved project management or timely completion. In contrast, 2023-24 shows only 16 completed out of 135 sanctioned (around 12 percent).

Table 8.20: Allocation for GGSY (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12			400.00	400.00
2012-13			400.00	900.00
2013-14		342.00	342.00	342.00
2014-15	N	1000.00	1000.00	140.00
2015-16	N	1000.00	1000.00	799.00
2016-17	N	800.00	800.00	480.00
2017-18	N	600.00	600.00	630.00
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table provides an overview of the allocation and expenditure under the GGSY scheme from 2011-12 to 2017-18. While allocations remained consistent or increased across years,

expenditure varied significantly, highlighting underutilization in some years and overutilization in others. For instance, in 2014-15, only Rs.140 lakh was spent out of Rs.1,000 lakh allocated, indicating poor fund utilization. However, in 2017-18, expenditure slightly exceeded the allocation, with Rs. 630 lakh spent against Rs. 600 lakh. This reflects fluctuating implementation efficiency and varying absorption capacity of funds under the scheme across different years.

8.2.4.2 Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

The Mahatma Gandhi National Rural Employment Guarantee Act, 2005 is a flagship programme of the government of India. The share of state and central government is 40:60. The scheme aims at enhancing rural livelihoods by providing at least 100 days of wage employment annually to every rural household. Focused on unskilled labour, it promotes sustainable development through infrastructure creation while empowering marginalized communities and reducing rural poverty.

Table 8.21: Allocation for MGNREGA (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2012-13			279.35	266.95
2013-14		269.00	269.00	269.06
2014-15	N	324.61	324.61	462.56
2015-16	N	1550.00	1550.00	934.77
2016-17	N	1181.00	1181.00	473.16
2017-18	N	1000.00	1000.00	187.13
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table presents data on the allocation and expenditure for MGNREGA from 2012-13 to 2017-18, measured in lakh rupees. The table includes the plan outlay, budget allocation, and actual expenditure. In 2012-13, Rs.279.35 lakh was allocated, and Rs.266.95 lakh was spent. In 2013-14, both allocation and expenditure closely matched at Rs.269 lakh. In 2014-15, the expenditure exceeded the allocation, with Rs.324.61 lakh allocated and Rs.462.56 lakh spent. However, in subsequent years, expenditures consistently fell short of the allocation. For example, in 2015-16, Rs.1550 lakh was allocated, but only Rs. 934.77 lakh was spent. By 2017-18, the allocation reduced to Rs.1000 lakh, with a significantly low expenditure of Rs.187.13 lakh, indicating underutilization of funds in later years.

Table 8.22: Year-wise utilization of MGNREGA grants (in Crore)

Year	Released	Utilised
2018-19	0.57	0.54
2019-20	1.47	0.79
2020-21	1.76	2.19
2021-22	2.25	2.29
2022-23	0.2	1.26

Source: 3rd Finance Commission p.111.

The table 22 provides data on the release and utilization of MGNREGA grants (in crore rupees) from 2018-19 to 2022-23, highlighting trends in fund allocation and usage. In 2018-19, Rs.0.57 crore was released, with almost full utilization at Rs.0.54 crore. The released amount increased to Rs.1.47 crore in 2019-20, but utilization lagged at Rs.0.79 crore. In 2020-21 and 2021-22, utilization exceeded the released funds, with Rs.2.19 crore and Rs.2.29 crore spent against releases of Rs.1.76 crore and Rs.2.25 crore, respectively, indicating reliance on previously unspent funds or additional sources. In 2022-23, the released amount dropped sharply to Rs.0.2 crore, while utilization was significantly higher at Rs.1.26 crore, reflecting continued reliance on carryover funds or delayed expenditure from prior allocations.

Table 8.23: Central grants to MGNREGA (In Lakh)

Year	Allocation
2016-17	425.85
2017-18	206.05
2018-19	48.83
2019-20	216.76
2020-21	356.91
2021-22	
2022-13	129.23

Source: Financial Accounts for various years

The Table 24 outlines the central grants allocated to the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) from 2016-17 to 2022-23. The allocation demonstrates significant fluctuations over the years, with the highest grant of Rs. 425.85 Lakh in 2016-17. This was followed by a steep decline in 2017-18 and 2018-19, where the allocation dropped to Rs.48.83 Lakh. There was a partial recovery in 2019-20 with Rs. 216.76 Lakh, peaking again in 2020-21 at Rs.356.91 Lakh. The grant decreased to Rs. 129.23 Lakh in 2022-23.

8.2.4.3 Goa Gramina Urja Yojana (GGUY)

The GGUY scheme is 100 percent funded by the state government. Under this scheme the Below Poverty Line families are ‘provided with free LPG installation comprising of one gas stove with two burners and two cylinders with all other required accessories for the total cost of ` 6,087/-‘ (Economic Survey. 2021-22).

Table 8.24: Year wise beneficiaries under GGUY

Year	Families	Amount (in lakh)
2016-17	850	53.41
2017-18	323	19.66
2018-19	192	11.69
2019-20	392	23.84
2020-21	326	29.63
2022 till Feb. 2022	584	35.52

Source: Economic Survey reports, GoG, 2020-21; 2021-22

The table shows that, the number of families benefitting from the GGUY program has shown variations from year to year. In 2016-17, the scheme benefited 850 families with Rs.53.41 lakh, the highest during this period. The number of beneficiaries and funds decreased in subsequent years, reaching 192 families with Rs.11.69 lakh in 2018-19. From 2019-20 onward, both metrics began to rise gradually, with 584 families receiving R.35.52 lakh in 2022 (up to February), reflecting renewed focus on the scheme.

Table 8.25: Schedule Caste development scheme (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2012-13			89.08	44.06
2013-14		89.08	89.08	81.15
2014-15	N	95.00	95.00	48.64
2015-16	N	95.00	95.00	87.12
2016-17	N	174.84	174.84	164.15
2017-18	N	109.01	109.01	104.42
2018-19	N	163.90	163.90	119.12
2019-20	N	483.94	483.94	160.18
2020-21	N	200.00	200.00	194.99
2021-22	N	202.00	202.00	127.06
2022-23	N	201.00	201.00	122.42
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table outlines the year-wise financial details of the Schedule Caste Development Scheme, from 2012-13 to 2022-23. In 2012-13, the budget allocation was Rs.89.08 lakh,

but only Rs.44.06 lakh was utilized. Over the years, allocations generally increased, with notable peaks such as Rs.483.94 lakh in 2019-20, though the expenditure that year was significantly lower at Rs.160.18 lakh. While the expenditure closely matched the allocation in some years, like 2016-17 (Rs.174.84 lakh allocated, Rs.164.15 lakh spent) and 2020-21 (Rs.200 lakh allocated, Rs.194.99 lakh spent), other years saw underutilization, such as in 2022-23, where Rs.201 lakh was allocated but only Rs.122.42 lakh was spent. This reflects varying levels of fund utilization efficiency over the period.

Table 8.26: Schedule Tribe development scheme (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2012-13		534.47	534.47	110.94
2013-14		534.47	534.47	441.68
2014-15	N	525.00	525.00	264.40
2015-16	N	550.00	550.00	541.35
2016-17	N	849.02	849.02	782.39
2017-18	N	802.12	802.12	619.56
2018-19	N	802.00	802.00	769.59
2019-20	N	1210.00	1210.00	639.02
2020-21	N	904.00	904.00	889.37
2021-22	N	904.00	904.00	892.58
2022-23	N	902.00	902.00	893.55
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table provides year-wise data on the Schedule Tribe Development Scheme from 2012-13 to 2022-23. Initially, in 2012-13, Rs.534.47 lakh was allocated, but only Rs.110.94 lakh was spent, indicating underutilization. Over the years, allocations increased, with notable improvements in expenditure. For instance, in 2015-16, Rs.550 lakh was allocated, and Rs.541.35 lakh was spent, reflecting effective utilization. Significant peaks in allocation occurred in 2019-20, with Rs.1210 lakh allocated but only Rs.639.02 lakh spent. However, from 2020-21 to 2022-23, expenditure consistently matched allocations, demonstrating improved fund utilization in recent years.

8.2.5 Grants-in-aid from central government

Table 8.27: Grants-in-aid from the Central Government

Year	Allocation under TFC	RGSA
2011-12	520.26	
2012-13		
2013-14	166.14	
2014-15	181.12	

2015-16		
	Allocation under FFC	
2016-17	262.00	
2017-18	2,000.00	
2018-19	1,155.00	
2019-20	7,737.00	
	Fifteenth Finance commission	
2020-21	3,750.00	
2021-22	7,294.96	59.50
2022-23	2,750.00	1,350.00

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table presents year-wise data on Grants-in-aid from the Central Government, showing allocations under the Twelfth Finance Commission (TFC) and Fourteenth Finance Commission (FFC). Allocations shifted to the FFC, resulting in larger grants to meet growing developmental needs. Under TFC, significant allocations were made in 2011-12 (Rs.520.26 lakh) and 2014-15 (Rs.181.12 lakh). From 2016-17 onward, grants transitioned to the FFC, with allocations peaking at Rs.7,737 lakh in 2019-20. In recent years, allocations under FFC have fluctuated, reaching Rs.2,750 lakh in 2022-23.

Under 15th Finance Commission grants-in-aid is provided in two categories Tied Grants (60%) and Untied Grants (40%). ‘The Tied Grants are for basic services like sanitation and maintenance of open defecation free (ODF), Supply of drinking water, rain water harvesting etc. The Untied Grants are open grants and can be utilized as per the need of Village Panchayats’ (Economic Survey Goa. 2023-24)

Table 8.28: Tied Grants under 15th Finance Commission (Rs.in Crore)

Year	Received from the Central Government	Installment	Released to Village Panchayats (RLBs)
2020-21	18.75	Ist	18.75
	18.75	2nd	18.75
2021-22	16.50	Ist	16.5
	16.50	2nd	16.5
2022-23	14.54	Ist	14.54
Total	85.04		85.04

Source: Directorate of Pancyat, Government of Goa

The Table outlines the Tied Grants under the 15th Finance Commission, showing the amounts received from the Central Government and subsequently released to Village

Panchayats (Rural Local Bodies, RLBs) during 2020-21 to 2022-23, measured in crore rupees. In 2020-21, a total of Rs.37.50 crore was received in two installments and was fully released to the Village Panchayats, demonstrating efficient fund disbursement. In the following years, allocations decreased to Rs.16.50 crore annually for 2021-22 and further reduced to Rs. 14.54 (Ist Installment) in 2022-23, with the full amounts released to RLBs. The total tied grant across three years sum up to Rs.85.04 crore, indicating consistent adherence to financial commitments for village-level development.

Table 8.29: Untied Grants 15th Finance Commission (Rs.in Crore)

Year	Received from the Central Government	Installment	Released to Village Panchayats (RLBs)
2020-21	18.75	Ist	18.75
	18.75	2nd	18.75
2021-22	11	Ist	11
	11	2nd	11
2022-23	6.69	Ist	6.69
	6.69	2nd	6.69
Total	78.88		78.88

Source: Directorate of Panchayats, Government of Goa

The Table 30 outlines the Untied Grants under the 15th Finance Commission, showing the amounts received from the Central Government Rural Local Bodies during 2020-21 to 2022-23. In 2020-21, a total of Rs.37.50 crore was received by the central government in two instalments and fully released to the Village Panchayats. In the following years, allocations decreased to Rs.11.00 crore annually for 2021-22 and further reduced to Rs. 13.38 cores in 2022-23. For all the three years the full amounts also released to RLBs. The total tied grant across three years sums up to Rs.78.88 crore, indicating consistent adherence to financial commitments for village-level development.

‘The total Grants received by the State Government is Rs.130 crore as on date and utilization by Village Panchayats as on 31/12/2023 is Rs.8.00 crore under Tied Grants and Rs.11.00 crore under Untied Grants’ (Economic Survey Goa. 2023-24).

8.2.5.1 Grant-in-aid from central government for central plan schemes

Table 8.30: Grant-in-aid from central government for central plan schemes

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23

Implementation of DRDA Administration	71.12	58.58	34.14		68.04		
Implementation of Indira/ Pradhan Mantri Awas Yojana	284.78				20.64		
Implementation of MGNREGA	425.85	206.05	48.83	216.76	356.91		129.23
National Rural Livelihood Mission (NRLM)	135		150	234.18	418	367.01	750
Rurban Mission			35				
Swachh Bharat Mission - Gramin					23.07	1,531.73	2,518.25
Total	916.75	264.63	267.97	450.94	886.66	1,898.74	3,397.48

Source: Financial Accounts Vol II from 2011-12 to 2022-23

From the above table it is evident that there has been a notable increase in funding over the years, from 916.75 lakh in 2016-17 to 3,397.48 lakh in 2022-23. The most significant jumps occurred between 2020-21 and 2021-22, and again between 2021-22 and 2022-23. This rise is largely driven by increased allocations under the Swachh Bharat Mission (Gramin) and the National Rural Livelihood Mission (NRLM), both of which received substantial funding in recent years.

The comprehensive data reflects the government's commitment to rural development, focusing on empowering Village Panchayats and addressing socio-economic challenges. Over the years, budget allocation for the VPs under various heads has increased. While some years demonstrate effective fund utilization, others reveal underutilization, pointing to areas requiring improved implementation and monitoring. The transition from TFC to FFC and the introduction of RGSA and tied grants under the 15th Finance Commission reflect evolving priorities to enhance financial autonomy and capacity building at the grassroots level. Overall, the data showcases significant strides in decentralization of finance from the centre, with scope for better fund efficiency and planning.

Fourteenth FC in its report recognized that a trust-based approach must be adopted for release of grants and recommended that no further conditions or directions, other than those indicated by FC should be imposed either by the Union or the State Government for the release of funds to local bodies (CAG, 2024b). However, delay in transferring the funds by the state government to the local governments, procedural delays, non-compliance of submission of Utilization Certificate are some of the main reasons for expenditure being less compared to income.

Out of 191 Panchayats of Goa, 56 are Census Towns as per the Census 2011. There are 16 Census Towns in south Goa (GoG, 2014a) and 40 Census Towns in North Goa (GoG, 2014b). In the past the state government has made attempts to convert few Panchayats into Municipalities which met with stiff resistance from the VPs and government is forced to drop its plans. Now it is upto the Panchayats to take a decision to convert Panchayat into Municipalities.

The major resistance for the transitioning Rural Local Bodies (RLBs) into Urban Local Bodies (ULBs) is due to the increase in the Floor Area Ratio (FAR). If the local area is transformed into the ULB it leads to increasing FAR, which means more area comes under construction activity (with 100 percent FAR). Due to which many Gram Sabhas object to converting the VP into Municipality. The people in the rural areas have fear that this may lead to increasing tourism and real estate related activities. The villages may lose their own identity as many more buildings with more heights may come up. The Floor Space Index (FSI) for urban areas is more. This will increase burden on already existing resources like water, electricity and others. It may also increase the issue of Garbage which Goa is already facing. Since two decades Goan villages are battling cases against mega housing projects coming up in their areas. Many Gram Sabhas have demanded to pass a resolution not to allow mega housing project in their villages.

8.3 Municipal Administration

Goa municipalities were governed by the Goa Municipal Act 1968 which was amended in 1994 as per the 74th Amendment to the Constitution. The Goa, Daman and Diu Municipalities Act, 1968 has repealed the pre-liberation legislation of the Portuguese rule. Soon after the act was passed general elections to the Municipal Councils were held. The Municipalities in the district of Goa or for that matter, in the entire territory are under the control of the Director of Municipal Administration (GoG, 1979). At present Goa has 14 municipal administrative structures with 13 are municipalities and Corporation of City of Panaji.

Table 8.31: Classification of municipal area

Category	Population	Wards/Councillors
A	>50,000	15 to 20
B	>10,000	10 to 15
C	10,000 or less	10

Source: Goa Municipalities Act, 1968, accessed from: <https://goprintingpress.gov.in>

The Municipalities Act, 1968 as amended later after the 74th Constitutional amendment to the Indian constitution provides for three categories of municipalities based on the population. The municipalities with 50,000 and more population have 15 wards (for every 3000 population one ward). And above 50,000 there shall be one additional elected Councillor, so, however, that the total number of elected Councillors shall not exceed 20 (Goa Municipalities Act, 1968). The municipalities with a population 10,000 and more, minimum number of elected members should be 10, with one ward each for 3000 population. For 10,000 and above population there shall be one additional elected Councillor, so, however, that the total number of elected Councillors shall not exceed 15 (Goa Municipalities Act, 1968). The municipal area with a population less than 10,000 there are 10 Councillors.

8.3.1 Receipts and expenditure of municipalities

Table 8.32: Receipts and Expenditure of Municipal Corporation/Council (in Lakh)

Year	Receipts	Expenditure	Deficit (-)/Surplus (+)
2011-12	12,976.92	8,955.28	4,021.64
2012-13	13,937.09	10,974.13	2,962.96
2013-14	11,971.83	10,775.75	1,196.08
2014-15	12,180.16	11,266.79	913.37
2015-16	12,300.67	12,058.06	242.61
2016-17	14,324.19	12,207.14	2,117.05
2017-18	25,896.44	14,697.58	11,198.86
2018-19	21,074.78	20,449.29	625.49
2019-20	25,120.15	20,362.46	4,757.69
2020-21	22,878.94	24,293.74	-1,414.80
2021-22	22,719.92	21,697.78	1,022.14

Source: Finance Account for various years

Table shows the total receipts and expenditure of the municipal corporation/councils in Goa. The table presents the receipts, expenditures, and the resulting deficit (-)/surplus (+) for Municipal Corporations/Councils from 2011-12 to 2021-22. Receipts (income) of Municipal Corporations/Councils grew from Rs. 12,976.92 lakhs in 2011-12 to Rs. 22,719.92 lakhs in 2021-22. Expenditure followed a similar upward trend, increasing from Rs. 8,955.28 lakhs in 2011-12 to Rs. 21,697.78 lakhs in 2021-22.

A surplus was maintained in most years, indicating good fiscal health and efficient management of finances. The largest surplus was recorded in 2017-18, at Rs. 11,198.86 lakhs, which was an outlier compared to other years. The year 2020-21 stands out as the

only year with a deficit (-1,414.80 lakhs), suggesting that expenditures during this year exceeded receipts.

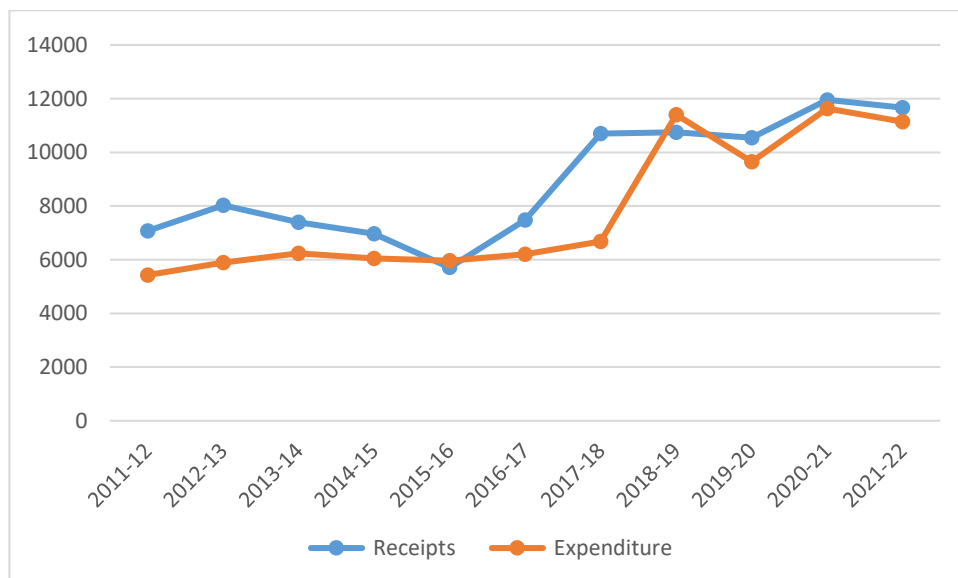
Table 8.33: Income and Expenditure of Municipalities from 2011-12 to 2021-22 (North Goa) (in lakhs)

Year	Receipts	Expenditure	Deficit (-)/Surplus (+)
2011-12	7080.7	5430.62	1650.08
2012-13	8032.73	5894.26	2138.47
2013-14	7392.7	6240.4	1152.3
2014-15	6971.21	6043.92	927.29
2015-16	5709.44	5967.15	-257.71
2016-17	7474.53	6199.15	1275.38
2017-18	10702.31	6677.91	4024.4
2018-19	10745.36	11408.98	-663.62
2019-20	10548.09	9648.84	899.25
2020-21	11958.15	11635.3	322.85
2021-22	11665.47	11146.58	518.89

Source: Finance Account for various years

The Table above indicates the income and expenditure of municipalities of North Goa. The receipts show a steady increase over the years, starting from Ra. 7,080.7 lakhs in 2011-12 to Rs. 11,665.47 lakhs in 2021-22. The highest annual growth in receipts is observed from 2016-17 to 2017-18, with an increase of Rs. 3,227.78 lakhs (43.2 percent). There are periods of fluctuations, e.g., a slight decline in 2013-14 and 2014-15 compared to preceding years. Expenditure also shows a general increasing trend, rising from Rs. 5,430.62 lakhs in 2011-12 to Rs. 11,146.58 lakhs in 2021-22. The increase in expenditure has been relatively consistent, with some sharp rises, particularly between 2017-18 and 2018-19. The municipalities of North Goa had experienced a surplus in most years, except 2015-16 (Rs. -257.71 lakhs) and 2018-19 (Rs. -663.62 lakhs). The largest surplus occurred in 2017-18 at Rs. 4,024.4 lakhs, driven by a significant rise in receipts without a proportional increase in expenditure.

Figure 8.3: Income and expenditure of North Goa (in lakhs)



Source: Finance Account for various years

It is evident from the Figure 3 that, income of the municipalities of North Goa grew faster than the expenditure. Between 2015-16 to 2017-18 there is a sharp increase in the income of the municipalities, which remained consistent from 2017-18 to 2019-20. There is further increase in the income of the municipalities from 2019-20 and 2020-21 which declined slightly in 2021-22. Compared to the income, the expenditure was less for most of the periods. It is only after 2017-18 there is a rise in the expenditure of the municipalities in Goa. It is only in the year 2018-19 the expenditure was more compared to the income of the municipalities.

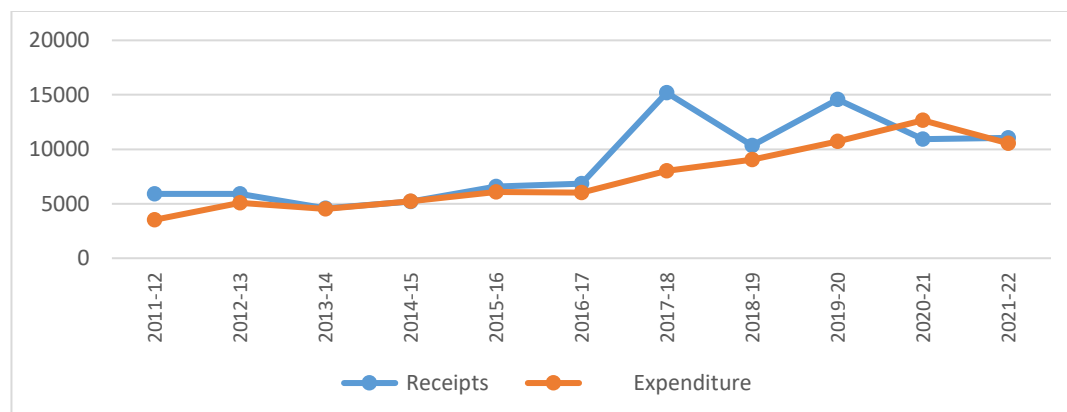
Table 8.34: Income and Expenditure of Municipalities from 2011-12 to 2021-22 (South Goa) (in lakhs)

Year	Receipts	Expenditure	Deficit (-)/Surplus (+)
2011-12	5896.22	3524.66	2371.56
2012-13	5904.36	5079.87	824.49
2013-14	4579.13	4535.35	43.78
2014-15	5208.95	5222.87	-13.92
2015-16	6591.23	6090.91	500.32
2016-17	6849.66	6007.99	841.67
2017-18	15194.13	8019.67	7174.46
2018-19	10329.42	9040.31	1289.11
2019-20	14572.06	10713.6	3858.44
2020-21	10920.79	12658.4	-1737.65
2021-22	11054.45	10551.2	503.25

Source: Finance Account for various years

The Table above shows the income and expenditure of municipalities of South Goa. The Receipts show a general increase from Rs. 5,896.22 lakhs in 2011-12 to Rs. 11,054.45 lakhs in 2021-22, with significant fluctuations in few years. A remarkable increase occurred in 2017-18, with receipts jumping to Rs. 15,194.13 lakhs, is evident from the table. Post-2017-18, receipts show a decline in 2018-19 (Rs.10,329.42 lakhs) but recover to stabilize around Rs. 11054.45 lakhs by 2021-22.

Figure 8.4: Figure: Income and expenditure of South Goa (in lakhs)



Source: Finance Account for various years

The Figure shows that the income of the municipalities of South Goa always remained high for most of the years. There is a wide gap between the income and the expenditure from 2016-17 to 2019-20. It was only in the year 2020-21 the expenditure of the municipalities was higher compared to its income. In the year 2021-22, the income and expenditure were almost same.

Table 8.35: Receipts of Municipalities of North Goa (in lakhs)

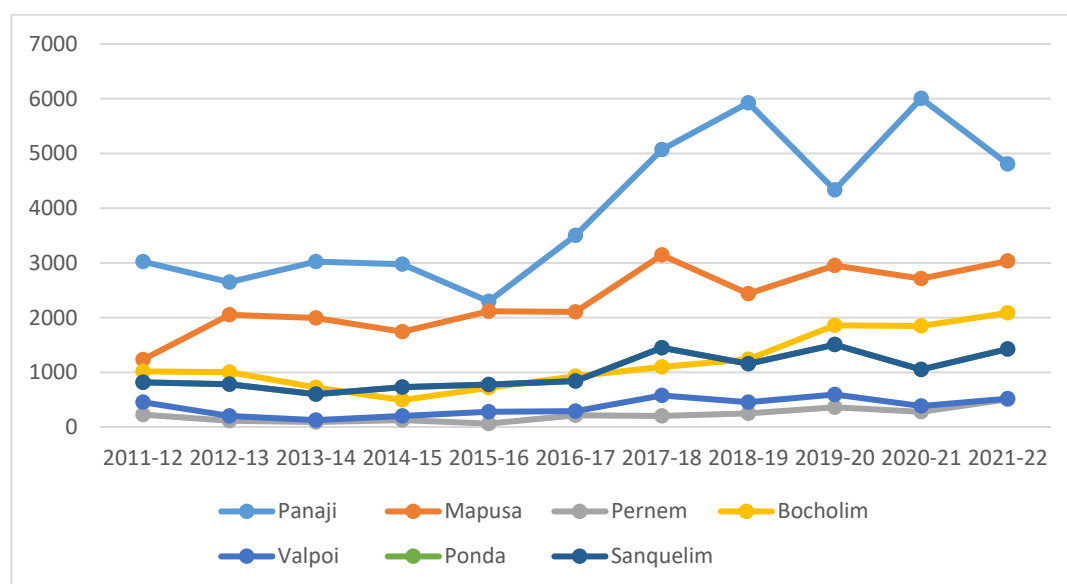
Year	Panaji	Mapusa	Pernem	Bocholim	Valpoi	Ponda	Sanquelim
2011-12	3021.51	1232.15	225.67	1014.2	453.28	814.07	814.07
2012-13	2650.91	2049.76	112.76	1002.13	203.79	779.77	779.77
2013-14	3021.82	1990.5	91.41	721.26	126.36	599.70	599.70
2014-15	2973.28	1740.07	128.43	492.61	201.92	730.66	730.66
2015-16	2297.00	2116.46	62.51	715.77	280.26	777.33	777.33
2016-17	3502.00	2106.02	213.6	926.04	292.43	837.52	837.52
2017-18	5068.09	3143.28	201.33	1095.77	578.53	1447.59	1447.59
2018-19	5926.74	2436.13	246.67	1237.14	451.24	1153.79	1153.79
2019-20	4332.64	2951.62	361.88	1859.09	594.32	1504.59	1504.59
2020-21	6005.76	2711.98	277.80	1848.69	383.21	1050.64	1050.64
2021-22	4808.13	3035.13	506.76	2086.04	519.94	1422.74	1422.74

Source: Finance Account for various years

The Table below depicts that Panaji Consistently generates the highest income among all listed municipalities, peaking at Rs. 6,005.76 lakhs in 2020-21. A sharp rise in revenue is observed from 2015-16 to 2018-19, followed by fluctuations, with a decline in 2021-22 (Rs. 4,808.13 lakhs). In Mapusa municipality revenue steadily increases overall, with a peak in 2017-18 (Rs.3,143.28 lakhs) and fluctuations in subsequent years. Revenue dropped in 2020-21 (Rs. 2,711.98 lakhs) but rebounded slightly in 2021-22 (Rs. 3,035.13 lakhs).

Pernem is the smallest Contributor and generates the lowest income among the listed municipalities, with an increasing trend over time. A substantial rise is observed in 2021-22 (Rs. 506.76 lakhs), almost double the revenue in 2015-16 (Rs. 62.51 lakhs). Bicholim has shown Moderate Growth in revenue, with significant growth in 2019-20 (Rs.1,859.09 lakhs) and 2021-22 (Rs.2,086.04 lakhs). Revenue is relatively stable with gradual increases year over year. Valpoi indicated a slow Growth of revenue starting from Rs. 453.28 lakhs in 2011-12 and reaching Rs. 519.94 lakhs in 2021-22. A decline is observed in 2018-19 (Rs. 451.24 lakhs) before recovering in later years. Ponda's revenue shows significant variation, peaking in 2017-18 (Rs. 1,447.59 lakhs) but declining in subsequent years. Revenue stabilizes at Rs. 1,422.74 lakhs in 2021-22. In Sanquelim income steadily increases over time, with notable peaks in 2017-18 (Rs.1,447.59 lakhs) and 2019-20 (Rs. 1,504.59 lakhs).

Figure 8.5: Receipts of Municipalities of North Goa (in lakhs)



Source: Finance Account for various years

There are significant income disparities among municipalities, with Panaji at the top and Pernem at the bottom. As a capital city, Panaji generates significantly higher revenue than other municipalities. Most municipalities experienced a revenue surge in 2017-18.

Revenues for several municipalities, particularly Panaji and Mapusa, peaked or stabilized despite pandemic-related disruptions, indicating potential financial interventions.

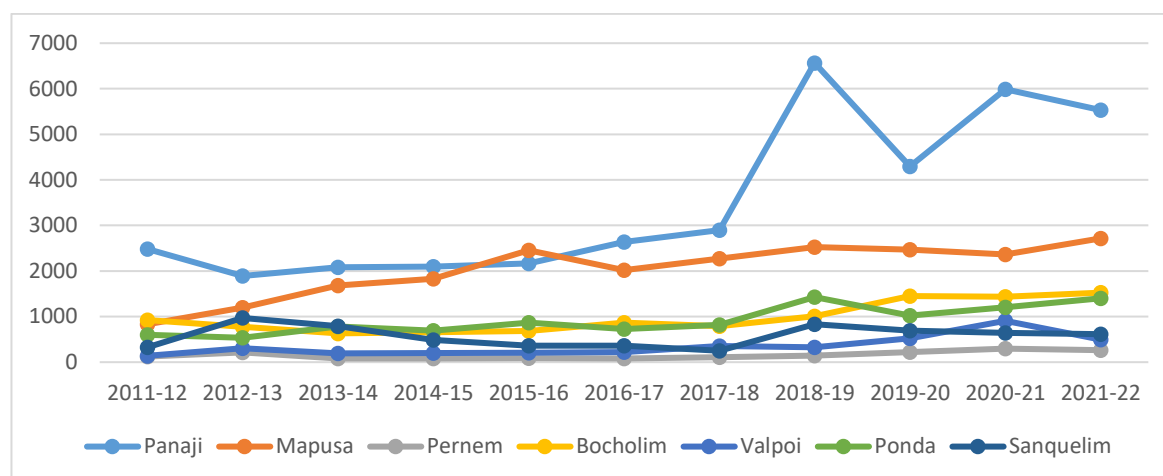
Table 8.36: Expenditure of Municipalities of North Goa (in lakhs)

Year	Panaji	Mapusa	Pernem	Bocholim	Valpoi	Ponda	Sanquelim
2011-12	2483.85	831.66	125.34	924.92	140.40	600.62	323.83
2012-13	1891.83	1194.52	215.32	779.83	307.28	535.31	970.17
2013-14	2080.24	1682.16	81.31	631.71	192.77	782.75	789.46
2014-15	2094.82	1827.38	83.04	657.56	203.25	691.84	486.03
2015-16	2170.00	2452.21	88.08	685.99	209.84	870.10	361.03
2016-17	2639.00	2020.19	83.02	867.31	224.65	724.23	364.98
2017-18	2900.21	2271.68	107.38	790.85	356.83	820.59	250.96
2018-19	6567.43	2523.49	147.35	1008.94	329.65	1428.31	832.12
2019-20	4295.68	2468.86	219.31	1452.55	523.45	1020.15	688.99
2020-21	5987.23	2366.74	296.83	1433.42	907.13	1201.90	643.95
2021-22	5532.09	2716.38	263.07	1525.41	497.51	1399.27	612.12

Source: Finance Account for various years

The Table shows that, Panaji consistently incurs the highest expenditures, peaking at Rs.6,567.43 lakhs in 2018-19, significantly higher than other municipalities. In Mapusa the expenditure has steadily risen, with peaks in 2015-16 (Rs.2,452.21 lakhs) and 2021-22 (Rs.2,716.38 lakhs). Pernem consistently has the lowest expenditure, peaking at Rs. 296.83 lakhs in 2020-21. Bicholim municipalities has shown substantial growth in the expenditure, peaking in 2019-20 (Rs. 1,452.55 lakhs) and stabilizing in subsequent years. In Valpoi the expenditure rose from Rs. 140.40 lakhs in 2011-12 to Rs. 907.13 lakhs in 2020-21, before dropping slightly in 2021-22 (Rs. 497.51 lakhs). Ponda showed a fluctuating Spending. The Expenditure peaked in 2018-19 (Rs. 1,428.31 lakhs) and rose again to Rs. 1,399.27 lakhs in 2021-22 after a dip in 2019-20. Sanquelim municipalities has witnessed gradual growth in the expenditure, which rose from Rs. 323.83 lakhs in 2011-12 to Rs. 832.12 lakhs in 2018-19 but dropped slightly in recent years.

Figure 8.6: Expenditure of Municipalities of North Goa (in lakhs)



Source: Finance Account for various years

All municipalities show a general upward trend in expenditure over the decade,. Panaji consistently leads in expenditure, reflecting its status as a major urban and administrative hub. There is a significant spikes in expenditure for multiple municipalities in 2018-19 (e.g., Panaji, Ponda, Bicholim)

Table 8.37: Receipts of Municipalities of South Goa (in lakhs)

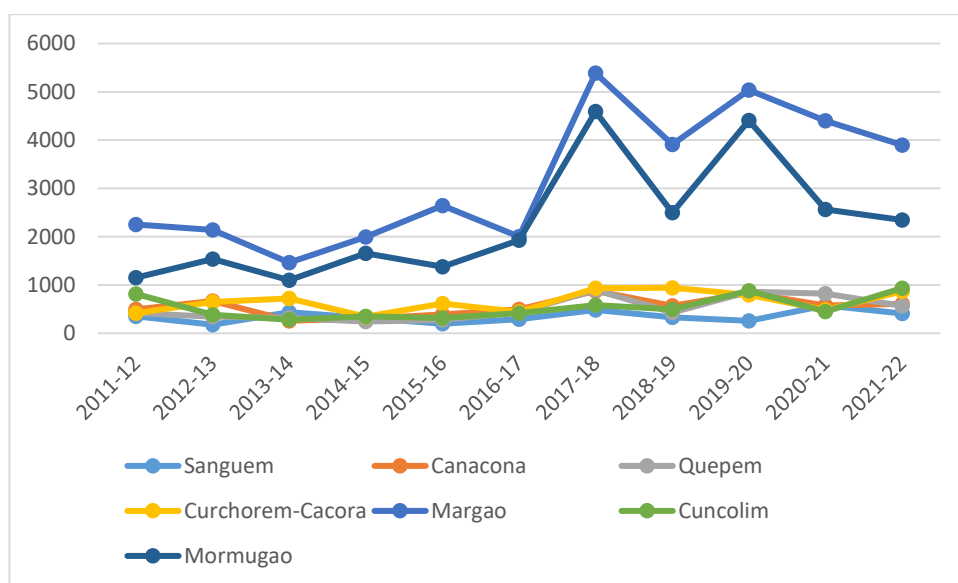
Year	Sanguem	Canacona	Quepem	Curchorem-Cacora	Margao	Cuncolim	Mormugao
2011-12	352.84	495.17	413.23	416.02	2251.94	812.02	1155.00
2012-13	177.90	671.23	340.99	647.96	2142.2	384.08	1540.00
2013-14	434.82	259.87	316.96	722.85	1463.93	280.70	1100.00
2014-15	318.43	306.83	241.78	343.65	1992.62	350.60	1655.04
2015-16	194.52	389.66	277.52	618.16	2642.04	3150.00	1377.00
2016-17	293.23	497.50	433.34	444.98	1999.09	416.71	1927.29
2017-18	479.93	876.25	894.26	936.40	5385.9	583.66	4590.14
2018-19	331.03	568.21	427.63	942.87	3912.18	493.00	2500.71
2019-20	255.65	836.43	860.73	790.98	5038.56	880.83	4404.29
2020-21	576.47	578.74	819.80	481.25	4402.82	448.43	2562.64
2021-22	409.78	608.38	568.41	867.06	3898.48	933.98	2345.62

Source: Finance Account for various years

The receipts of municipalities in South Goa from 2011-12 to 2021-22 demonstrate significant variation across regions, with Margao and Mormugao consistently generating the highest revenues, reflecting their economic importance and larger urban bases. Margao peaked in 2017-18 with receipts of Rs. 5,385.90 lakhs, while Mormugao followed closely, reaching Rs. 4,590.14 lakhs in the same year. Smaller municipalities like Sanguem, Canacona, and Quepem show relatively modest revenue generation, though

Sanguem saw a spike in 2020-21 (Rs. 576.47 lakhs), possibly due to exceptional grants or revenue measures. The period 2017-18 was particularly notable, with most municipalities experiencing a surge in receipts. Post-pandemic trends indicate a decline in receipts for major municipalities like Margao and Mormugao, reflecting economic slowdowns, while smaller municipalities like Cuncolim and Canacona show stabilization or modest growth. Overall, the data underscores disparities in revenue generation capabilities of municipalities in South Goa.

Figure 8.7: Receipts of municipalities of South Goa (in lakhs)



Source: Finance Account for various years

Overall most of the municipalities in South Goa are showing a declining receipts except for Cuncolim for the year 2021-22 has shown an increase. Compared to other municipalities in South Goa, Margao and Mormugao generated more income.

Table 8.38: Expenditure of Municipalities of South Goa (in lakhs)

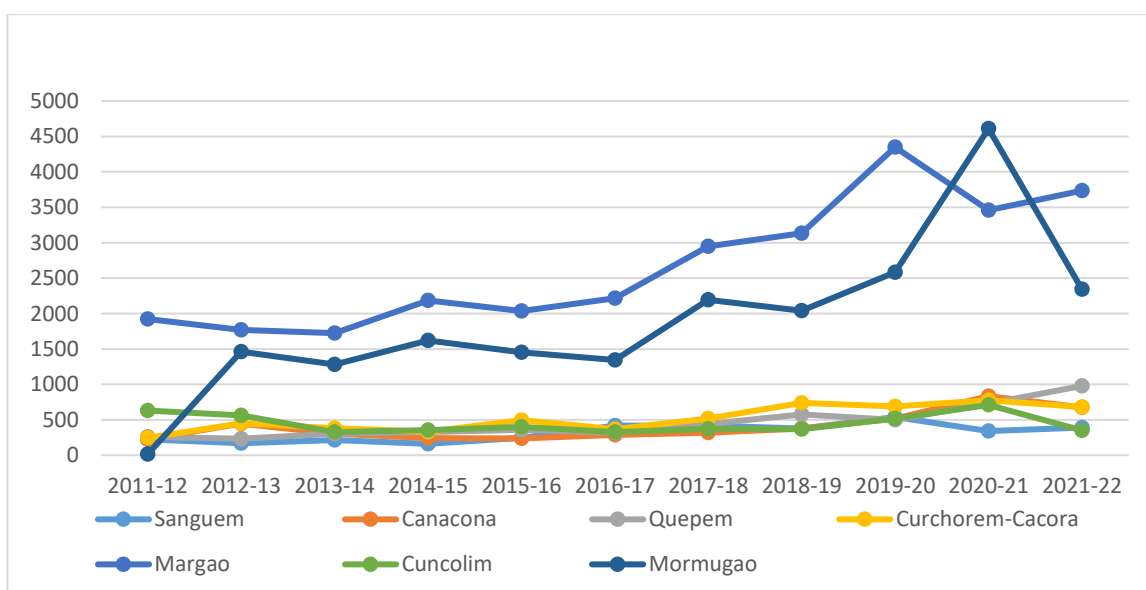
Year	Sanguem	Canacona	Quepem	Curchorem-Cacora	Margao	Cuncolim	Mormugao
2011-12	221.21	228.66	261.3	247.23	1921.78	628.48	16.00
2012-13	167.18	442.61	233.04	447.48	1767.78	561.78	1460.00
2013-14	213.24	302.89	306.83	382.27	1723.14	326.98	1280.00
2014-15	160.37	241.71	329.50	332.77	2185.75	354.00	1618.77
2015-16	245.32	238.04	358.07	493.75	2033.93	399.7	1452.00
2016-17	418.42	288.45	318.02	369.9	2216.34	326.93	1345.70
2017-18	417.69	316.89	438.29	516.06	2947.36	371.36	2191.43
2018-19	378.03	378.28	574.46	737.55	3132.01	370.00	2041.67
2019-20	539.00	515.5	499.79	690.61	4347.84	516.69	2584.04
2020-21	341.64	833.49	727.51	776.59	3457.9	709.47	4609.94

2021-22	392.04	675.51	978.42	677.74	3735.55	351.75	2340.92

Source: Finance Account for various years

The expenditure of South Goa municipalities from 2011-12 to 2021-22 highlights significant disparities in spending, with Margao consistently having the highest expenditure, reflecting its role as a major urban center. Margao's expenditure peaked in 2019-20 at Rs. 4,347.84 lakhs, followed by a slight decline, reaching Rs. 3,735.55 lakhs in 2021-22. Mormugao also shows substantial spending, peaking in 2020-21 (Rs.4,609.94 lakhs), likely due to increased pandemic-related costs. Smaller municipalities like Sanguem, Canacona, and Quepem maintain lower but steady expenditures, with occasional spikes such as Canacona's sharp rise in 2020-21 (Rs.833.49 lakhs). Most municipalities experienced notable expenditure increases in 2017-18 and 2018-19. By contrast, spending patterns in Cuncolim remain more restrained, with minimal variation over the years. Overall, the data indicates a trend of rising expenditure across municipalities, driven by increasing service demands, inflation, and localized development projects.

Figure 8.8: Expenditure of municipalities of South Goa (in lakhs)



Source: Finance Account for various years

The expenditure of Margao municipality is higher compared to other municipalities in South Goa, followed by Mormugao. The expenditure pattern is continuously rising for both of these municipalities. The expenditure of Mormugao has drastically increased between 2011-12 to 2020-21. The expenditure between 2020-21 and 2021-22 has witnessed a decline for Mormugao, Curcholem-Cacora and Cuncolim, while Margao and Sanguem have shown an increase in the expenditure.

8.3.2 Income head of ULBs

The income of the ULBs is broadly classified into three categories:

- i) Municipal rates and taxes
- ii) Receipt, and
- iii) Income from other sources

Table 8.39: Income from Municipal rates and taxes for the ULBs (in Lakh)

Year	Octroi	Taxes on House and Land	Others	Total
2011-12	744.92	1,498.18	369.55	2612.65
2012-13	2535.73	1652.68	370.06	4558.47
2013-14	968.05	1,900.79	1,483.81	4,352.65
2014-15	1,081.60	2,209.44	361.71	3,652.75
2015-16	931.30	2178.32	628.71	3738.33
2016-17	1629.25	2473.04	581.96	4684.25
2017-18*	2515.25	2872.68	565.48	5953.41
2018-19	0.00	3209.56	685.11	3894.67
2019-20	0.00	3288.2	677.32	3965.52
2020-21	0.00	3297.81	592.55	3890.36
2021-22	0.00	4276.07	723.76	4999.83

*From the year 2017 Octroi has become part of GST

Source: Finance Account for various years

Table shows the municipal rates and taxes received by the ULBs from Octroi, taxes on house and land and others. In the last 10 years there is no much increase in the total income from municipal rates and taxes. It is since 2018-19 till 2020-21 the total income from municipal rates and taxes reduced due inclusion of Octroi in GST. There is a slight increase in the municipal rates and taxes in the year 2021-22.

Table 8.40: Income from receipts for the ULBs (in Lakh)

Year	Realisation under special acts	Markets	Slaughter houses	Rent for houses and lands	Other fees & revenue	Total
2011-12	33.01	328.51	2.75	416.73	2,320.94	3101.94
2012-13	128.69	323.92	2.20	472.08	2703.87	3630.76
2013-14	29.49	312.64	2.83	445.10	1,557.13	2,347.19
2014-15	0.20	366.80	1.02	639.10	3,941.36	4948.48

2015-16	--	384.50	2.40	872.78	3050.83	4310.51
2016-17	0.01	377.72	--	895.90	3285.91	4559.54
2017-18*	15.46	569.29	--	1190.57	5485.73	7261.05
2018-19	8.03	567.5	1.50	875.46	6253.45	7705.94
2019-20	52.98	552.71	--	865.83	3873.7	5345.22
2020-21	21.13	346.19	--	856.78	5197.53	6421.63
2021-22	18.01	452.38	--	1006.00	4572.93	6049.32

Source: Finance Account for various years

The Table depicts the ULBs income from the receipts from realisation under special acts, markets, slaughter houses, rent for houses and lands, and other fees and revenue. The income from receipts has increased since 2012 but the increase is not constant but fluctuating. The major contribution to the income from receipts is from ‘other fees and revenue’.

Table 8.41: ULBs income from other sources (in Lakh)

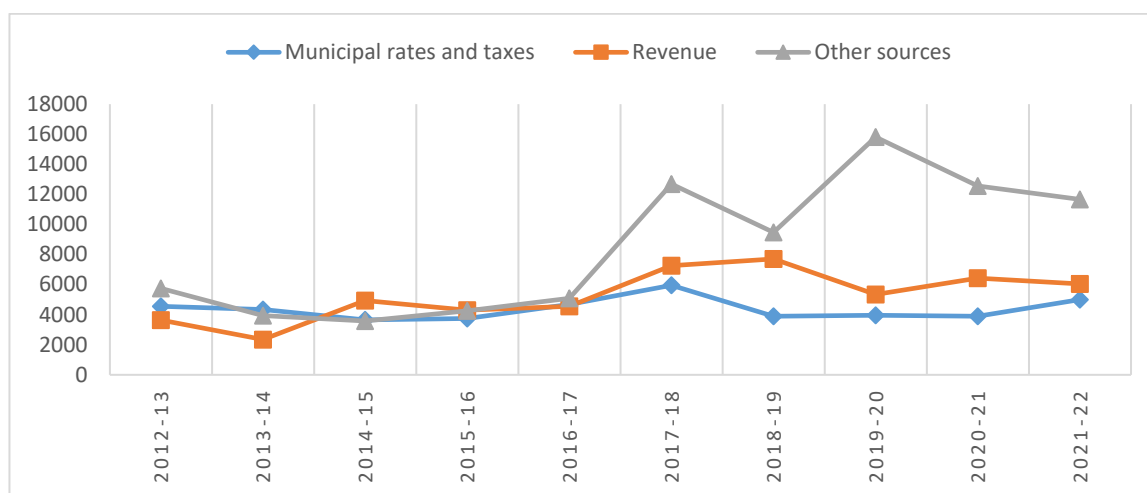
Year	Govt. Grants	Interests on receipts	Miscellaneous	Security Deposit/EMD/Loans & Advances	Total
2011-12	5,368.16	403.46	500.48	990.23	7262.30
2012-13	3850.75	924.19	452.66	520.26	5747.86
2013-14	1,975.95	1,027.43	622.53	311.71	3,937.62
2014-15	1,967.27	704.80	271.24	636.34	3,579.65
2015-16	1767.60	1466.59	260.47	757.17	4251.83
2016-17	2800.08	801.94	713.27	765.11	5080.4
2017-18*	9030.77	1113.51	1336.08	1201.62	12681.98
2018-19	5330.13	914.96	1520.24	1708.84	9474.17
2019-20	12253.94	1011.12	1312.92	1231.44	15809.42
2020-21	7709.91	1040.35	3153.76	662.94	12566.96
2021-22	7280.97	1730.84	1361.60	1297.36	11670.77

Source: Finance Account for various years

The Table summarizes the financial inflows for ten years (2012-13 to 2021-22), categorized into Government Grants, Interest on Receipts, Miscellaneous Receipts, and Security Deposits/EMD/Loans and advances, with all figures in lakh rupees. Government Grants represent the largest component of the inflows, with significant peaks in 2017-18 (Rs. 9,030.77 lakh) and 2019-20 (Rs. 12,253.94 lakh). Interest on Receipts has generally been stable, peaking in 2021-22 at Rs. 1,730.84 lakh, reflecting effective fund management. Miscellaneous Receipts show gradual growth over the years, with notable increases in 2017-

18 (Rs.1,336.08 lakh) and 2020-21 (Rs.3,153.76 lakh). Income from Security Deposits/EMD/Loans and Advances fluctuate, with a peak in 2018-19 (Rs.1,708.84 lakh). The total inflows exhibit an increasing trend, reaching a high of Rs.15,809.42 lakh in 2019-20. This reflects an expansion in financial activities, grant allocations, and revenue from diverse sources.

Figure 8.9: Aggregate income of ULBs in Goa (in Lakh)



Source: Data compiled from the Statistical Hand Book of Goa of various years

The Figure illustrates the financial inflows over ten years, showing Government Grants as the primary source, peaking at Rs.12,253.94 lakh in 2019-20. Other components like Interest on Receipts, Miscellaneous Receipts, and Security Deposits/EMD/Loans and Advances contribute variably, with notable peaks in 2017-18 and 2020-21. The total inflows demonstrate a generally increasing trend, reaching a high of Rs.15,809.42 lakh in 2019-20, reflecting growing financial activities and diversified revenue sources. This highlights effective fund allocation and management, with variations influenced by policy and economic factors.

Table 8.42: Aggregate income and growth rate of ULBs (In Lakh)

Year	Municipal rates and taxes	Revenue	Other sources
2011-12	2612.65	3101.94	7262.30
2012-13	4558.47	3630.76	5,747.86
2013-14	4,352.65	2,347.19	3,937.62
2014-15	3,652.75	4948.48	3,579.65
2015-16	3738.33	4310.51	4,251.83
2016-17	4684.25	4559.54	5,080.40
2017-18	5953.41	7261.05	12,682.00

2018-19	3894.67	7705.94	9,474.17
2019-20	3965.52	5345.22	15,809.40
2020-21	3890.36	6421.63	12,567.00
2021-22	4999.83	6049.32	11,670.80

Source: Finance Account for various years

The table presents data on municipal rates and taxes, revenue, and other sources of income for the years 2011-12 to 2021-22. Over the decade, municipal rates and taxes show fluctuations, peaking at Rs.5,953.41 lakh in 2017-18. Revenue exhibits a general upward trend, reaching its highest in 2018-19 at Rs.7,705.94 crore, before declining slightly in subsequent years. Income from other sources is notably volatile, surging to a peak of Rs.15,809.40 lakh in 2019-20 which has further reduced to Rs. 11,670 lakh. Overall, the data reflects variability across all categories, with significant increases in certain years, particularly in other sources of income, which contribute a substantial portion of the total finances.

8.3.3 Expenditure head of the Municipalities

The overall expenditure of the municipalities can be classified as follows:

- i) Administration
- ii) Public Safety
- iii) public health, convenience and instructions
- iv) Expenditure on miscellaneous

Table 8.43: Expenditure under general administration of municipalities in Goa (in lakhs)

Year	General Administration
2011-12	2,221.59
2012-13	5,856.64
2013-14	6,122.92
2014-15	5,707.82
2015-16	7,592.43
2016-17	8,472.07
2017-18	9,155.55
2018-19	9,952.05
2019-20	10,184.99
2020-21	10,044.77
2021-22	10,695.75

Source: Finance Account for various years

It is evident from the Table that the expenditure on general administration of municipalities in Goa is consistently increasing from Rs. 2,221.59 lakhs in 2011-12 to Rs. 10,695.75 lakhs in 2021-22 with 381.446 percent increase.

Table 8.44: Expenditure on public safety

Year	Public lighting	Others	Public safety	Total
2011-12	58.04	7.01	28.29	93.34
2012-13	68.25	16.93	5.90	91.08
2013-14	72.83	165.91	24.62	263.36
2014-15	35.56	312.27	43.80	391.63
2015-16	60.23	150.19	59.34	269.76
2016-17	72.53	92.66	10.33	175.52
2017-18	79.56	14.75	325.77	420.08
2018-19	117.12	274.28	233.16	624.56
2019-20	78.82	491.56	165.98	736.36
2020-21	274.49	304.44	201.23	780.16
2021-22	44.11	312.42	58.62	415.15

Source: Finance Account for various years

The above table on expenditure for public safety from 2011-12 to 2021-22 shows a fluctuating trend, with significant variations across its components—public lighting, other expenditures, and direct public safety costs. Overall, total expenditure steadily increased over the years, peaking at Rs.780.16 lakhs in 2020-21. The Other category consistently contributes the most variability, spiking notably in 2019-20 (Rs. 491.56 lakhs) and 2020-21 (Rs. 304.44 lakhs). Public lighting expenditure shows gradual growth, peaking in 2020-21 at Rs.274.49 lakhs. Direct public safety expenditure exhibits sporadic surges, most prominently in 2017-18 (Rs.325.77 lakhs) and 2018-19 (Rs.233.16 lakhs). However, expenditure dropped significantly in 2021-22 (Rs.415.15 lakhs).

Table 8.45: Expenditure on public health, convenience and instructions

Year	Water Safety	Drainage, conservancy and sanitary	Public garden	Public works	Public instructions	Total
2011-12	10.01	2,142.20	172.11	3,256.64	20.56	5,601.52
2012-13	18.84	844.89	11.86	2,967.19	104.46	3,947.24
2013-14	4.39	1,159.06	57.88	1,891.00	113.99	3,226.32
2014-15	7.71	1,338.57	53.46	1,758.12	67.18	3,225.04
2015-16	12.78	1,161.39	60.96	2,281.20	16.41	3,532.74
2016-17	9.74	97.74	80.22	1,354.72	22.11	1,564.53

2017-18	84.40	1,879.97	99.13	1,577.48	22.79	3,663.77
2018-19	49.14	2,323.49	78.54	2,938.60	24.90	5,414.67
2019-20	45.92	282.36	107.93	6,329.78	100.16	6,866.15
2020-21	78.56	2,605.70	85.08	7,669.96	16.63	10,455.93
2021-22	12.08	3,129.21	93.93	3,396.46	14.58	6,646.26

Source: Finance Account for various years

The expenditure on public health, convenience, and instructions from 2011-12 to 2021-22 shows significant variation. Public works consistently accounted for the largest share, peaking at Rs.7,669.96 lakhs in 2020-2. Drainage, conservancy, and sanitary services also saw substantial increases, with a significant rise to Rs.3,129.21 lakhs in 2021-22, indicating a focus on sanitation and waste management. Expenditure on water safety remained minimal throughout, except for a spike in 2017-18 (Rs.84.40 lakhs). Public gardens and public instructions had relatively low allocations, reflecting their secondary priority compared to sanitation and infrastructure. Overall, total expenditure fluctuated, with a peak of Rs.10,455.93 lakhs in 2020-21, followed by a decline in 2021-22.

Table 8.46: Expenditure on miscellaneous

Year	Repayment of loans and interest etc.	Others	Total
2011-12	1.61	1,037.22	1,038.83
2012-13	329.90	749.27	1,079.17
2013-14		1,503.67	1,503.67
2014-15	-	1,942.30	1,942.30
2015-16	101.63	561.50	663.13
2016-17	219.50	1,775.52	1,995.02
2017-18	-	1,458.19	1,458.19
2018-19	-	4,458.00	4,458.00
2019-20	-	2,574.97	2,574.97
2020-21	-	3,012.89	3,012.89
2021-22	19.22	3,921.40	3,940.62

Source: Finance Account for various years

The expenditure on miscellaneous items from 2011-12 to 2021-22 highlights varying patterns, with Others consistently dominating the total expenditure. Repayment of loans and interest was only significant in a few years, peaking in 2013-14 at Rs.1,503.67 lakhs, while being negligible or absent in most other years. Expenditure under Others fluctuated widely, with notable peaks in 2018-19 (Rs.4,458.00 lakhs) and 2021-22 (Rs.3,921.40 lakhs),

possibly reflecting allocations for non-regular or unforeseen expenditures like grants or emergency services. Total expenditure reached its highest in 2018-19.

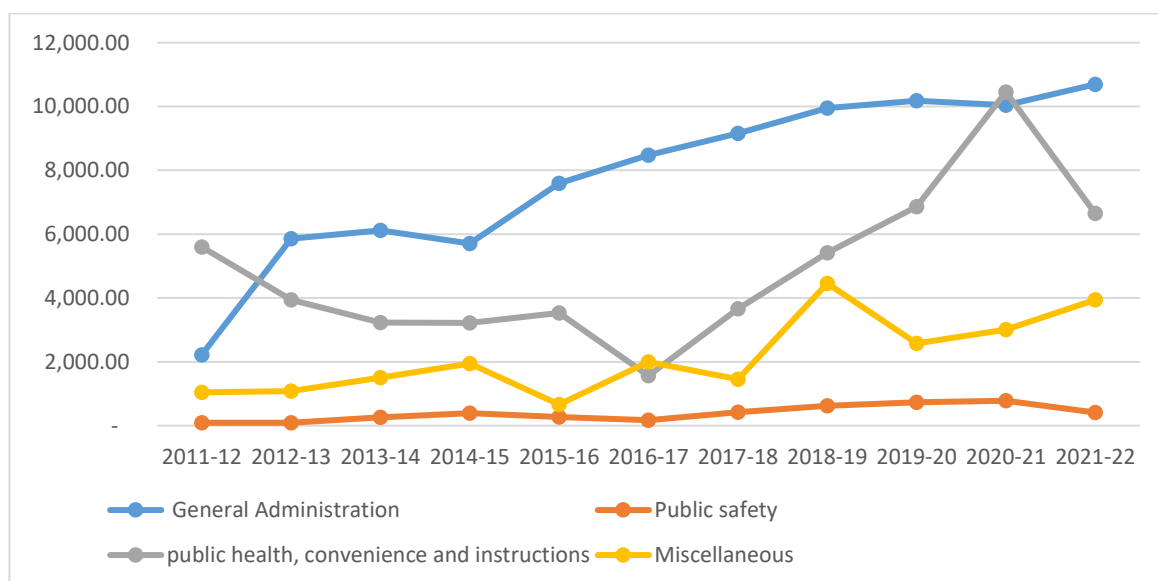
Table 8.47: Overall expenditure of municipalities

Year	General Administration	Public safety	Public health, convenience and instructions	Miscellaneous
2011-12	2,221.59	93.34	5,601.52	1,038.83
2012-13	5,856.64	91.08	3,947.24	1,079.17
2013-14	6,122.92	263.36	3,226.32	1,503.67
2014-15	5,707.82	391.63	3,225.04	1,942.30
2015-16	7,592.43	269.76	3,532.74	663.13
2016-17	8,472.07	175.52	1,564.53	1,995.02
2017-18	9,155.55	420.08	3,663.77	1,458.19
2018-19	9,952.05	624.56	5,414.67	4,458.00
2019-20	10,184.99	736.36	6,866.15	2,574.97
2020-21	10,044.77	780.16	10,455.93	3,012.89
2021-22	10,695.75	415.15	6,646.26	3,940.62

Source: Finance Account for various years

The overall expenditure of municipalities from 2011-12 to 2021-22 highlights significant growth in resource allocation across various sectors. General Administration consistently accounted for the largest share, increasing from Rs. 2,221.59 lakhs in 2011-12 to Rs.10,695.75 lakhs in 2021-22. Public health, convenience, and instructions witnessed notable fluctuations, peaking at Rs.10,455.93 lakhs in 2020-21, underscoring a response to public welfare demands, likely influenced by the pandemic. Expenditure on Public Safety remained relatively modest, though it surged in certain years, such as 2020-21. Miscellaneous expenses showed variable trends, with significant spikes in 2018-19 (Rs.4,458.00 lakhs) and 2021-22 (Rs.3,940.62 lakhs), possibly driven by unique or unforeseen circumstances. This data illustrates the dynamic nature of municipal spending, responding to governance and public service priorities.

Figure 8.10: Total expenditure of municipalities



Source: Finance Account for various years

The Figure 10 shows that the expenditure of General Administration is higher compared to other expenditures of the municipalities and is growing consistently. The expenditure under public health, convenience and instruction has seen a dip in 2016-17 and since then rising till 2020-21 and once again declined in 2021-22. The expenditure under miscellaneous has also witnessed increasing trend while the expenditure under public health is growing at a moderate phase since 2020-21 and seen an decline in 2021-22.

8.3.4 State Grants to ULBs

Table 8.48: Grants to Municipalities (in Lakh)

Year	Plan Outlay	Budget Allocation	Expenditure
2011-12		400.00	400.00
2012-13	1,000.00	1,000.00	53.48
2013-14	1,500.00	1,500.00	881.70

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The Table shows the Plan Outlay and Budget Allocation remained identical each year, indicating that funds were consistently set aside according to pre-determined plans without any apparent revisions. The budget allocation saw a significant increase, rising from 400 lakh in 2011-12 to 1,000 lakh in 2012-13 and 1,500 lakh in 2013-14. This increase reflects a rising emphasis on municipal development needs over these years. While the budget allocation increased each year, actual expenditures lagged, particularly in 2012-13, where

only a small portion of funds was used. However, this grant was discontinued after 2013-14.

Table 8.49: Grants to City Corporation of Panaji (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12			400.00	399.99
2012-13			5,000.00	530.57
2013-14		3,000.00	3,000.00	
2014-15	N	2,000.00	2,000.00	6.00
2015-16	N	2,000.00	2,000.00	68.38
2016-17	N	2,000.00	2,000.00	
2017-18	N	500.00	500.00	480.84
2018-19	N	500.00	500.00	30.31
2019-20	N	500.00	500.00	11.58
2020-21	N	500.00	500.00	224.33
2021-22	N	500.00	500.00	100.00
2022-23		375.00	375.00	374.43
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

It is evident from the table 38 that the plan outlay has drastically reduced from Rs. 2000 Lakh 2012-17 to Rs. 500 Lakh in 2017-18, with a corresponding reduction in the budget allocation. This was further reduced to Rs. 375 in 2022-23. There are gaps between budget allocations and actual expenditures, particularly in years with higher allocations. The grants allocated to the City Corporation of Panaji show several years marked by low fund utilization despite high allocations.

Table 8.50: Grants to Margao Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12			100.00	99.94
2012-13			100.00	
2013-14	N			
2014-15	N	600.00	600.00	6.00
2015-16	N	800.00	800.00	11.81
2016-17	N	800.00	800.00	11.82
2017-18	N	500.00	500.00	273.34
2018-19	N	500.00	500.00	
2019-20	N	500.00	500.00	221.35
2020-21	N	500.00	500.00	
2021-22	N	500.00	500.00	113.34
2022-23	N	375.00	375.00	372.14

N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table shows grants provided to the Margao Municipal Council from 2011-12 to 2022-23. It is evident from the above table that, the plan outlay and budget allocation has regularly increasing till 2017-18. Since then, it remained constant at Rs. 500 Lakh till 2021-22. The plan outlay and budget allocation reduced to Rs. 375 Lakh in 2022-23. In 2014-15, although 600 lakh was allocated, only 6 lakh was spent. Similarly, in 2015-16 and 2016-17, expenditures were only around 11.81 lakh out of 800 Lakh, indicating low fund utilization. Persistent underutilization of funds in earlier years could be one of the reasons for the reduction in the allocation of funds in the subsequent years. It is only in the year 2022-23, expenditure reached 372.14 Lakh out of 375 Lakh.

Table 8.51: Grants to Marmugao Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	600.00	600.00	17.91
2015-16	N	800.00	800.00	11.81
2016-17	N	800.00	800.00	11.82
2017-18	N	500.00	500.00	11.82
2018-19	N	500.00	500.00	8.32
2019-20	N	500.00	500.00	
2020-21	N	500.00	500.00	
2021-22	N	500.00	500.00	402.71
2022-23	N	375.00	375.00	474.87
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table provides an overview of grants provided to the Marmugao Municipal Council from 2014-15 to 2022-23. The grants to Marmugao Municipal Council was provided since 2014. From 2014-15 onwards, the Plan Outlay and Budget Allocation were set at either 500 or 800 lakh each year, except in 2022-23, where it was slightly reduced to 375 lakh. From 2014-15 to 2018-19, expenditures were significantly low despite high allocations. From 2021-22 onward, a significant improvement is visible, with 402.71 lakh spent in 2021-22 out of the allocated 500 lakh and 474.87 lakh utilized in 2022-23 out of 375 lakh.

Table 8.52: Grants to Ponda Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	300.00	300.00	58.9

2015-16	N	500.00	500.00	76.73
2016-17	N	500.00	500.00	7.94
2017-18	N	500.00	500.00	77.86
2018-19	N	500.00	500.00	
2019-20	N	500.00	500.00	
2020-21	N	500.00	500.00	17.49
2021-22	N	500.00	500.00	426.77
2022-23	N	350.00	350.00	317.33
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The Table 41 shows that, from 2015-16 to 2021-22, the budget allocation remained steady at 500 lakh annually, except for the initial year (2014-15) with a 300 lakh allocation, and 2022-23, when the allocation decreased to 350 lakh. For most of the period since 2014-15 the expenditure remained drastically low compared to the budget allocation. There was no expenditure shown under this grant for the year 2018-19 and 2019-20. There is a notable increase in expenditure in the recent years, particularly in 2021-22, where 426.77 lakh was utilized out of the 500 lakh allocation. In 2022-23, with a reduced budget allocation of 350 lakh, the Ponda Municipal Council spent 317.33 lakh, showing nearly full utilization of allocated grant.

Table 8.53: Grants to Mapusa Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	300.00	300.00	193.25
2015-16	N	800.00	800.00	154.60
2016-17	N	800.00	800.00	12.86
2017-18	N	500.00	500.00	273.91
2018-19	N	500.00	500.00	5.24
2019-20	N	500.00	500.00	
2020-21	N	500.00	500.00	198.42
2021-22	N	500.00	500.00	568.03
2022-23	N	350.00	350.00	247.74
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The above table shows the grants provided to the Mapusa Municipal Council across different years. This table shows a consistent allocation in certain periods, while some years saw reduced funds (such as in 2022-23). The allocation rose from 300 lakh in 2014-15 to 800 lakh in both 2015-16 and 2016-17. Starting from 2017-18, the budget allocation

decreased to 500 lakh annually and then to 350 lakh in 2022-23. The table also indicates there was a consistent decline in expenditure, with a notable low in 2018-19, where only 5.24 lakh was spent out of a 500 lakh allocation. Expenditure increased significantly, reaching its peak in 2021-22 with 568.03 lakh spent.

Table 8.54: Grants to Curchorem Cacora Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	200.00	200.00	208.29
2015-16	N	1000.00	1000.00	109.68
2016-17	N	1000.00	1000.00	14.42
2017-18	N	500.00	500.00	213.04
2018-19	N	500.00	500.00	466.20
2019-20	N	500.00	500.00	116.48
2020-21	N	500.00	500.00	30.48
2021-22	N	500.00	500.00	348.61
2022-23	N	350.00	350.00	6.45
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table provides an overview of grants allocated to the Curchorem Cacora Municipal Council from 2014-15 to 2022-23. Initial funding varied, with 200 lakh allocated in 2014-15, which then significantly increased to 1000 lakh for 2015-16 and 2016-17. From 2017-18 onward, allocations were generally set at 500 lakh, with a reduction to 350 lakh in 2022-23. The Curchorem Cacora Municipal Council's spending patterns are highly inconsistent, with some years of high utilization but many years of significant underutilization. 2017-18 and 2018-19 marked expenditure, with 213.04 lakh and 466.20 lakh spent, respectively. The expenditure fell drastically in the year 2022-23, despite a reduced allocation of 350 lakh, only 6.45 lakh was spent.

Table 8.55: Grants to Cuncolim Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	200.00	200.00	57.21
2015-16	N	300.00	300.00	26.75
2016-17	N	300.00	300.00	16.28
2017-18	N	300.00	300.00	6.81
2018-19	N	300.00	300.00	-
2019-20	N	300.00	300.00	4.46
2020-21	N	300.00	300.00	-

2021-22	N	300.00	300.00	400.00
2022-23	N	175.00	175.00	44.94
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table details the grants allocated to Cuncolim Municipal Council from 2014-15 to 2022-23. The council received a stable budget allocation of 300 lakh annually from 2015-16 to 2021-22, except for a reduced allocation of 175 lakh in 2022-23. From 2014-15 to 2020-21, actual expenditure is relatively low, with no full utilization of the allocated budget in any year. In 2014-15, only 57.21 lakh out of 200 lakh was spent, and in 2019-20, just 4.46 lakh was used from a 300 lakh allocation.

Table 8.56: Grants to Canacona Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	200.00	200.00	13.71
2015-16	N	300.00	300.00	78.90
2016-17	N	300.00	300.00	13.27
2017-18	N	300.00	300.00	154.91
2018-19	N	300.00	300.00	8.39
2019-20	N	300.00	300.00	7.27
2020-21	N	300.00	300.00	
2021-22	N	300.00	300.00	121.78
2022-23	N	175.00	175.00	
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source : Financial Accounts Vol II from 2011-12 to 2022-23

This table presents grants allocated to the Canacona Municipal Council from 2014-15 to 2022-23. The data illustrates the trends in fund distribution and actual utilization, highlighting variations in spending efficiency over the years. For most of the years (2015-16 to 2021-22), Canacona Municipal Council received a budget allocation of 300 lakh. Actual expenditure remains well below the allocated budget for most years, indicating significant underutilization. In 2014-15, for instance, only 13.71 lakh was spent out of the 200 lakh allocation. This pattern continues in other years, such as 2016-17 (13.27 lakh) and 2018-19 (8.39 lakh).

Table 8.57: Grants to Pernem Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	200.00	200.00	3.00
2015-16	N	200.00	200.00	5.81
2016-17	N	200.00	200.00	12.64

2017-18	N	200.00	200.00	5.62
2018-19	N	200.00	200.00	
2019-20	N	200.00	200.00	95.14
2020-21	N	200.00	200.00	99.33
2021-22	N	200.00	200.00	296.25
2022-23	N	150.00	150.00	140.82
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table outlines the grants provided to Pernem Municipal Council from 2014-15 to 2022-23. From 2014-15 to 2021-22, the budget allocation for Pernem Municipal Council remained steady at 200 lakh each year, indicating a consistent funding level. In 2022-23, the allocation was reduced to 150 lakh. From 2014-15 to 2018-19, expenditure remained low despite the full annual allocations. In 2014-15, only 3 lakh was spent out of the allocated 200 lakh, and in 2017-18, expenditure was limited to 5.62 lakh. The year 2021-22 saw a dramatic increase in spending, with 296.25 lakh. In 2022-23, 140.82 lakh of the 150 lakh allocation was spent. The Pernem Municipal Council's expenditure patterns show a marked improvement from the initial years of low spending to more consistent and substantial fund utilization from 2019-20 onwards.

Table 8.58: Grants to Quepem Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	200.00	200.00	11.59
2015-16	N	300.00	300.00	18.91
2016-17	N	300.00	300.00	12.51
2017-18	N	300.00	300.00	235.21
2018-19	N	300.00	300.00	7.57
2019-20	N	300.00	300.00	16.95
2020-21	N	300.00	300.00	279.41
2021-22	N	300.00	300.00	100.00
2022-23	N	150.00	150.00	140.45
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The above table shows that, from 2015-16 to 2021-22, the budget allocation remained at 300 lakh annually, demonstrating a stable financial commitment to the municipal council. However, in 2022-23, the allocation was reduced to 150 lakh. From 2014-15 to 2016-17, spending was consistently low relative to the budget allocation, with only 11.59 lakh spent

in 2014-15 and 12.51 lakh in 2016-17. In 2017-18, expenditure rose sharply to 235.21 lakh, and again in 2020-21 to 279.41 lakh. While early years show underutilization, the Quepem Municipal Council demonstrated improved expenditure rates, particularly in 2020-21 and 2022-23.

Table 8.59: Grants to Bicholim Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	200.00	200.00	7.85
2015-16	N	300.00	300.00	179.27
2016-17	N	300.00	300.00	220.35
2017-18	N	300.00	300.00	111.05
2018-19	N	300.00	300.00	299.12
2019-20	N	300.00	300.00	
2020-21	N	300.00	300.00	298.80
2021-22	N	300.00	300.00	366.61
2022-23	N	175.00	175.00	253.92
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table 48 provides a detailed overview of grants allocated to the Bicholim Municipal Council from 2014-15 to 2022-23. The budget allocation for the Bicholim Municipal Council remained steady at Rs. 300 lakh from 2015-16 to 2021-22. The Budget Allocation dropped to Rs. 175 lakh for the year 2022-23. The years following 2014-15 saw a significant increase in expenditure, of Rs. 366.61 lakh in 2021-22.

Table 8.60: Grants to Sanquelim Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	200.00	200.00	3.00
2015-16	N	200.00	200.00	
2016-17	N	200.00	200.00	
2017-18	N	200.00	200.00	151.27
2018-19	N	200.00	200.00	78.12
2019-20	N	200.00	200.00	
2020-21	N	300.00	300.00	150.50
2021-22	N	300.00	300.00	165.20
2022-23	N	175.00	175.00	147.65
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The above table indicates that, from 2014-15 to 2018-19, the Plan Outlay and Budget Allocation remained steady at 200 lakh. In 2020-21, the Budget Allocation increased to Rs.

300 lakh. The allocation for 2022-23 was reduced to Rs. 175 lakh. The Sanquelim Municipal Council has shown periods of both low and improved expenditure levels. The initial years exhibited significant challenges in fund utilization, while recent years indicate a better capacity to absorb funds and execute projects effectively.

Table 8.61: Grants to Sanguem Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	200.00	200.00	131.23
2015-16	N	200.00	200.00	13.22
2016-17	N	200.00	200.00	15.49
2017-18	N	200.00	200.00	167.57
2018-19	N	200.00	200.00	17.64
2019-20	N	200.00	200.00	5.01
2020-21	N	200.00	200.00	145.20
2021-22	N	200.00	200.00	161.40
2022-23	N	150.00	150.00	145.17
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table 50 displays grants provided to the Sanguem Municipal Council. or most years (2014-15 to 2021-22), both the plan outlay and budget allocation are consistently set at Rs. 200 lakh. In 2022-23, the budget allocation and plan outlay were reduced to Rs.150 lakh, indicating a decrease in funds for that year. Expenditure varied widely across the years, with some years showing minimal spending despite high allocations (e.g., 2015-16 and 2019-20), while other years showed high utilization (e.g., 2017-18, 2021-22, and 2022-23). The years from 2020-21 onwards saw increased expenditure.

Table 8.62: Grants to Valpoi Municipal Council (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2014-15	N	200.00	200.00	13.27
2015-16	N	200.00	200.00	84.48
2016-17	N	200.00	200.00	4.48
2017-18	N	200.00	200.00	142.57
2018-19	N	200.00	200.00	74.94
2019-20	N	200.00	200.00	9.85
2020-21	N	200.00	200.00	
2021-22	N	200.00	200.00	130.43
2022-23	N	150.00	150.00	150.00
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table displays annual grants provided to the Valpoi Municipal Council. For most years (2014-15 to 2021-22), both plan outlay and budget allocation are set at Rs.200 lakh, which shows a consistent funding pattern. In 2022-23, the allocation and plan outlay were reduced to Rs.150 lakh. The table shows fluctuation in the expenditure pattern of the Valpoi Municipal Council. The expenditure varies significantly from year to year, with some years (2016-17, 2019-20) having minimal spending despite full allocations, while others (2017-18, 2021-22, and 2022-23) have higher utilization. The budget allocation was fully utilised in the year 2021-22.

Table 8.63: Grants to Goa State Urban Development Authority (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12	N		34.00	31.63
2012-13	N		36.00	
2013-14		40.00	40.00	46.09
2014-15	N	53.00	53.00	
2015-16	N	40.00	40.00	31.76
2016-17	N	80.00	80.00	72.46
2017-18	N	80.00	80.00	38.19
2018-19	N	80.00	80.00	79.01
2019-20	N	80.00	80.00	108.11
2020-21	N	150.00	150.00	34.35
2021-22	N	100.00	100.00	75.21
2022-23	N	100.00	100.00	39.25
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table presents the annual grants to the Goa State Urban Development Authority (GSUDA) from 2011-12 to 2022-23. The table shows that, the budget allocation and expenditure fluctuated across the years. From 2011-12 to 2013-14, allocations were relatively low, in 2014-15, the allocation increased to Rs. 53 lakh, then decreased back to Rs. 40 lakh in 2015-16. Starting in 2016-17, the budget allocation doubled to Rs. 80 lakh and remained consistent until 2019-20. In 2020-21, there was a significant increase to 150 lakh, but the allocation decreased again in 2021-22 and 2022-23 to 100 lakh. Certain years show near or full utilization of the allocated budget, such as 2011-12, 2016-17, and 2018-19. In 2013-14 and 2019-20, expenditures exceeded the allocations. Years like 2017-18, 2020-21, and 2022-23 show significant under-utilization. Allocations generally increased

over time, notably in 2020-21, when it reached 150 lakh. However, this higher allocation did not result in corresponding expenditure, as only 34.35 lakh was spent that year.

Table 8.64: Solid Waste Management (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12	N		1000.00	513.60
2012-13	N		1000.00	158.88
2013-14		1000.00	1000.00	444.77
2014-15	N	700.00	700.00	105.49
2015-16	N	900.00	900.00	296.64
2016-17	N	900.00	900.00	415.36
2017-18	N	700.00	700.00	348.73
2018-19	N	700.00	700.00	89.05
2019-20	N	600.00	600.00	104.19
2020-21	N	1500.00	1500.00	340.35
2021-22	N	1000.00	1000.00	239.86
2022-23	N	500.00	500.00	98.24
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The Table represents budget allocations and expenditures for Solid Waste Management from 2011-12 to 2022-23. The initial years (2011-12 to 2013-14) show a high budget allocation of Rs. 1000 lakh each year. Budget allocation decreasing to Rs. 700 lakh in 2014-15 and fluctuating between Rs. 600 and Rs. 900 lakh up to 2019-20. Allocation peaked at Rs. 1500 lakh in 2020-21, decreased to Rs.1000 lakh in 2021-22 and then to Rs.500 lakh in 2022-23. There is a noticeable pattern of fluctuation in expenditures, with some years having low utilization (e.g., 2012-13 and 2018-19) and others showing moderate to high utilization (e.g., 2016-17 and 2017-18). In 2020-21, even with the highest allocation of 1500 lakh, expenditure remained low, at 340.35 lakh. The decline in budget allocations in recent years is combined with low expenditures in recent years.

Table 8.65: Compensation of Municipalities in lieu of Octroi (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12	N		2000.00	2000.00
2012-13	N		2100.00	2014.63
2013-14		2000.00	2000.00	1063.80
2014-15	N	1250.00	1250.00	1112.42
2015-16	N	1500.00	1500.00	999.78
2016-17	N	1500.00	1500.00	1612.64
2017-18	N	1500.00	1500.00	2515.22
2018-19	N	-	-	-
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table outlines the Compensation of Municipalities in lieu of Octroi. The budget allocation remained steady at 2000 lakh for the initial three years. The allocation dropped significantly to 1250 lakh. Allocation increased to 1500 lakh, where it remained stable for three years. In 2011-12 the expenditure matched the allocation exactly, with 2000 lakh spent. In the year 2012-13 the expenditure slightly exceeded the allocation. In 2017-18 the expenditure sharply increased to 2515.22 lakh, exceeding the budget by a substantial margin. Since 2018-19 no expenditure data is available. Expenditure varies significantly year-to-year, with some years showing full or over-utilization and others indicating substantial under-utilization.

Table 8.66: Integrated Developments of Major Towns (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12	N		1800.00	1355.05
2012-13	N	15314.00	15314.00	1104.09
2013-14		9000.00	9000.00	1033.66
2014-15	N	5000.00	5000.00	1324.36
2015-16	N	6000.00	6000.00	2422.65
2016-17	N	5000.00	5000.00	1976.48
2017-18	N	3000.00	3000.00	5433.71
2018-19	N	3000.00	3000.00	2163.15
2019-20	N	600.00	600.00	-
2020-21	N	500.00	500.00	-
2021-22	N	-	-	-
2022-23	N	-	-	-
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table detailing the Integrated Developments of Major Towns illustrates significant fluctuations in budget allocation and expenditure from 2011-12 to 2022-23. In 2011-12, the budget allocation was Rs.1800 lakh, with an expenditure of Rs.1355.05 lakh, indicating a utilization rate of approximately 75%. The following year, 2012-13, saw a drastic increase in allocation to Rs. 5,314 lakh, but expenditure dropped to Rs.1104.09 lakh, reflecting only about 7.2% utilization. The trend of increasing allocations continued, peaking at Rs.9000 lakh in 2013-14 and subsequently at Rs.6000 lakh in 2015-16, where expenditure increased significantly to Rs.2422.65 lakh. The fiscal year 2017-18 marked a high expenditure of Rs.5433.71 lakh against a Rs.3000 lakh allocation. However, expenditures saw a decline in 2019-20 and 2020-21, with allocations of Rs.600 lakh and Rs.500 lakh, respectively, but the

table do not show any records of expenditure. There were no grants allocated from 2021-22 to 2022-23, suggesting a significant shift in focus or funding priorities.

Table 8.67: Smart City Mission (Plan) (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2021-22		23086.00	23086.00	15560.00
2022-23		15000.00	15000.00	14950.00
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table for the Smart City Mission (Plan) shows budget allocation and expenditure for the fiscal years 2021-22 and 2022-23. In 2021-22, the budget allocation was Rs. 23,086 lakh and an expenditure of Rs.15,560 lakh, indicating a utilization rate of approximately 67.3 percent. This suggests effective spending but also highlights that about one-third of the allocated funds remained unspent. In 2022-23, the budget allocation decreased significantly to Rs.15,000 lakh, with expenditure nearly matching this amount at Rs.14,950 lakh, resulting in a high utilization rate of 99.7 percent.

Table 8.68: Desilting of nalahs in urban areas (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12	N		300.00	172.81
2012-13	N		300.00	51.78
2013-14		200.00	200.00	44.09
2014-15	N	150.00	150.00	12.36
2015-16	N	150.00	150.00	-
2016-17	N	150.00	150.00	-
2017-18	N	150.00	150.00	-
2018-19	N	150.00	150.00	-
2019-20	N	150.00	150.00	-
2020-21	N	10.00	10.00	-
2021-22	N	-	-	-
2022-23	N	-	-	-
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table detailing the Desilting of Nalahs in Urban Areas reveals a concerning trend in budget allocation and expenditure from 2011-12 to 2020-21. Initially, in 2011-12, the budget allocation was Rs.300 lakh, with an expenditure of 172.81 lakh, resulting in a utilization rate of approximately 57.6%. However, in 2012-13, expenditure was just 51.78 lakh, despite the same allocation of Rs.300 lakh, indicating significant under-utilization.

The following years saw continued reductions in both budget allocation and expenditure; in 2013-14, the allocation dropped to Rs.200 lakh with a minimal expenditure of Rs.44.09 lakh, and from 2014-15 onward, the budget was consistently set at Rs.150 lakh, with the expenditure dropping to zero for several consecutive years (2015-16 to 2019-20), suggesting that no funds were utilized for desilting activities during this period. In 2020-21, the allocation was further reduced to just Rs.10 lakh, but again, no expenditure was reported.

Table 8.69: Strengthening of Directorate of Municipal Administration (in Lakh)

Year	N/TSP/SCSP	Plan Outlay	Budget Allocation	Expenditure
2011-12	N	-	18.00	18.03
2012-13	N	-	27.00	14.92
2013-14		35.00	35.00	18.81
2014-15	N	33.80	33.80	25.50
2015-16	N	50.00	50.00	23.05
2016-17	N	60.00	60.00	25.92
2017-18	N	29.37	29.37	35.76
2018-19	N	29.01	29.01	34.94
2019-20	N	41.90	41.90	38.52
2020-21	N	81.70	81.70	48.85
2021-22	N	85.50	85.50	37.99
2022-23	N	123.50	123.50	56.18
N=Normal, TSP-Tribal Sub Plan, SCSP-Scheduled Caste Sub-Plan				

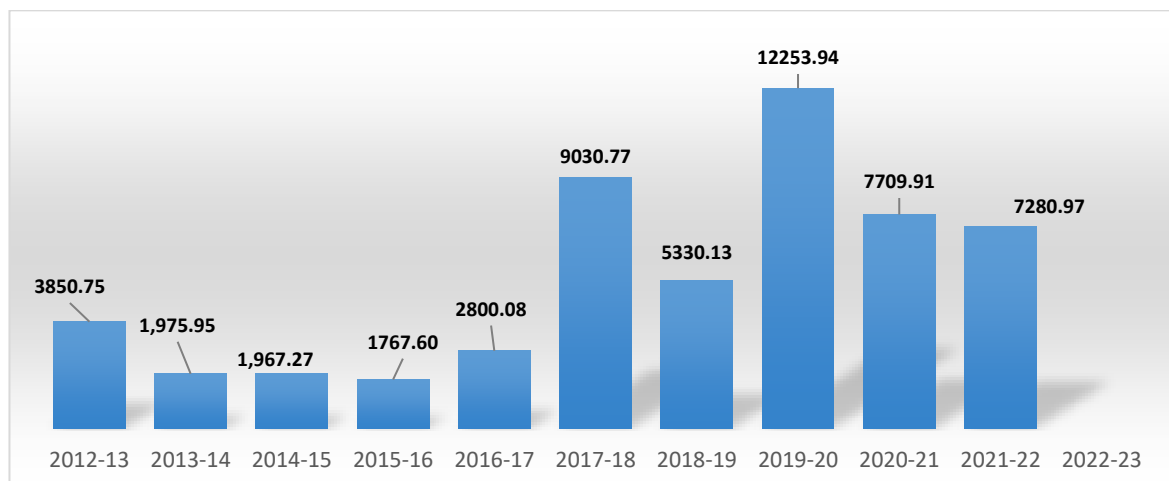
Source: Financial Accounts Vol II from 2011-12 to 2022-23

The table presents the annual grants for strengthening of Directorate of Municipal Administration from 2011-12 to 2022-23. The table shows that, the budget allocation and expenditure fluctuated across the years. With an initial allocation of Rs. 18 lakh in the year 2011-12, the allocation of budget increased to Rs.123.50 for the year 2022-23. However, the expenditure pattern fluctuated over these years. Except for the year 2017-18 the expenditure for other years constantly remained low compared to the budget allocated.

8.3.5 Grants from Government (State and Centre) to ULBs

The grants received by the ULBs since 2012 varies from each year. In the year 2019-20 the ULBs received more grants compared to any other year from 2012 to 2023. The grants received by the ULBs from the government remained almost same from 2020 onwards.

Figure 8.11: Grants from government to the ULBs (In Laks)



Source: Data collected from Directorate of Panchayats

Grant -in-aid assistance given by the state government (institution and scheme wise)

Table 8.70: Grants-in-aid to Municipal corporation/Council by state government

	Municipal Corporation		Municipal Councils		Other Municipal Authorities	
Year	Non-plan	Plan	Non-plan	Plan	Non-plan	Plan
2011-12		2,928.00	600.00	4,516.19		1,900.29
2012-13		2,928.00	415.87	2,435.21		1,308.77
2013-14		51.65	700.00	2,390.27		1,274.45
2014-15		6.00	652.09	1,217.91		2,748.72
2015-16		130.49	405.11	1,388.34		3,985.14
2016-17		20.70	2,448.02	2,528.00		2,554.94
	State Fund Expenditure		State Fund Expenditure		State Fund Expenditure	
2017-18	696.49		11,425.73		5,866.61	
2018-19	520.25		4407.15		2473.9	
2019-20	1,067.44		11888.72		595.97	
2020-21	649.73		6232.59		255.87	
2021-22	891.18		3251.9		216.77	
2022-23	374.43		6329.14		786.17	
Note: Non-plan and Plan grant is merged as State Fund Expenditure						

Source: Financial Accounts of various years

The above table indicates the grants to other local bodies include grants to Goa State Urban Development Agency, Municipal Authority and EDC Ltd. Since 2017-18 the Plan and Non-Plan grant was clubbed into State Fund Expenditure. It provides an overview of state fund expenditures for Municipal Corporation and Municipal Councils, and Other Municipal Authorities from 2011-12 to 2022-23, split into Non-Plan and Plan categories. Initially, Municipal Corporations primarily reported Non-Plan expenditures, with Rs. 2,928 Lakh

sanctioned under Plan grant in 2011-12, but these figures dropped significantly in subsequent years. Plan expenditures for Municipal Corporations saw a sharp increase in 2019-20, reaching Rs. 1067.44 Lakh, with variations in later years.

Municipal Councils experienced fluctuating expenditures, with notable peaks in state fund expenditure in 2017-18 (Rs. 11,425.73 Lakh) and expenditures reaching a high of Rs.11, 888.72 Lakh in 2019-20. Other Municipal Authorities showed a mixed trend, with their grant peaking in 2015-16 (Rs. 3,985.14 crore) and significant reductions thereafter. The expenditures remained generally lower but saw an increase in 2022-23 (Rs.786.17 Lakh). Overall, the data highlights shifting funding and expenditure patterns among the three municipal entities over the years.

Table 8.71: Grants-in-aid from Central Government (in Lakh)

Year	Allocation under FFC
2016-17	109.32
2017-18	3,976.00
2018-19	5,328.50
2019-20	8,204.50
2020-21	900.00
2021-22	
2022-23	

Source: Financial Accounts Vol II from 2011-12 to 2022-23

The Table indicates that the allocation under Fifteenth Finance Commission has increased drastically between 2016-17 to 2019-20. However the allocation has drastically reduced from Rs. 8204 Lakh to Rs. 900 Lakh in 2021-22.

Table 8.72: Total income of the ULBs (In Lakh)

Year	Total income
2012-13	13937.09
2013-14	10,637.46
2014-15	12,180.88
2015-16	12300.67
2016-17	14324.19
2017-18	25896.44
2018-19	21074.78
2019-20	25120.16
2020-21	22878.95
2021-22	22719.92

Source: Data collected from Department of Urban Development

The table represents the total income of urban local bodies (ULBs) across different financial years from 2012-13 to 2021-22. The income of urban local bodies shows an upward trend, but there are fluctuations with several periods of growth followed by some declines. The year 2012-13 to 2013-14 witnessed a sharp decline of about 23.66 percent, with income falling to Rs.10,637.46. It recovers by 14.52 percent to Rs.12,180.88 in the year 2014-15. A substantial spike in income by 80.78 percent, with Rs.25,896.44 was noticed for the year 2017-18. Post 2019-20 has seen a marginal dip in the income of the ULBs. The reason for this decline could be a sharp decline visible in the other sources of income of the ULBs.

Table 8.73: Year wise FFC grants allocated to ULBs (in Crore)

Year	Grants
2020-21	36
2021-22	27
2022-23	28
2023-24	30
2024-25	32
2025-26	32

Source: Data collected from Department of Urban Development

The table 61 depicts the year wise allocation in FFC grants to ULBs to Goa. In the year 2021-22 36 crore was released to ULBs in Goa in two instalments of Rs. 18 crore each. Out of these Rs. 18 crore Rs. 9 crore for tied grants and 9 crore for untied grants. In the year 2021-22 Rs. 27 crore was released which was again divided into Two instalments of Rs. 13.5 crore each. This was further divided into Rs. 13.5 crore each for tied (Rs. 8.1 crore) and untied grants (5.4 crore).

The allocation of grants takes place as per 90:10 ratio, 90 percent for population and 10 percent for area. The formula for the calculation of grants as per population is:

$$\frac{\text{Population of the Municipal Corporation/Council} \times 90\% \times \text{Total Grant Received}}{\text{Total population of the Municipal Corporation and council}}$$

The formula for the calculation of grants as per area is:

$$\text{Area} = \frac{\text{Area in square kilometer as per 2011 census} \times 10\% \times \text{Total Grant received}}{\text{Total area of the Municipal Corporation and council}}$$

Tied Grants

As per the information collected from the Department of Urban Development Tied grants are to be utilized by the local bodies for:

- (a) Drinking water (including rainwater harvesting and recycling) and
- (b) Solid Waster Management as recommended by FFC

Table 8.74: Distribution of Tied Grant Ist Instalment of Financial Year 2022-23 (in Lakh)

Sr. No.	Name of the MCs	Area in Square Kilometer as per 2011 census	Municipal Population as on 2011 Census	As per population	As per Area	Total
1	Corporation of City of Panaji	8.12	40017	75.27	3.42	78.69
2	Margao	15.10	87650	164.86	6.36	171.22
3	Mormugoa	27.36	94393	177.55	11.52	189.07
4	Bicholim	14.50	16986	31.95	6.10	38.05
5	Canacona	18.70	12434	23.39	7.87	31.26
6	Cuncolim	28.70	16623	31.27	12.08	43.35
7	Quepem	14.10	14795	27.83	5.94	33.76
8	Curchorem-Cacora	22.60	22730	42.75	9.51	52.27
9	Mapusa	11.32	39989	75.22	4.77	79.98
10	Ponda	5.20	22664	42.63	2.19	44.82
11	Pernem	2.52	5021	9.44	1.06	10.51
12	Valpoi	11.70	8532	16.05	4.93	20.97
13	Sanquem	4.90	6444	12.12	2.06	14.18
14	Sanquelim	14.70	13651	25.68	6.19	31.87
	Total	199.52	401929	756.00	84.00	840.00

Source: Department of Urban Development

The table indicates the distribution of tied grants across all the municipal councils/corporations in Goa. The grants are received on the basis of population and area with 90:10 ratio for population and area, with bigger municipalities/corporations having big area and more population getting more financial benefit compared to others. In Goa, Marmugao municipal council received maximum tied grants followed by, Margao, Mapusa, Panaji and others.

Table 8.75: Distribution of Tied Grants of Financial Year 2020-23 (in Lakh)

Sr. No.	Name of the MCs	2020-21 (Ist Instalment)	2020-21 (2 nd Instalment)	2021-22 (Ist Instalment)	2021-22 (2 nd Instalment)	2022-23
1	Corporation of City of Panaji	84.31	84.31	75.88	75.88	78.69

2	Margao	183.45	183.45	165.11	165.11	171.22
3	Mormugoa	202.57	202.57	182.31	182.31	189.07
4	Bicholim	40.77	40.77	36.70	36.70	38.05
5	Canacona	33.49	33.49	30.14	30.14	31.26
6	Cuncolim	46.45	46.45	41.80	41.80	43.35
7	Quepem	36.18	36.18	32.56	32.56	33.76
8	Curchorem-Cacora	56.00	56.00	50.40	50.40	52.27
9	Mapusa	85.70	85.70	77.13	77.13	79.98
10	Ponda	48.02	48.02	43.22	43.22	44.82
11	Pernem	11.26	11.26	10.13	10.13	10.51
12	Valpoi	22.47	22.47	20.22	20.22	20.97
13	Sanquem	15.20	15.20	13.68	13.68	14.18
14	Sanquelim	34.14	34.14	30.73	30.73	31.87
	Total	900.00	900.00	810.00	810.00	840.00

Source: Data collected from Department of Urban Development

The Table summarizes the distribution of tied grants to various municipal councils (MCs) in Goa for the financial years 2020-21 to 2022-23. Each year saw two installments in 2020-21 and 2021-22, with consistent allocations across installments. Total grants started at Rs.900.00 lakhs in 2020-21, decreased to Rs.810.00 lakhs in 2021-22, and rose slightly to Rs.840.00 lakhs in 2022-23. Larger municipalities like Mormugao and Margao received higher allocations, while smaller ones like Pernem and Sanguem received lower amounts.

Untied/Basic Grants to ULB

The basic grants are untied and can be used by the local bodies for location-specific felt needs, except for salary or other establishment expenditure.

Table 8.76: Distribution of Untied Grant of Financial Years 2020-22 (in Lakh)

Sr. No.	Name of the MCs	2020-21 (Ist Instalment)	2020-21 (2 nd Instalment)	2021-22 (Ist Instalment)	2021-22 (2 nd Instalment)
1	Corporation of City of Panaji	84.31	84.31	50.58	50.58
2	Margao	183.45	183.45	110.07	110.07
3	Mormugoa	202.57	202.57	121.54	121.54
4	Bicholim	40.77	40.77	24.46	24.46
5	Canacona	33.49	33.49	20.10	20.10
6	Cuncolim	46.45	46.45	27.87	27.87
7	Quepem	36.18	36.18	21.71	21.71
8	Curchorem-Cacora	56.00	56.00	33.60	33.60
9	Mapusa	85.70	85.70	51.42	51.42
10	Ponda	48.02	48.02	28.81	28.81
11	Pernem	11.26	11.26	6.75	6.75
12	Valpoi	22.47	22.47	13.48	13.48

13	Sanquem	15.20	15.20	9.12	9.12
14	Sanquelim	34.14	34.14	20.48	20.48
	Total	900.00	900.00	540.00	540.00

Source: Data collected from Department of Urban Development

The Table presents the distribution of untied grants to municipal councils (MCs) in Goa for the financial years 2020-21 and 2021-22. Each year had two instalments, with total grants amounting to Rs.900.00 lakhs in 2020-21 and reduced to Rs.540.00 lakhs in 2021-22. Larger municipalities like Mormugao and Margao received the highest allocations, while smaller ones like Pernem and Sanguem were allocated less.

Central Grants to Local Bodies

Table 8.77: Central grants to local bodies Finance Commission

Grants to local bodies under Fourteenth Finance Commission		
Year	Amount released	Expenditure incurred
2019-20	1800	2784.83
2020-21	5512	5037.08
Grants to local bodies under Fifteenth Finance Commission		
2021-22	8427	3803.54
2022-23	12220	3961.83
2023-24	6700	1650

Source: Economic Survey, Directorate of Planning, Statistics and Evaluation, (GoG, 2024b).

The trend of increasing allocations for grants to Urban Local Bodies (ULBs) coupled with less spending highlights a significant gap between fund allocation and utilization. While higher allocations reflect the government's intent to strengthen urban infrastructure and governance, underutilization points to challenges such as delays in project execution, administrative inefficiencies, or inadequate planning at the local level. To maximize the impact of these grants, it is essential to streamline fund disbursement processes, enhance capacity building within ULBs, and ensure effective monitoring of expenditures. Bridging this gap is crucial for achieving the intended urban development objectives efficiently.

Grants-in-aid to Local Bodies under state expenditure (State Plan/ State Expenditure)

Table 8.78: Grants to local bodies under state expenditure (State Plan/ State Expenditure in Lakh)

Year	12th FC	13th FC	14th FC	15th FC
2011-12				
2012-13				
2013-14		567.91		
2014-15		199.31		

2015-16			503.80	
2016-17			1,986.79	
2017-18	256.78		1,262.00	
2018-19	8.32		1,161.85	
2019-20			2,793.13	
2020-21			5,037.08	3,768.97
2021-22	402.71			3,803.54
2022-23				3,961.83

Source: Financial Accounts of various years

The table summarizes grants provided to local bodies under state expenditure from 2011-12 to 2022-23, categorized by the 12th, 13th, 14th, and 15th Finance Commissions (FC). Under the 14th FC, grants began in 2015-16 and showed significant growth, peaking at Rs. 5,037.08 Lakh in 2020-21. Transitioning to the 15th FC, grants started in 2020-21 with Rs. 3,768.97 Lakh and steadily increased to Rs.3,961.83 Lakh by 2022-23. This trend reflects a growing emphasis on local body funding, particularly under the 14th and 15th FCs in recent years.

8.4 Third State Finance Commission (TSFC)

- The existing devolution of funds both revenue and capital is approximately 10 % of state's own tax revenue should be continued (GoG, 2024a).
- The won revenues sources of the Village Panchayats in Goa constitute about 50 % of their total income. However, with the introduction of the GST in the year 2017, many of the revenue sources of the local bodies like Octroi, taxes on entertainment, etc., are now subsumed in the GST. The TSFC recommended budget provision of Rs. 50.00 crore per year with an annual increment of the Ten percent every year during the award period (2024-25 to 2028-29) to compensate the local bodies in lieu of revenue forgone due to implementation of GST (3rd State Finance Commission of Goa, 2024).
- The TSFC recommends the introduction of Professional Tax by the local bodies.
- To cope up with the climate change effect the commission recommended climate change fund of Rs. 10.00 crore per year during the award period for the weaker panchayats and group 'C' municipal authorities.

Observations of the TSFC:

- The TSFC has observed that the full potential of collecting own revenue has not been tapped by the local bodies.

Table 8.79: Devolution criteria for Grant-in-Aid by the state government as suggested by the TSFC

	Population	Area
Rural Local Bodies	90 %	10%
Urban Local Bodies	80 %	20%

Source: 3rd Finance Commission Report (2024), Government of Goa. P.7.

8.5 Recent reforms

- i) Recently the ULBs are taking initiatives to collect rent and houses taxes properly. In the year 2024-25 special drives were conducted for the recovery of House Tax.
- ii) State government is conducting GIS mapping of all the properties. This will help in identifying the construction work and illegal buildings constructed. These will be later brought into the tax structure.
- iii) The transfer of Property Tax from retail value to capital value as per 15th FC is also helping them.
- iv) Some Municipalities like Canancona and Sanquelim are showing increase in their own revenue and there is a possibility that if continued in the same manner their own revenue might increase to the extent that they become self-sufficient.

8.6 Reasons for income consistently exceeding the expenditure

Based on the discussion with the authorities under the RLB and as per the reports of (CAG, GoG, 2024a, 2024b), we have cited certain reasons for the income to be on consistently higher side as compared to the expenditures.

- i) In some cases there is delayed payment to the RLBs. This is one of the reasons for non-utilization of funds within the time. In the case of delayed payment, it is difficult for the local bodies to plan and execute the implementation any development activity or project within that short period in its reports pointed out at such delays.
- ii) In some cases CCP and few MCs have not fully utilized the money received. Dilution of delegated powers of ULBs with respect to FC grants was one of the reasons for under-utilization of the grants.
- iii) There are procedural delays. In the case of grants from the XIV and XV FC to the ULBs, utilization of these grants is subject to the approval of the DUD and

Secretary. In it is observed that, there are cases when there is a delay in the approval of the DUD and Secretary.

- iv) There are also cases when the work carried out is carried forward for the next financial year due to which Utilization Certificates are not ready by the end of the financial year. These projects are carried forward to the next financial year and cannot be shown as money utilized in the previous financial year, though the project has started in the previous financial year. The delay in the submission of the UC, also delays the release of Central FC funds. For the release of next installment from the FC submission of the UC is must.
- v) As per the information shared at the conclave held by the Panchayati Raj Ministry in the year 2024, Goa is one of the states which has framed Own Source of Revenue (OSR) rules. In terms of the per capita OSR raised by the Panchayats, Goa topped the list with Rs. 1,635 raised in tax per person (The Economic Time, November 16, 2024). Property tax constitutes as the major OSR of both the RLBs and ULBs.

The (CAG, GoG, 2024a) report states that:

Own revenues of VPs (48.40 *per cent*) were almost equal to Government grants (47.85 *per cent*) during this period. The share of Government grants increased from 44.89 *percent* to 60.81 *per cent*, while the share of own revenue decreased from 44.94 *per cento* 39.19 *per cent*. Audit observations on sources of revenue of PRIs were as below.

In the case of the ULBs the (CAG, GoG, 2024b) report states that:

Own revenue of CCP constituted 88.38 *per cent* of the total revenue, whereas it accounted for 54.55 *per cent* in the rest of the MCs. Government grants for CCP and MCs constituted 9.69 *per cent* and 41.10 *per cent* of their total revenues respectively.

However as per the CAG report (2024), in ‘the absence of adequate resources of own revenue, PRIs are highly dependent on government grants for carrying out their functions’ (CAG, 2024). The Performance Audit of Implementation of 74 Constitutional Amendment Act in Goa mentions similar situation of the ULBs. Both the RLBs and ULBs are dependent upon the government grants to meet the establishment expenditure.

- vi) The CAG (2024) report also points at delays in the constitution of State Finance Commission (SFC) and no action taken on any of the recommendations of SFC. The CAG in its report recommended that, ‘The State Government must constitute SFCs as per the timeframe prescribed in the Constitution. Recommendations of

the SFC may be considered and accepted recommendations implemented in a time-bound manner’.

8.7 Reasons for resistance in transitioning from rural to urban for local bodies

Out of 191 Panchayats of Goa, 56 are Census Towns as per the Census 2011. There are 16 Census Towns in south Goa and 40 Census Tons in North Goa (GOG, 2014). In the past the state government has made attempts to convert few Panchayats into Municipalities which met with stiff resistance from the VPs and government is forced to drop its plans. Government of Goa has notified 56 villages from nine Talukas as urban areas in February 2020. The villages ‘notified as urban areas are in Pernem (4), Bardez (16), Bicholim (1), Sattari (1), Tiswadi (9), Ponda (9), Salcete (10), Mormugao (4) and Quepem (2)’ (Team, 2020). This resulted in many villages passing a resolution in the gram Sabha opposing the notification. The Aquem Baixo gram Sabha opposed the decision of the government (Team, 2020). Further the Sao Jose de Areal and Aquem-Baixo opposed in their respective gram sabhas by the villagers in order to protect the cultural and socio-economic wealth of the village(The Goan, 2020). Sao Jose consisted to majority of tribal population and in the gram sabha the members noted that without the consent of the indigenous people the village cannot be changed to urban. The fear of losing land to builder lobby, pressure on existing resources were the reasons for gram sabhas opposing the notifications. Due to increasing pressure from the villages the government was forced to withdraw the notification to change 56 villages into urban areas (The Times of India, 2020).

In the year 2021 Calangute village has been notified as urban areas but met with an opposition. ‘Protestors claimed that after urbanisation the existing 200-metre construction requirements under the Coastal Management Plan will be relaxed to 50 metres resulting in huge constructions and buildings are likely to cover up the coastal area, specially the beach which is considered as the queen of the beaches’ (Team, 2021).

The past attempts by the government to change the status of village to urban area also met with opposition. One of the major reasons for the opposition for notifications to convert the village into urban areas was that the government has not taken into consideration the opinion of the villagers. Government has to wait for the Panchayats to take a decision to convert a village into an urban area.

The major resistance for the transitioning Rural Local Bodies (RLBs) into Urban Local Bodies (ULBs) is due to the increase in the Floor Area Ratio (FAR). If the local area is

transformed into the ULB it leads to increasing FAR, which means more area comes under construction activity (with 100 percent FAR). In the year 2018 22, villages in North Goa opposed inclusion of their village into Planning and Development Authority (PDA). The PDA prepares the development plans for the urban areas in Goa. The villagers claimed that, the Panchayats can approve FAR upto 80, this will increase to 200 or 250 if their village is included under PDA, which is three times more than what Panchayats could allow for construction (D'Mello, 2018). Due to which many Gram Sabhas object to converting the VP into Municipality. The people in the rural areas have fear that this may lead to increasing tourism and real estate related activities. The villages may lose their own identity as many more building with more heights may come up. The Floor Space Index (FSI) for urban areas is more. This will increase burden on already existing resources like water, electricity and others. It may also increase the issue of Garbage which Goa is already facing. During the last two decades, the Goan villages have been battling cases against mega housing projects coming up in their areas. Many Gram Sabhas have demanded to pass a resolution not to allow mega housing project in their villages.

8.8 Conclusion

The analysis of fund transfers to urban and rural local bodies in the state reveals a mixed pattern of increasing allocations but inconsistent utilization, reflecting both opportunities and challenges in decentralization efforts.

ULBs have seen significant growth in grant allocations, particularly under various schemes and specific urban development initiatives. However, underutilization of funds is a recurring issue, indicating challenges such as inefficient fund absorption and capacity constraints in municipal governance.

While the increasing allocation of funds underscores a strong decentralization push, underutilization highlights gaps in planning, execution, and capacity at the local levels. Strengthening institutional frameworks, improving monitoring mechanisms, and fostering greater accountability will be essential to maximize the potential of these transfers. A more balanced and efficient utilization of resources is key to achieving sustainable development across urban and rural areas in the state.

Chapter 9 Impact of State Public Enterprises finances on the State's financial health

9.1 Introduction

Government undertakes commercial activities through its business undertakings referred to as Public Sector Enterprises (PSEs) which are owned, managed and controlled by the State on behalf of public at large. The PSEs have played a significant role in shaping the path of India's economic growth and development. Public enterprises are state-owned institutions established for social welfare or to meet social needs. PSEs have been established, managed, and controlled by the Central Government as government companies (under the Companies Act or statutory corporations under the specific statutes of Parliament). Along with central PSEs many State level PSEs have been established to set up infrastructure, provide public utilities, generate employment opportunities, promote growth and reduce inter-regional disparities (Jain et al., 2014). The State Public Sector Enterprises are a dominant part of the public enterprise system in India. Besides the public utilities, the State PSEs have been set up in areas, such as, mining, public distribution /trading and marketing, warehousing, tourism, handicrafts and handloom development, forest and fisheries development, financial services and housing (Gouri, 1997).

While a number of PSEs have been set up as 'Statutory Corporations' through the Acts enacted in the state legislatures, a larger number of them have been set up as 'joint stock companies' under the Companies Act, 1956. The financial performance of these enterprises has a direct bearing on the health of state finances. There have been both economic and social objectives behind the establishment of PSEs (Bandyopadhyay, 2006). They provide direct and indirect employment to people, lead to development of a particular region and create wealth for the society in general. These objectives can be best achieved when these PSEs generate profits on a sustainable basis, where the returns from sales are more than the cost of operation. If they incur losses, the State PSEs become a liability on the state's finances. In this chapter we review the functioning of the Public Sector Enterprises and its impact on the financial health of the state of Goa.

9.2 State Level Public Sector Enterprises in Goa

In Goa, the structure of PSEs comprises of Statutory Corporation and State Government Companies. When analyzing the financial health of PSEs, it is important to differentiate between these two types, as their regulatory framework, governance, and financial impact on the state's budget may be different.

- a) **Statutory Corporations:** these are public enterprises that came into existence by special Acts of the Legislature. The Act defines the powers and functions, rules and regulations governing the employees and the relationship of the Corporation with the Government.
- b) **State Government Companies:** companies in which not less than 51 per cent of the paid up capital is held by Central Government, or by any State Government or Governments or partly by the Central Government and partly by one or more State Governments, and includes a company which is a subsidiary company of such a Government company. Further, a company in which 51 per cent of the paid up capital is held in any combination by Government(s), Government companies and corporations controlled by Government is treated as if it were a Government company (deemed Government Company as per Section 619 B of the Companies Act, 1956).

While various forms of organizations prevail vis-à-vis the organizational structure of PSEs, the “company” and “statutory corporation” are the more dominant ones. Indeed, the PSEs are not the same as “departmental undertakings”, and have to be on their own rather than depend on budgetary support from the Government. In this chapter we discuss the financial performance of Government Companies and Statutory Corporations. The State Government exercises control over their affairs through its administrative departments. The Chief Executive and Directors to the Board are appointed by the government.

9.2.1 Stake of the Government of Goa

As owners, the Government of Goa has large financial stake in these PSEs. This stake is of mainly three types:

- **Share capital and loans** – In addition to the share capital contribution, Government of Goa also provide financial assistance by way of loans to PSEs from time to time.
- **Special financial support** – Government of Goa provide budgetary support by way of grants and subsidies to PSEs as and when required.
- **Guarantees** – Government of Goa also guarantees the repayment of loans with interest availed by PSEs from financial institutions.

9.2.2 Classification of Public Sector Enterprises

For facilitating the discussion, we give a sector-wise classification of the PSEs in Goa. Accordingly the PSEs, Government Companies are classified into different sectors- Agriculture Food, Allied and Forestry, Industry and Finance, Infrastructure, Information Technology and Communication, Manufacturing and Services, while the Statutory

Corporation are classified as Information Technology, Industry and Finance and Services. In Goa, we had identified 18 PSEs across different sectors, but have included 17 PSEs based on the availability of the data.

Table 9.1: Number of PSEs in Goa

S.No	Sector and Name of the Company		
	GOVERNMENT COMPANIES		
	<i>AGRICULTURE, FOOD, ALLIED AND FORESTRY</i>		<i>Data available (years)</i>
1		Goa Forest Development Corporation Limited (GFDCL)	2012-13 to 2020-21
2		Goa State Horticultural Corporation Limited (GSHCL)	2012-13 to 2020-21
3		Goa Meat Complex Limited (GMCL)	2012-13 to 2022-23
	<i>INDUSTRY AND FINANCE</i>		
4		Economic Development Corporation of Goa, Daman & Diu (EDC)	2012-13 to 2022-23
5		Goa State Scheduled Caste and Other Backward Classes Finance and Development Corporation Limited (GSSCOBCFDCL)	2012-13 to 2022-23
6		Goa State Schedule Tribes Finance and Development Corporation Limited (GSSTFDCL)	2012-13 to 2019-20
7		Goa Handicraft, Rural and Small Scale Industries Development Corporation Limited (GHRSSIDCL)	2012-13 to 2022-23
	<i>INFRASTRUCTURE</i>		
8		Goa State Infrastructure Development Corporation Limited (GSIDCL)	2012-13 to 2022-23
9		Sewerage and Infrastructural Development Corporation Limited (SIDCL)	2012-13 to 2022-23
	<i>INFORMATION TECHNOLOGY & COMMUNICATION</i>		
10		Info Tech Corporation of Goa Limited (ITCGL)	2012-13 to 2022-23
11		Goa Electronic Limited (GEL)	2012-13 to 2022-23
	<i>MANUFACTURING</i>		
12		Goa Auto Accessories Limited (GAAL) *	
13		Goa Antibiotics and Pharmaceuticals Limited (GAPL)	2012-13 to 2022-23
	<i>SERVICES</i>		
14		Goa Tourism Development Corporation Limited (GTDCL)	2012-13 to 2022-23

15		Kadamba Transport Corporation Ltd	2012-13 to 2022-23
	STATUTORY CORPORATION		
	INFORMATION TECHNOLOGY		
16		Goa Information Technology Development Corporation (GITDC)	2012-13 to 2020-21
	INDUSTRY AND FINANCE		
17		Goa Industrial Development Corporation	2012-13 to 2022-23
	SERVICES		
18		Goa Education Development Corporation	2012-13 to 2015-16

Note: 1. *G.A.A.L was a subsidiary of EDC Limited in the past and operated from Honda, Sattari, Goa. Since operation of GAAL was not viable it has been liquidated and dissolution was completed in 2022, this PSE is therefore not included in the study.

2. Imagine Panaji Smart City Development Ltd. (IPSCDL) was incorporated on 16.08.2016, however we have not included this PSE in our chapter.

The PSEs are engaged in different activities ranging from industrial development, finance, trading and marketing, construction services, consumer goods, engineering goods as also development of backward regions and weaker sections of the society. The sectoral analysis incorporating the financial dimensions presents an interesting account of the functioning of the PSEs in Goa. None of the companies included in these PSEs was listed on the stock exchange.

The State PSEs can also be classified as commercial, commercial-cum-promotional and promotional.

1) Commercial Enterprises: These include engineering, electronics, textiles, mining, telecommunications, drugs and chemicals, sugar and cement sector enterprises. These enterprises conduct industrial activities and use the local resources for the purpose of manufacturing. Employment creation was also an important objective behind the creation of these enterprises.

2) Commercial-cum-promotional Enterprises: These enterprises were characterized by twin elements of business i.e. a mix of commercial as well as promotional goals directing their functioning. These enterprises undertook dairy development, fisheries development, industrial finance, and industrial and infrastructure development.

3) Promotional State PSEs: In the case of these enterprises, promotional activities became the primary objective and profit earning became a secondary consideration. These State PSEs include the SC/ST Finance Corporation and the Backward Classes Corporation.

The main objectives in this chapter are as follows:

- 1) Review annual reports and other financial statements of PSEs, to track their performance over time
- 2) To examine the financial performance of the PSEs in terms of major ratios, namely, profitability, liquidity and leverage
- 3) PSEs and their contribution to the GSDP of the State
- 4) Investments in PSEs by the Government and budgetary support by the Government.

9.3 Definitions

In this section we state the definitions of different financial ratios that are being used.

1) Capital Employed: The sum total of investments in the net fixed assets and working capital. The net fixed assets indicate the investments in gross fixed assets minus accumulated depreciation. The investment in working capital represents the excess of current assets over current liabilities.

2) Returns on Capital Employed Ratio:

This quantifies the relationship between the total capital employed and the PBID (Profit before Interest and Depreciation). This ratio indicates how efficiently the equity and debt resources have been employed to earn profits. The capital invested is represented by equity, retentions and long-term investments. It is expressed as:

$$\frac{\text{PBID}}{\text{Capital Invested}} \times 100$$

3) Debt-Equity Ratio:

This shows the relationship between the long-term debt and the equity as a fraction of the latter. This shows long term viability of a company's financial health. It is expressed as:

$$\frac{\text{Long Term Debt}}{\text{Equity}} \times 100$$

4) Accumulated Losses to Paid-up Capital Ratio:

This quantifies the relationship between accumulated losses and paid-up capital in percentage terms. It is expressed as a formula:

$$\frac{\text{Accumulated Losses}}{\text{Paid up Capital}} \times 100$$

5) Gross Profits/ PBIT:

These include profits before interest and taxes. They are inclusive of all direct costs, indirect costs and margins other than interest on loans and taxes.

6) Investment:

This comprises the sum total of the investments in the form of equity and debt capital by State Governments and others which includes the central government, holding company and financial institutions.

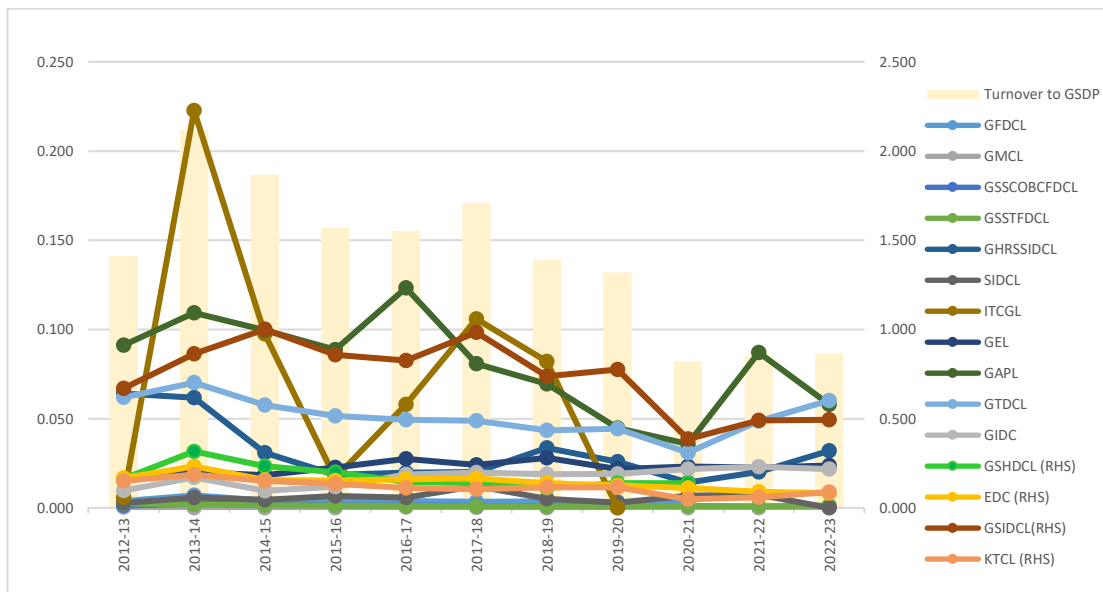
9.4 PSEs and their contribution to the GSDP of the State

The contribution made by the PSEs in terms turnover and the total revenue towards GSDP is given below. The ratio of PSEs' turnover to GSDP and TR to GSDP shows the extent of activities of PSEs in the State economy.

9.4.1 Ratio of PSE's Turnover to GSDP of the State

A ratio of total turnover of the PSEs to the GSDP shows the extent of activities of the PSEs in the State's economy. The ratio of turnover of all the PSEs to GSDP increased from 1.41 in 2012-13 to 2.12 in 2013-14 but declined to 0.82 in 2020-21. Among all the PSEs, GSIDCL ratio of turnover to GSDP was the highest (0.67 in 2012-13 to 1.00 in 2013-14, but later declined to 0.49 in 2022-23. This was followed by EDC, which began with the turnover ratio at 0.16 in 2022-23 and rose to 0.23 in the next year but declined to 0.09 in 2022-23. The GSHCL has seen an increase in the turnover ratio from 0.16 in 2012-13 to 0.2 in 2015-16 but later declined to 0.39 in 2020-21. The KTCL turnover ratio was 0.15 in the initial year but declined to 0.08 in 2022-23.

Figure 9.1: PSE's Turnover to GSDP

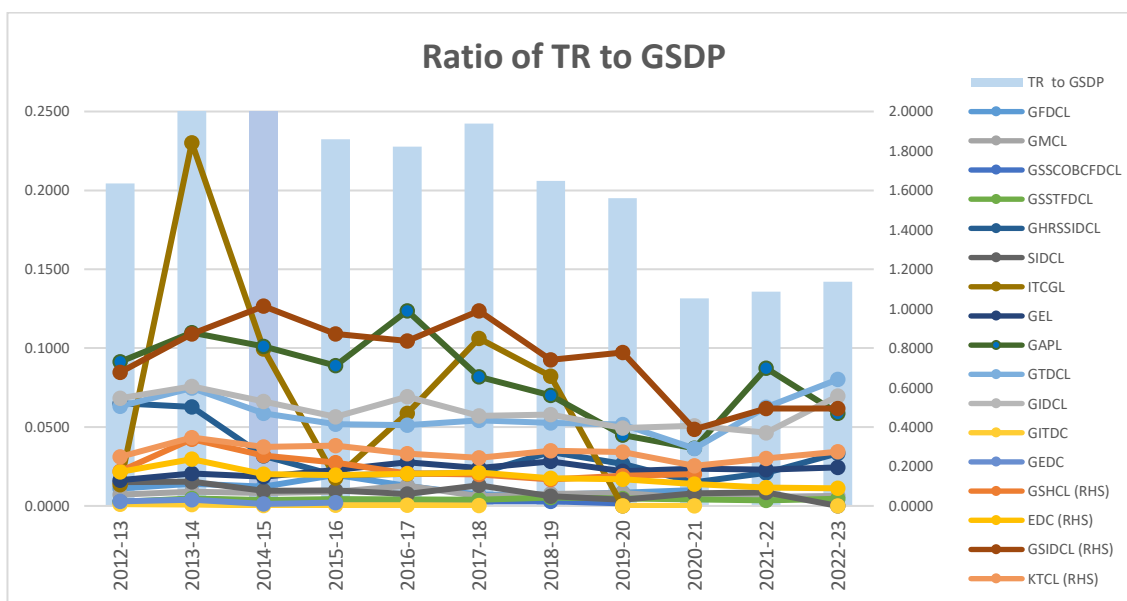


Source: Financial Statement of PSEs (Various years)

9.4.2 Ratio of PSE's Total Revenue to GSDP of the State

The total revenue of the PSEs comprise of total turnover and other incomes. The ratio of total revenue of all the PSEs to GSDP increased from 1.64 in 2012-13 to 2.42 in 2013-14 but declined 1.05 in 2020-21.

Figure 9.2: PSE's Total Revenue to GSDP



Source: Financial Statement of PSEs (Various years)

The ratio of total revenue of all PSEs to GSDP increased from 1.63 in 2012-13 to 2.43 in 2013-14, but declined over the years to 1.13 in 2022-23. Major contribution to GSDP was by GSIDCL which was at 0.67 in 2012-13 increased to 1.01 in 2014-15 but later declined

to 0.49 in 2022-23. This was followed by KTCL, the ratio of TR to GSDP being around 0.24 to 0.30 in the entire period. The GSHCL had began with 0.17 in 2012-13, steadily increased to 0.33 in the next year, but later declined to 0.16 in 2020-21. The EDCL had a ratio of 0.17 in 2012-13 that declined drastically to 0.08 in 2022-23.

9.5 Investments in PSEs

Government engages actively in various areas of business activity for reasons of strategic importance to capital intensity to social objectives. The total investment (capital and long-term loans) in 17 PSEs was 44815 lakh in 2012-13 which increased to 135462 lakh in 2019-20 and was 121846 lakh in 2020-21.

9.5.1 Equity holding and loans in PSEs

The State governments demonstrated their commitment to the State PSEs by increasing their investment in the form of equity. The total equity is made up of the contributions from the States, Centre and other sources. The share of State equity in total equity has been the highest for most of the PSEs. While the total debt comprises of the loans outstanding from the state government, the central Government and the other sources. The equity contribution and long-term loans by Central and State Government and others is given in the table. The equity support of the State Government has increased for all the PSEs in Goa. Among all the PSEs across different sectors, nine PSE's received equity support from the central government as well. From the Agriculture, Food, Allied and Forestry sector we have GMCL, from the Industry and Finance Sector, we have GIDC GHRSSICCL, GSSCOBCFDCL, GSSTFDCL, GSIDCL, from the Infrastructure sector we have GSIDCL, SIDCL, and from the Service Sector KTCL had received equity capital from the Central Government. Certain PSEs also received equity support from other sources---- these are GMCL, EDC, GSSCOBCFDCL, GIDC, and GAPL, For most of the PSE's the support from the state government has increased to a great extent.

Under the Agriculture, Food, Allied and Forestry Sector, from 2012-13 to 2020-21, GFDCL and GSHCL had equity capital only from State Government, of 268.91 lakh and 499.50 lakh respectively, while for GMCL, equity capital from other sources was highest at 37.61 lakh followed by the Central Government share at 23.96 lakh and 0.25 lakh by the State Government. With regard to the loan outstanding, only GSHCL had state debt of 124 lakh for the study period.

In the case of Industry and Finance Sector, for EDC, the share of state equity was highest at 8620.26 lakh for 2012-13 to 2022-23 among all the PSEs followed by GSSTFDCL which increased from 2260 to 3110 lakh in the same period. The state equity for GIDC increased from 1802.19 lakh to 2246.90 lakh in the same period. For GHRSSICCL, the State's equity was 783 lakh for the entire period. For GIDC the Central Government's equity holding increased from 1479 lakh (2012-13) to 4065 lakh (2021-22) and declined to 3582 lakh in 2022-23. For GHRSSICCL, the central government equity holding was stable at 17 lakh from 2012-13 to 2022-23, while for GSSTFDCL it increased from 240 lakh to 1405 lakh. For GSSTFDCL central government equity holding declined from 99.76 lakh (2012-13) to 18.66 lakh (2015-16), with no central share thereafter. GSSCOBCFDCL had equity holdings only from other sources and it increased from 354.54 lakh (2012-13) to 500 lakh (2019-20). Equity holding by other sources for EDC and GIDC was constant at 1472 lakh and 0.03 lakh respectively. The state debt for EDC increased from 4625 lakh in 2014-15 to 18636 lakh in 2019-20. For GSSCOBCFDCL, the central debt increased from 767.35 in 2013-14 to 1048.29 in 2016-17 but later declined to 838.11 lakh in 2019-20, the debt from other sources was 270.54 for the entire period. The state debt was least and below 7 lakh compared to the other sources during the entire period. The GSSTFDCL, the state debt increased from 25 lakh in 2012-13 to 385 lakh in 2022-23. The central debt declined from 99.76 lakh in 2012-13 to 18.66 lakh in 2015-16. GIDC had higher debt from other sources at 16894.40 in 2019-20, but declined to 12699.37 in 2020-21 and later to 7011.11 in 2021-22.

Under the infrastructure sector, state equity in GSIDCL, was stable at 372 lakh for the entire period, while for SIDCL the state's share increased from 605 lakh (2012-13) to 755 lakh (2021-22). For GSIDCL, the loan outstanding from state government increased from 5000 lakh in 2012-13 to 69135.80 in 2018-19 but later declined to 28467.96 lakh in 2022-23. For SIDCL, the state debt increased from 10000 lakh in 2017-18 to 17275 lakh in 2018-19 but later declined to 5901 lakh in 2021-22. While from central government it increased from 1200 lakh in 2014-15 to 5079 lakh in 2022-23.

Under the Information Technology & Communication Sector, the state equity for GEL was constant at 180 lakh for the entire period while state debt was 907 lakh for three years from 2012-13 to 2014-15. For GITDC only other sources had a paid up capital of 25 lakh from 2018-19 to 2020-21.

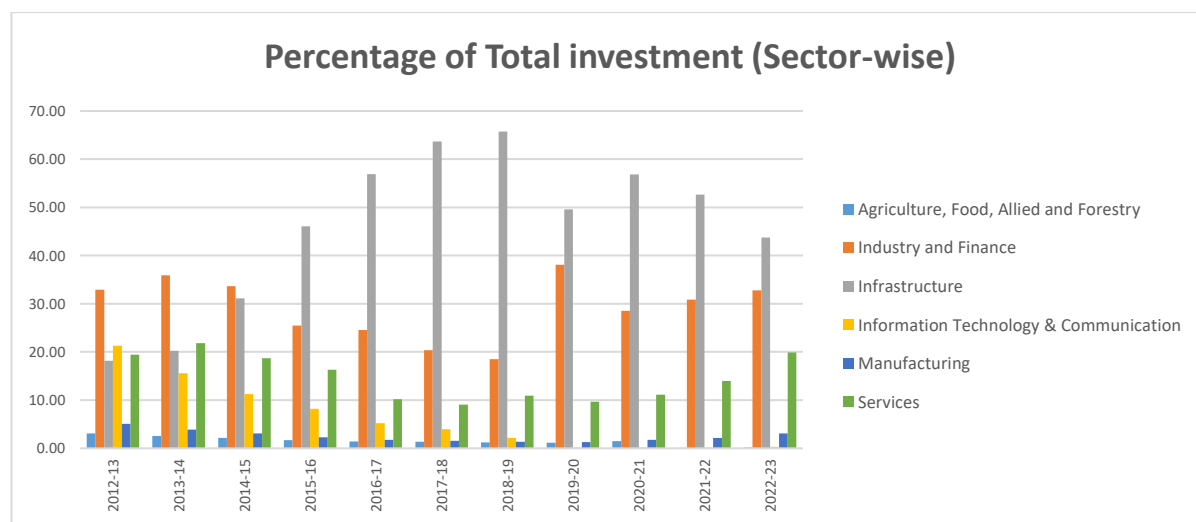
For manufacturing sector, the GAPL received equity support from the state Government of 1902 lakh (2012-13) that declined to 494 lakh from 2013-14 onwards, while equity from other sources was higher at 1407 lakh from 2013-14 onwards. State debt was at 1010 lakh in 2012-13 but later declined to 120 lakh in 2022-23.

Under the service sector, both GTDCL and KTCL received high equity support from state government. For GTDCL it was 2264 lakh for the entire period, while for KTCL it increased from 5964 lakh (2012-13) to 10381 lakh (2022-23). KTCL also had equity support from central government of 463 lakh from 2021-22 to 202-23. State debt for GTDCL was 412 lakh in 2012-13 but later declined to 10 lakh in 2021-22 and was nil in 2022-23. While for KTCL, state debt was at 2215 lakh in 2013-14 that declined to 1702 in 2018-19, with no state debt thereafter. For GEDCL state debt was at 537 lakh in 2012-13 and went up to 1837 in 2015-16.

9.5.2 Total Investment

The total investment comprises of Equity capital and Debt capital. Among all the sectors, Infrastructure had highest investment followed by Industry and Finance, and then the Service sector enterprises.

Figure 9.3: Total investment – Equity and debt capital



Source: Financial Statement of PSEs (Various years)

The investment in the infrastructure sector constituted 18 percent of the total investment in 2012-13, later there was a spurt to 65 percent in 2018-19 followed by a declined to 43 percent. Investment in the Industry and finance sector shows a fluctuating trend, and has ranged between 18 to 38 percent. While investment in service sector has been between 9 to 20

percent over the years. In the section we see the sector wise investment of the state government in the PSEs.

Sector-wise investments of State Government in SPSEs

Within the infrastructure sector, the debt capital was higher than the equity capital.

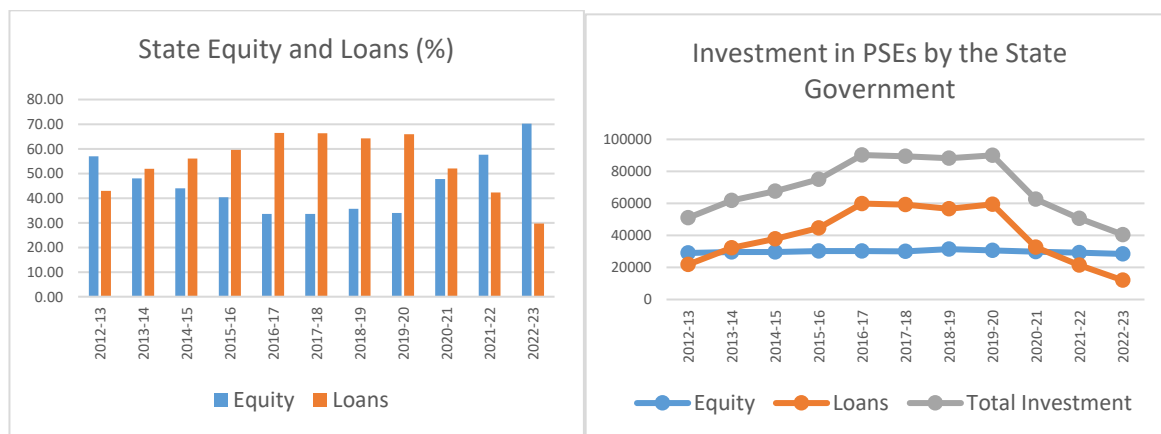
Table 9.2: Sector-wise investments of State Government

Sectors	Type	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Agriculture, food, allied and forestry	Equity	769	769	769	769	769	769	769	769	769	-	-
	Loans	124	124	124	124	124	124	124	124	124	-	-
	Investment	954	954	954	954	954	954	954	954	954	62	62
Industry and finance	Equity	13465	14265	14265	14315	14315	14132	14132	14882	14260	14760	14760
	Loans	31	4654	6202	5346	9400	5160	4131	18782	145	265	385
	Investment	13497	18919	20467	19661	23716	19291	18262	33664	14405	15025	15145
Infrastructure	Equity	977	1127	1127	1127	1127	1127	1127	1127	1127	1127	372
	Loans	9440	13160	19300	26269	44107	50307	48720	38576	32178	21002	11500
	Investment	10417	14287	20427	27396	45234	51434	49847	39703	33305	22129	11872
Information technology & communication	Equity	180	180	180	180	180	180	180	180	180	180	180
	Loans	907	907	907	-	-	-	-	-	-	-	4
	Investment	1087	1087	1087	180	180	180	180	180	180	180	184
Manufacturing	Equity	1902	495	495	495	495	495	495	495	495	495	495
	Loans	1010	841	659	511	292	127	51	140	159	132	120
	Investment	2912	1336	1154	1006	786	622	545	635	654	626	615
Services	Equity	10179	11229	11229	11729	11729	11729	13110	13110	13110	12646	12646
	Loans	950	4170	4122	5539	1217	173	2387	1789	43	11	-
	Investment	11129	15399	15351	17268	12946	11902	15497	14899	13153	12657	12646

Source: Financial Statement of PSEs (Various years)

The figure below shows the percentage of investment of the state government in equity capital and debt capital of the PSEs. The state's investment in equity capital and in loans has been fluctuating over the years. From 2013-14 to 2020-21 the state government's investment in loans was higher than the equity capital of the PSEs. With investment in 2016-17 being at 66 percent. However in 2022-23 we notice a rise in equity capital investment to 70 percent for the PSEs.

Figure 9.4: State Equity and Loans

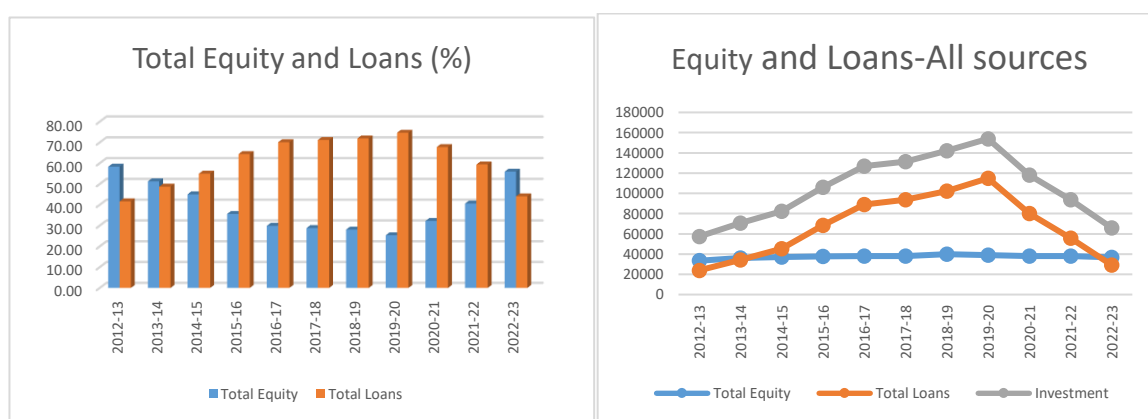


Source: Financial Statement of PSEs (Various years)

In absolute numbers, the investment-capital and long-term loans of the state government increased from 51120 lakh in 2012-13 to 90216 in 2016-17 lakh but declined to 62675 lakh in 2020-21 and 40523 in 2022-23. From 2013-14 onwards the percentage of long term loans is higher in the total investment made by the PSEs as compared to the equity capital as seen in the figure below.

The figures below show the investment in equity capital and loans by all the sources- Central, State government and other sources. The total investment consisted of 58.34 percent towards capital and 41.66 percent towards long-term loans in 2012-13, but from 2014-15 onwards, the percentage of investment towards loans has been higher than capital.

Figure 9.5: Total Equity and loans



Source: Financial Statement of PSEs (Various years)

9.5.3 Total Investment in Individual PSEs

The table below shows the total investment-Equity capital and Debt capital from the Central, State Government and other sources for each PSEs. Among all the PSEs, GSIDCL had the highest amount of investment and it increased from 9812 lakh in 2012-13 to 69508 lakh in 2018-19, declining to 28840 lakh in 2022-23. The higher investment was due to the increase

in debt capital of the state government in GSIDCL. This was followed by EDC, whose total investment was 10092 in 2012-13, increased to 19465 lakh in 2016-17.

Table 9.3: Total Investments in Individual PSEs

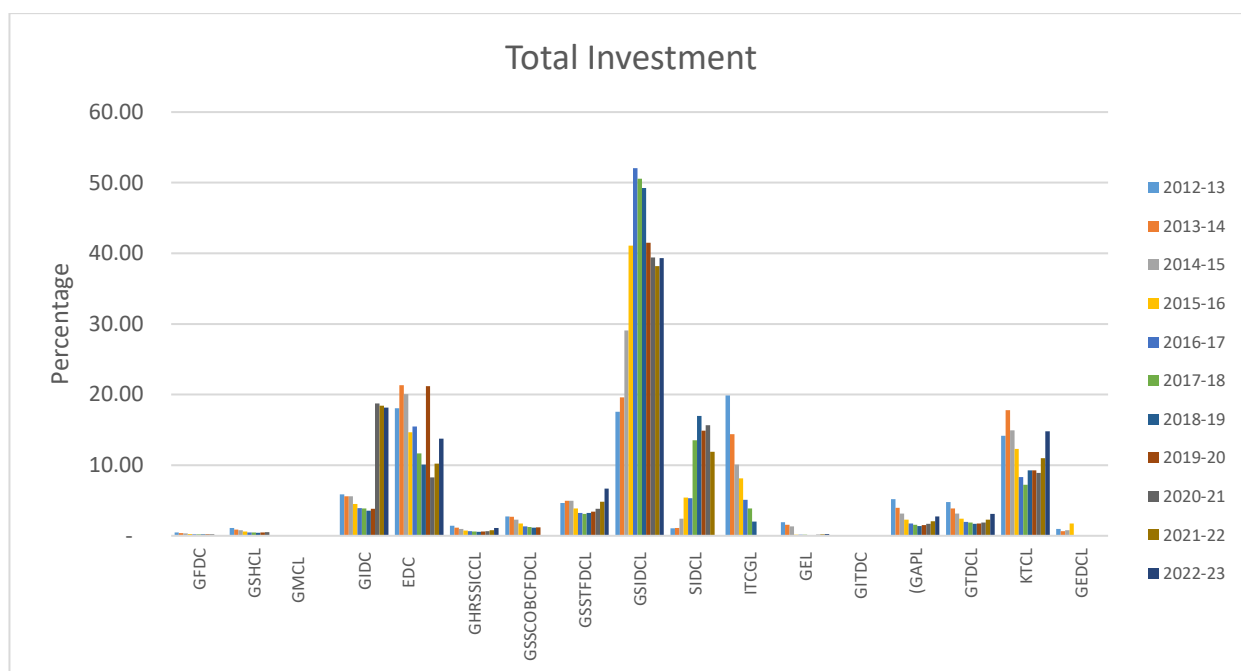
		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Agricultur e food, allied and forestry	GFDC	269	269	269	269	269	269	269	269	269	-	-
	GSHCL	624	624	624	624	624	624	624	624	624	-	-
	GMCL	62	62	62	62	62	62	62	62	62	62	62
Industry and finance	GIDC	3861	4549	4717	4921	5076	5046	5187	22822	18149	13324	5829
	EDC	10092	14717	16267	15407	19465	15227	14199	28728	10092	10092	10092
	GHRSSICCL	800	800	800	800	800	800	800	800	800	800	800
	GSSCOBCFDCL	1544	1865	1841	1825	1706	1640	1607	1610	0	0	0
	GSSTFDCL	2596	3428	4044	4075	4075	4075	4540	4660	4660	4780	4900
Infrastr ucture	GSIDCL	9812	13532	23610	43123	65525	66070	69508	56181	48000	37664	28840
	SIDCL	605	755	1955	5703	6703	17676	23964	20195	19098	11736	0
IT & communi cation	ITCGL	11123	9932	8182	8540	6401	5052	2869	0	0	0	0
	GEL	1087	1087	1087	180	180	180	180	180	180	180	184
	GITDC	-	-	-	-	-	-	25.00	25.00	25.00	-	-
Manufact ruing	GAPL	2912	2743	2561	2413	2194	2029	1953	2042	2061	2034	2022
Services	GTDCL	2677	2677	2571	2525	2481	2438	2395	2351	2308	2276	2265
	KTCL	7914	12280	12141	12905	10464	9464	13102	12547	10845	10845	10845
	GEDCL	538	441	640	1838	0	0	0	0	0	0	0
	TOTAL	36206	46922	50202	54170	54722	60154	69528	97540	69796	56752	36999

Source: Financial Statement of PSEs (Various years)

The table indicates the percentage of total investment in PSEs. For most of the years the total investment towards GSIDCL was the highest among all the PSEs and was more than 50 percent in 2016-17 and 2017-18. This was followed by EDC, wherein the investment were between 8 to 25 percent. For KTCL too, the investment was between 7 to 20 percent.

ITCGL initially had higher investment in 2012-13 at 19 percent but later has continuously declined over the years.

Figure 9.6: Percentage of total investment in PSEs



Source: Authors calculations based on Financial Statement of PSEs (Various years)

9.6 Financial Performance of the PSEs

In this chapter in order to assess the financial performance of the PSEs, we have relied on the ‘financial ratios’. The key financial ratios are considered in this study are a) Profitability b) Leverage and c) Liquidity.

I) Profitability: Profitability has been measured in terms of rate of return on investment and sales. Following ratios are been considered under profitability

a) Return on Capital Employed

Return on Capital Employed (RoCE) indicates how efficiently the equity and debt resources have been employed to earn profits, it measures a company’s profitability and the efficiency with which its capital is employed. RoCE is calculated by dividing a company’s earnings before interest and taxes (EBIT) by the capital employed.

Capital Employed = Paid-up Share capital + Free Reserves and surplus + Long- term loans + Current Maturities of Long Term Debt – Accumulated losses – Deferred Revenue Expenditure

This ratio focuses directly on operating efficiency. The higher the ratio, the more efficient is the use of funds.

For certain PSEs there has been a rise in the % return on capital employed. In the Agriculture, Food, Allied and Forestry Sector, the GFDC and GSHCL had positive RoCE for almost all the years under consideration (except for two years). In case of the Industry and finance sector, EDC which had positive RoCE for all the years ranging from 9 percent to 18 percent RoCE. Similarly, GSSCOBCFDCL (except one year in 2019-20) and GSSTFDCL also had positive RoCE. GIDC had negative RoCE for most of the years. In the infrastructure sector, PSEs like GSIDCL have been showing a positive RoCE while SIDCL had positive returns from 2012-13 to 2017-18. Within the Information, Technology & Communication sector, ITCGL had positive returns for most of the years GITDC started with negative returns but later showed positive returns for all the years, GEL had negative returns from 2015-16 to 2018-19. Similarly within the manufacturing sector, the GAPL had higher RoCE in almost all the years, (except two years). With regard to the service sector PSEs their performance has been mixed, with GEL having negative returns for most of the years especially, 2019 to 2022. Under the Service sector, GTDCL had positive returns for few years while, KTCL had negative returns on capital employed only for 2015-16 to 2016-17, rest of the years had high positive returns, while the GEDCL had negative returns in 2014-15 and 2015-16. It was observed that the overall RoCE for 17 SPSEs was positive for most of the PSEs, however for certain PSEs like GMCL, GHRSSICCL, the percentage of negative returns have been very high.

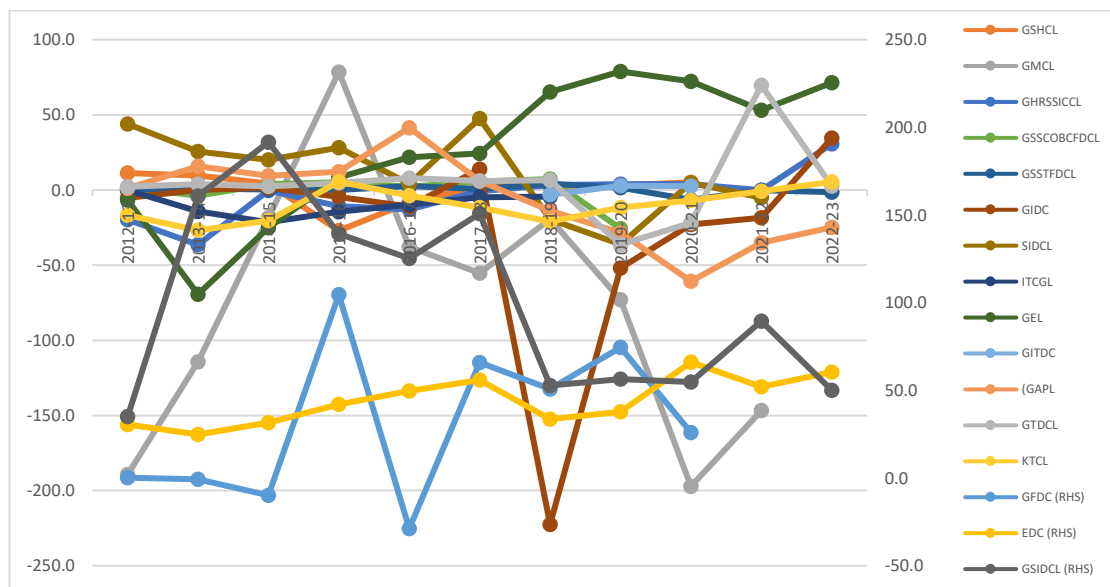
b) Returns on Equity Ratio (RoER)

The RoER measures the profitability in relation to shareholders' equity. It indicates how effectively a company is using the equity invested by its shareholders to generate profits.

$$\text{RoER} = \frac{\text{Net Profit after Tax}}{\text{Equity Share Capital}} \times 100$$

Shareholder's equity=paid-up capital + free reserves. A positive shareholder's fund reveals that the company has enough assets to cover its liabilities while negative shareholder equity means liabilities exceed assets. A higher ROER generally indicates that the PSE is more efficient at converting equity into profit.

Figure 9.7: Returns on Equity Ratio



Source: Authors calculations based on Financial Statement of PSEs (Various years)

Among all the PSEs, EDC and GSIDCL had positive returns for all the years. GEL had negative returns in the initial years but later showed positive returns throughout. GSSTFDCL in contrast had positive returns till 2019-20, with negative returns in the later years. GMCL, GIDC, ITCGL and KTCL had negative returns for most of the years. GAPL, had positive returns for initial years till 2017-18 but later showed negative returns.

c) Net Profit Ratio (NPR)

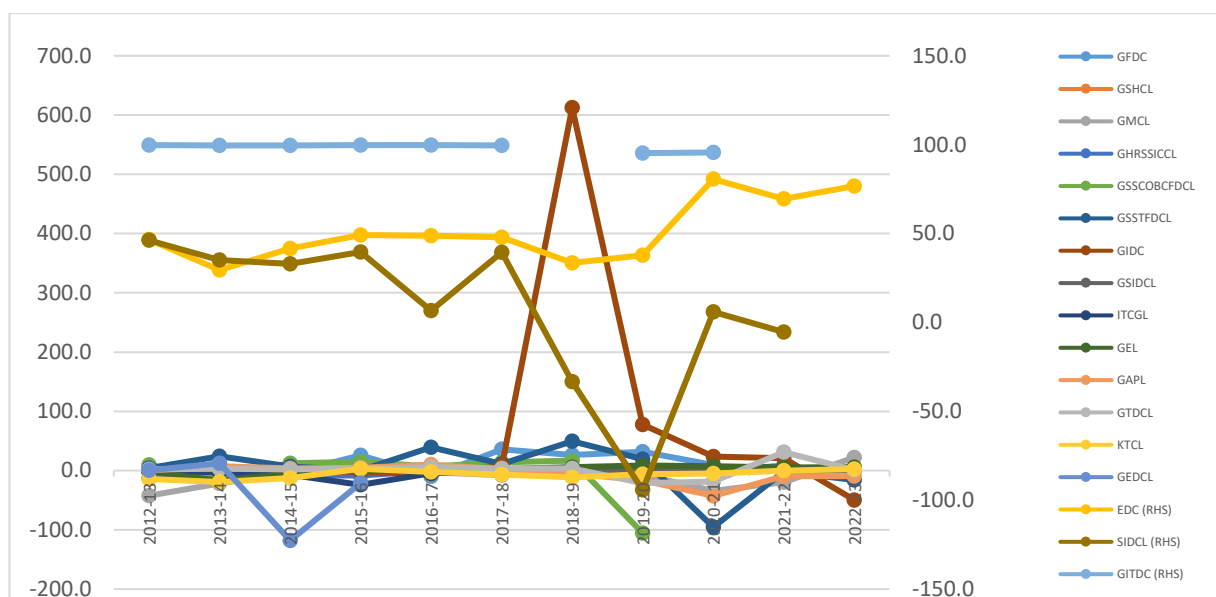
Net profit helps in updating the technology, contribute to an organic growth and provides a unified direction. It builds up reserves and provides and higher earnings per share. Net profit ratio is the percentage of revenue that turns into profit after all expenses, taxes, and other costs have been subtracted.

$$\text{Net Profit Ratio} = \frac{\text{Net Profit After Tax}}{\text{Total Revenue}} \times 100$$

The NPR for EDC ranged between 46.62 in 2012-13 and rose to 76.8 in 2022-23, showing a rise in the net profit margin by 30.18 percent. The reason behind the rise in net profit was probably due to the rise in the total revenue from 2016 onwards, also due to reduction in the financial cost (interest expenses) from 2021-22 and reduction in direct tax liability. EDC had recorded a net profit of Rs 5636 lakh for 2017-18 due to strong recovery of loans and interest on funds. (ToI, 2018). Though GITDC has a NPR at 99 percent, we cannot consider this an ideal ratio as GITDC is a non-working PSE, it does not have any expenses. SIDCL had high initial NPR, subsequently it declined, as from 2017-18 the debt of SIDCL increased

as seen by rise in the loans taken by this PSE. The NPR of GEL was positive from 2015-16 onwards as their profits increased in this period.

Figure 9.8: Net Profit Ratio



Source: Authors calculations based on Financial Statement of PSEs (Various years)

Under the profitability ratio in case of the RoCE, most of the PSEs were having positive ratio, while RoER was positive for EDC and GSIDCL and negative for GMCL, GIDC, ITCGL and KTCL. GSSTFDCL, GEL and GAPL had mixed results.

- I) Leverage:** Leverage ratios are key indicators of the financial health of the PSEs and their ability to meet their financial obligations. To measure how much debt a PSE uses to fund its operations relative to other financial measure we use leverage ratio like the debt equity ratio in our analysis.

1) Debt-Equity Ratio

The debt equity ratio for select PSEs is seen below. The debt-equity ratio of these enterprises has been fluctuating in the period of the study. Debt equity ratio between 1 and 2 indicates balanced financing. While above 2 will indicate a higher debt to equity ratio. PSEs like EDC, GSSTFDCL, GTDCL and GIDC have relied on their own finances that includes equity capital and their reserves. This is seen by the debt equity ratio being either 0 (implying no debt) or below 1 (low borrowings). GSSCOBCFDCL and GAPL had fluctuating debt equity ratio ranging between 0 to 3. GSIDCL, ITCGL, GEDCL had very high debt to equity ratio. GEL, GIDC and KTCL have been having high accumulated losses for many years indicated by negative debt to equity ratio. EDC, GSSTFDCL, GTDCL and GIDC can therefore be seen as being able to meet their financial obligations.

Table 9.4: Debt-Equity Ratio

Year	EDC	GSSCOBCFDCL	GSSTFDCL	GSIDCL	SIDCL	ITCGL	GEL	GIDC	GAPL	GTDCCL	KTCL	GEDCL
2012-13	-	1.94	0.04	10.64	-	6.72	(0.50)	-	(8.00)	0.40	(0.01)	5.56
2013-14	0.15	2.63	0.02	9.05	-	6.50	(0.47)	-	6.52	0.34	(0.64)	3.11
2014-15	0.20	2.49	0.01	11.07	0.77	7.23	(0.45)	-	2.51	0.29	(0.56)	5.54
2015-16	0.15	2.35	0.01	16.30	2.44	7.54	(0.46)	-	1.05	0.24	(0.90)	10.65
2016-17	0.26	2.10	0.01	25.12	2.91	7.18	(0.47)	-	0.33	0.17	(0.29)	
2017-18	0.13	1.34	0.01	23.47	7.16	5.12	(0.48)	-	0.17	0.13	(0.03)	
2018-19	0.10	1.24	0.01	23.18	10.47	2.08	(0.51)	-	0.09	0.10	(0.46)	
2019-20	0.00	1.46	0.03	19.02	10.00		-	(4.30)	0.34	0.16	(0.30)	
2020-21	-		0.03	15.31	9.27		-	(2.41)	(0.41)	0.27	(0.04)	
2021-22	-		0.06	11.35	5.66		-	(1.26)	(0.15)	0.09	-	
2022-23	-		0.06	8.48			0.01	-	(0.08)	0.08	-	

Source: Financial Statement of PSEs (Various years)

2) Debt Service Coverage Ratio (DSCR):

This ratio describes how well a PSE can cover its debt obligations with its operating cash flows. If the DSCR is less than one, indicates that a PSE is not generating enough income to cover its debt obligations, while with DSCR equal to 1, the PSE has just enough cash to cover its debt obligations. Higher the DSCR better would be the financial performance of the PSE.

Table 9.5: Debt Service Coverage Ratio

Year	EDC	GSIDCL	ITCGL	GEL	GAPL	GTDCCL	KTCL
2012-13	4.50	0.27	0.03	(0.12)	0.83	1.69	(1.22)
2013-14	2.72	0.51	(0.15)	(10.37)	1.63	2.84	(1.25)
2014-15	2.08	0.52	0.28	(0.63)	2.06	1.43	(0.62)
2015-16	2.30	0.48	0.80	1.70	2.62	(1.48)	3.29
2016-17	1.87	0.50	(0.13)	3.12	5.76	(0.78)	2.12
2017-18	2.48	0.40	0.94	3.98	2.57	4.03	0.57
2018-19	2.09	0.39	0.79	9.58	(0.54)	4.33	(1.82)
2019-20	3.81	0.32		20.33	(2.89)	(5.57)	0.48
2020-21	4.61	0.36		25.10	(5.00)	(2.07)	1.60
2021-22	25.64	0.33		14.62	(2.40)	(1.49)	-

2022-23	16.54	0.31		13.79	(1.59)	1.60	-

Source: Authors calculations based on Financial Statement of PSEs (Various years)

The DSCR is calculated only for some PSEs due to unavailability of data on short term debt obligations. EDC has displayed the most ideal DSCR followed by GEL. For EDC from the year 2021-22, there was no long term debt resulting in low interest expense and hence a high DSCR at 25.64. GAPL had high DSCR till 2017-18, but it later declined and was negative due to the losses incurred from 2018-19 onwards, also their long term debt liability increased from the same year. GSIDCL and ITCGL had a DSCR of less than one, indicating insufficient cash flows to meet debt obligations. KTCL and GTDCL had fluctuating DSCR, with most of the years having negative ratio, due to high accumulated losses incurred.

II) Liquidity Ratio

This ratio shows the ability to pay off its current liabilities using its current assets without needing to raise additional capital. We have considered one type of liquidity ratio the Current Ratio. This is a ratio of current assets to current liabilities. Value less than 1.0 indicates a PSEs potential inability to use current resources to fund short-term obligations. GIDC and KTCL (except for 2022-23) had current ratio of less than one for all the years. GMCL, EDC, GHRSSICCL, SIDCL and GEL had fluctuating current ratio during the years, however, the ratio of EDC and GHRSSICCL has shown an improvement over the later years.

Table 9.6: Current Ratio

	GF DC	GSH CL	GM CL	ED C	GHRSSI CCL	GSSCOB CFDCL	GSSTF DCL	GIDC	GSID CL	SID CL	ITCG L	GE L	GITD C	GA PL	GTD CL	KT CL	GED CL
2012 -13	11.03	1.13	0.80	0.90	1.07	63.40	1.42	0.64	1.43	6.24	3.52	4.42		1.20	1.18	0.15	47.42
2013 -14	9.81	1.06	1.34	0.70	0.91	33.59	2.19	0.66	1.55	1.59	1.77	2.53		1.38	1.12	0.43	14.64
2014 -15	3.54	1.07	1.26	0.67	0.91	32.75	1.77	0.69	1.74	1.70	1.47	1.61		1.28	1.17	0.59	5.75
2015 -16	5.24	1.03	1.63	0.84	0.81	30.05	1.60	0.73	2.22	1.14	1.54	0.36		1.27	1.14	0.87	34.93
2016- 17	2.96	1.02	0.90	0.63	0.75	28.17	1.63	0.69	2.96	0.64	1.30	0.38		1.30	0.89	0.50	
2017- 18	4.40	1.02	0.99	0.58	0.72	28.21	2.06	0.66	2.28	0.26	1.18	0.41		1.37	1.58	0.35	
2018- 19	8.65	1.03	1.09	0.70	0.94	28.90	2.07	0.54	2.40	0.27	1.06	0.38	19.66	1.23	1.22	0.67	
2019- 20	9.82	1.03	0.84	0.23	1.00	19.18	1.75	0.64	1.93	0.03		1.12	20.67	0.97	1.18	0.66	
2020- 21	8.48	1.04	0.57	6.15	1.08		1.51	0.53	1.82	0.73		0.81	5.43	0.76	1.20	0.57	
2021- 22			0.66	2.26	1.04		1.91	0.48	1.95	2.16		0.55		0.67	1.10	0.76	
2022- 23			0.89	3.80	1.08		3.24	0.43	1.78			0.73		0.71	1.04	1.49	

Source: Authors calculations based on Financial Statement of PSEs (Various years)

We notice that most of the other PSEs have current ratio above one, with GFDC having a ratio ranging between 2 to 11. Among all the PSEs, GSSCOBCFDCL and GEDCL had very

high current ratio, there is a possibility that these PSEs could have had underutilization of resources.

9.7 Earnings and Reserves of PSEs

In this section, we look at three components a) the Net profits/Losses made by the PSEs, b) Accumulated Losses and c) Net worth.

9.7.1 Net Profit/ Losses made by the PSEs.

Net profit or net income, is a PSEs total earnings after subtracting all business expenses from its revenue. Net profit helps in updating the technology, contribute to an organic growth and provides a unified direction. It builds up reserves and provides and higher earnings per share. Net profit making can take place through the concept of equity participation, limited liability, setting up the strategic business units and practicing responsibility accounting.

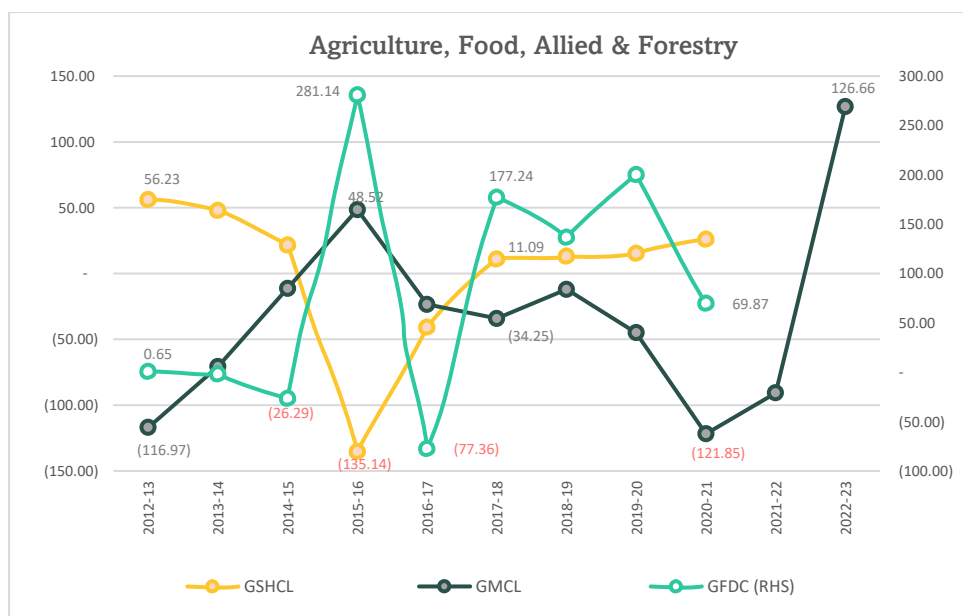
$$\text{Net Profit} = \text{Total Revenue} - (\text{Total Expenses} + \text{Taxes})$$

A sector wise analysis of Net profit/losses made by the PSEs is given below.

1) Agriculture, Food, Allied and Forestry:

Under this sector, higher profits were made by GFDC ranging between Rs 0.65 to 281.14 lakh. GSHDC had made losses for 2015-16 and 2016-17, while in other years the net profits ranged between Rs. 11.09 lakh to Rs. 56.23 lakh. GMCL has incurred losses for almost all the years except for 201`5-16 and 2022-23.

Figure 9.9: Net profit/losses under Agriculture, Food, Allied and Forestry

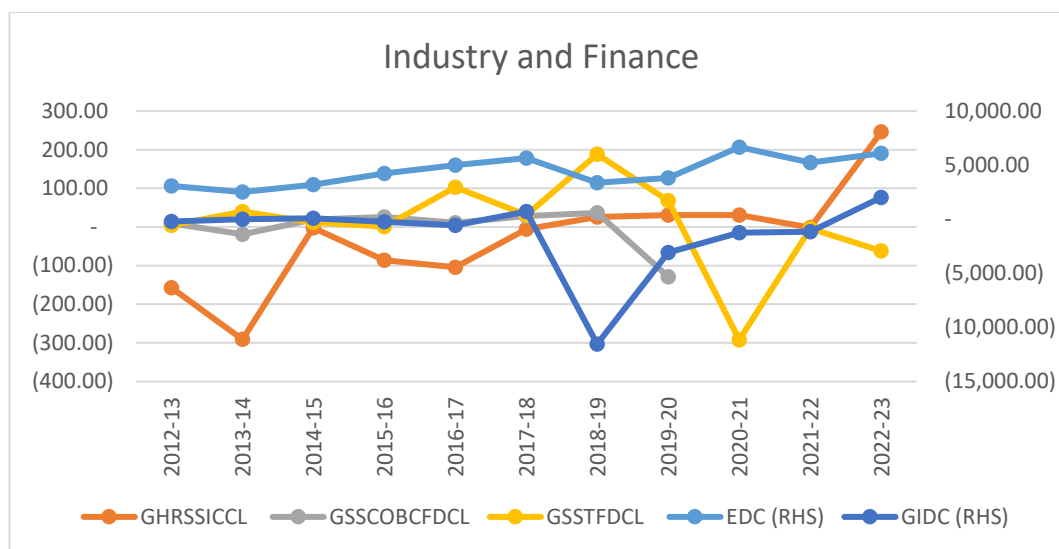


Source: Authors calculations based on Financial Statement of PSEs (Various years)

2) Industry and Finance

Under this sector, the highest net profits were made by EDC ranging between Rs 2510.57 lakhs to Rs 6669.21 lakh. GSSTFDCL also had high profits till 2019-20, for the subsequent three years it has been incurring losses. GSSCOBCFDCL made profits for most of the years except for 2013-14 and 2019-20.

Figure 9.10: Net profit/losses under Industry and Finance



Source: Authors calculations based on Financial Statement of PSEs (Various years)

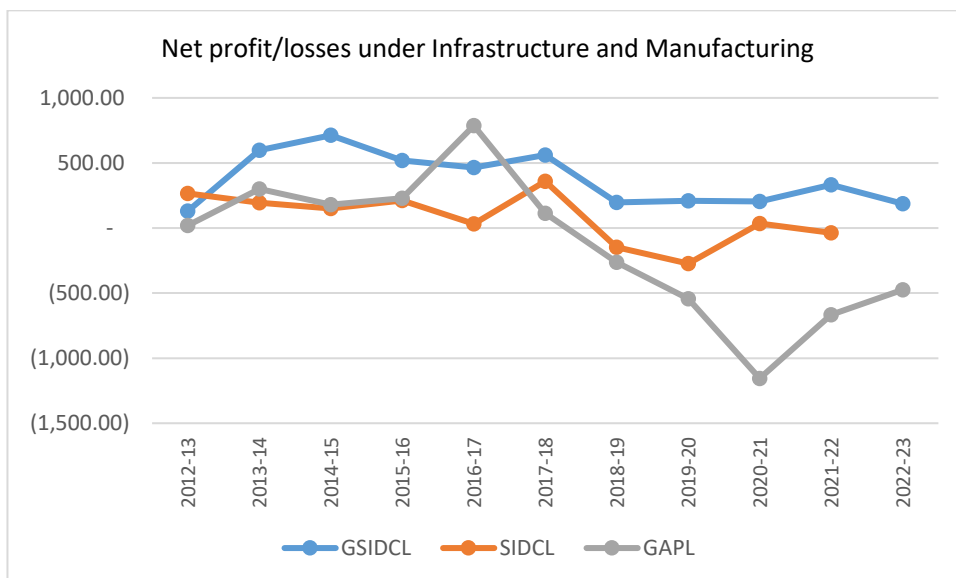
GHRSSICCL incurred losses in the initial year's upto 2017-18, thereafter it has been making profits till 2022-23 except for 2021-22 at Rs 1.57 lakh. GIDC, however has performed poorly in this category, worst being at Rs 11539.23 lakh in 2018-19.

This loss was due to high interest payments (of Rs 11553.03 lakh) made to SEZ parties as shown in their income and expenditure accounts. It has made profits only in 2013-14 and 2014-15.

3) Infrastructure and Manufacturing

Under this sector, GSIDCL has been showing higher profits within the range of 130.36 lakh to 712.61 lakh. SIDCL made profits for most of the years ranging between 31.78 lakh to 359.11 lakh, except in 2018-19, 2019-20 and 2021-22. Under the manufacturing sector, GAPL has been making profits till 2017-18 ranging between 19.90 lakh to 787.05 lakh, however from 2018-19 onwards it has been incurring losses, highest being of 1155.27 lakh in 2020-21, due to a very low turnover.

Figure 9.11: Net profit/losses under Infrastructure and Manufacturing

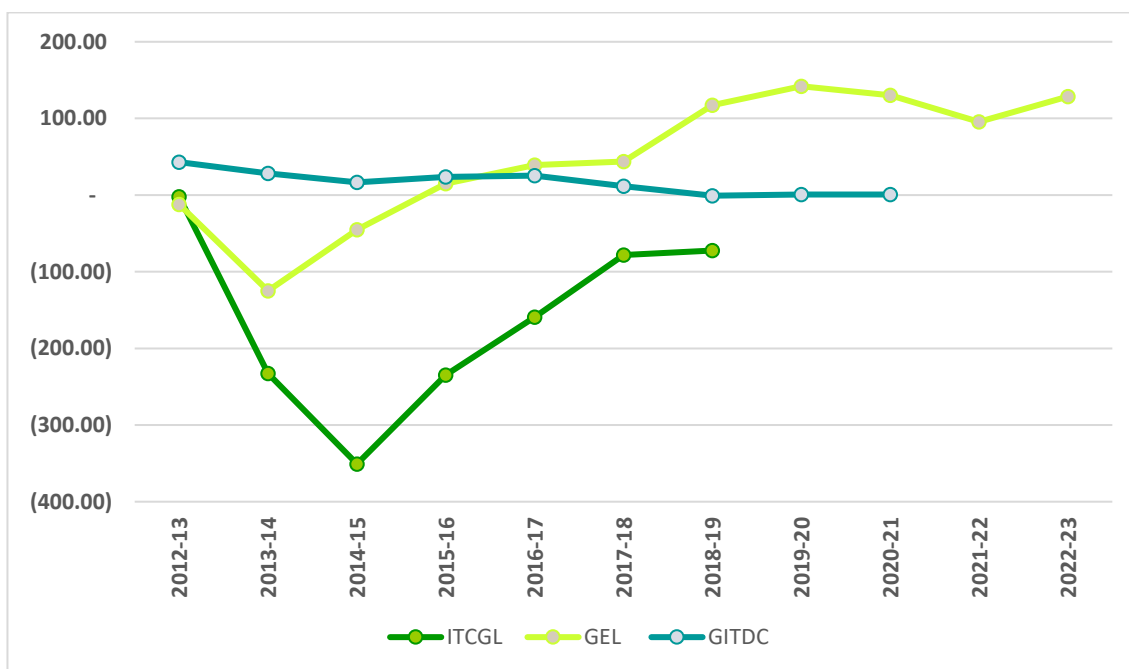


Source: Authors calculations based on Financial Statement of PSEs (Various years)

4) Information, Technology & Communication

GITDC has made profits throughout the period except for 2018-19 where the losses incurred were 0.78 lakh, however their profits have been gradually decreasing over the years from 43.02 lakh in 2012-13 to 0.63 lakh in 2020-21.

Figure 9.12: Net profit/losses under Information, Technology & Communication



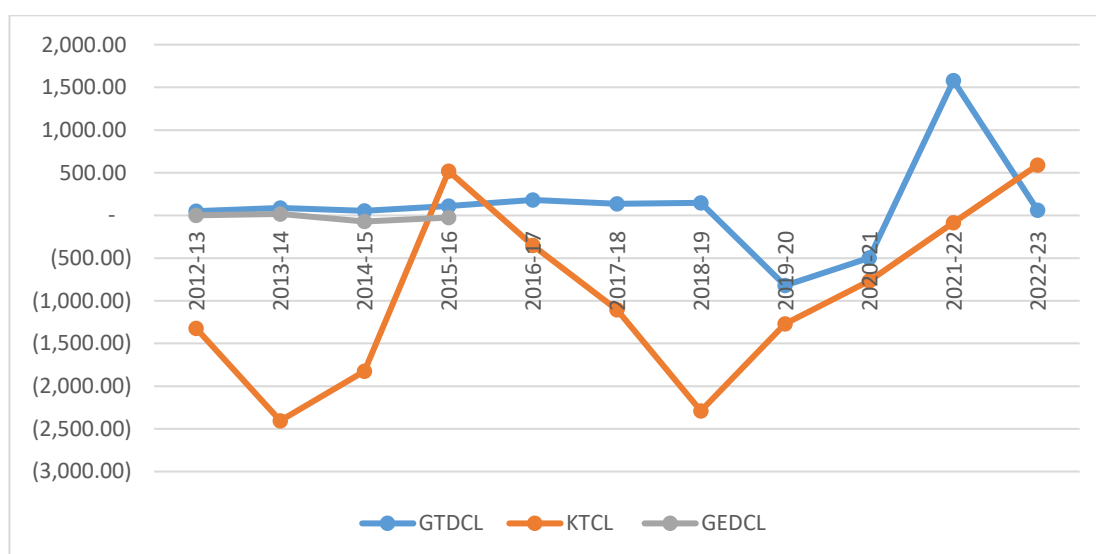
Source: Authors calculations based on Financial Statement of PSEs (Various years)

Though the revenues have almost remained constant, their expenses have been increasing over the years. GEL had losses only for the initial two years, thereafter it has made profits ranging between 15.02 lakh to 141.99 lakh. ITCGL, on the other hand has incurred losses throughout ranging between 2.05 lakh to 350.72 lakh.

5) Services

Under this sector, KTCL has been incurring losses for all the years except in 2015-16 where it made a profit of 519.54 lakh and 590 lakh in 2022-23. The expenditure incurred by the KTCL is higher than the revenues generated.

Figure 9.13: Net profit/losses under services



Source: Authors calculations based on Financial Statement of PSEs (Various years)

In contrast, GTDCL has incurred profits for all the years ranging between 51.62 lakh to 1578.84 lakh, except for 2019-20 and 2020-21 probably due to the pandemic.

We can therefore conclude that few among the PSEs have made profits throughout the years like EDC and GSIDCL. Secondly, GTDCL, GITDC, GSSCOBCFDCL, GSSTFDCL and GEL has made profits for most of the years. In contrast, ITCGL, KTCL, GIDC and GMCL has incurred losses for most of the years.

9.7.2 Accumulated Losses

What is worrisome is the accumulated losses of the PSEs in Goa. Within the agricultural, food and allied Sector, GSHCL has accumulated losses throughout, as of 2020-21, their accumulated losses stands at 109.80 lakh. GMCL had accumulated losses only for two years 2020-21 and 2021-22. Among all the enterprises under Industry and Finance sector, GHRSSICCL made had

accumulated losses throughout, as of 2022-23 it stands at 363.86 lakh, but the amount of accumulated losses has been decreasing from 2018-19 onwards. GIDC has been accumulating losses from 2018-19 and as of 2022-23 their accumulated losses stand at 9886.94 lakh. The enterprises under Information, Technology & Communication, ITCGL has accumulated losses since 2013-14 as of 2018-19 their losses stand at 1038.40 lakh. GITDC accumulated losses in 2012-13 and then from 2018-19 onwards, as of 2020-21 their accumulated losses stand at 43.95 lakh. GEL had accumulated losses from 2012-13 to 2018-19, thereafter had surplus reserves. GAPL has accumulated losses throughout, as of 2022-23 their losses stand at 3714.54 lakh. Under the service sector, KTCL accumulated losses throughout, as of 2022-23 their accumulated losses stand at 17145 lakh. GTDCL had accumulated losses upto 2020-21 at 1502.14 lakh thereafter they had surplus reserves.

KTCL had the highest amount of accumulated losses followed by GAPL, GIDC, ITCGL, GHRSSICCL, GSHCL and GITDCL.

9.7.3 Net Worth

Finally, in this section, we look at the Net worth of the Public Sector Enterprises, one of the most important component to assess the financial health and standing of any company. The Net Worth of the PSEs will give us an idea about the value of each PSE and how strong or poor they are in terms of their finances. It is important to note that a low or negative net worth of PSE indicates liability to the government. Since all PSEs don't have audited financial accounts as of March 2023, we have considered their last audited accounts for this analysis.

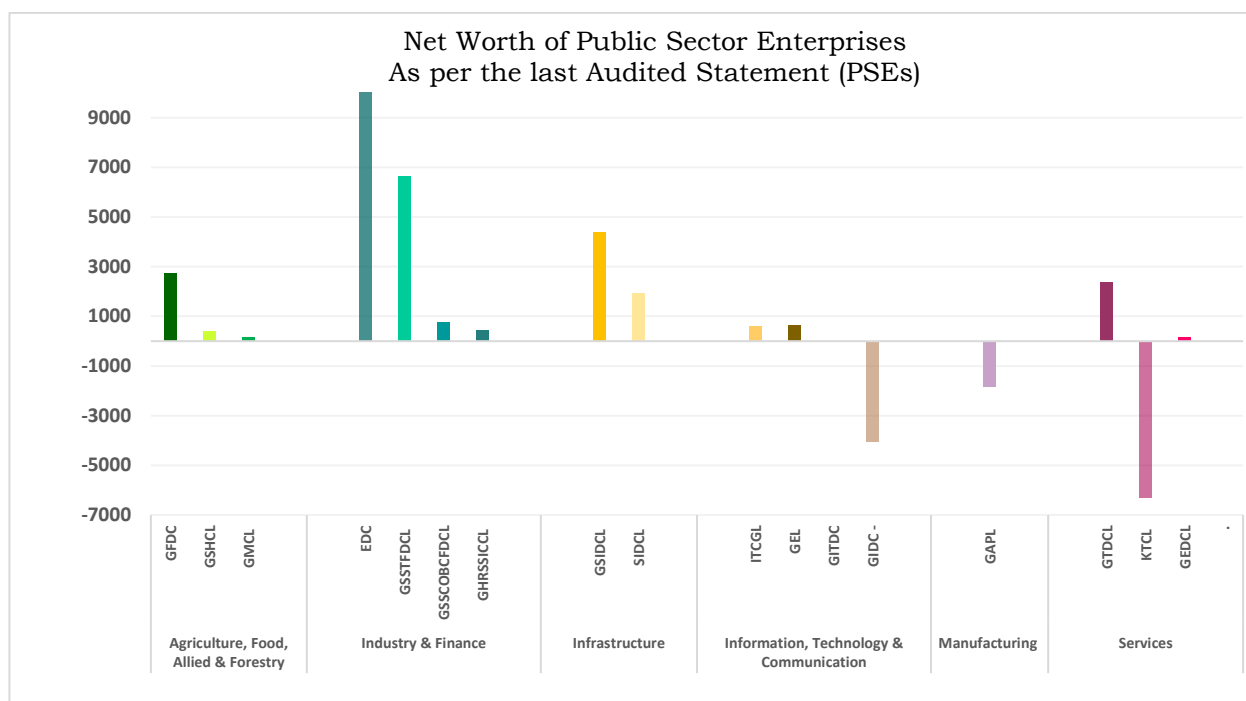
Net worth means the sum total of the paid-up share capital and free reserves and surplus minus the accumulated loss and deferred revenue expenditure. Free reserves mean all reserves created out of profits but do not include reserves created out of revaluation of assets and write back of depreciation provision.

Among all the sectors, the PSEs in industry and finance have a remarkable financial standing, especially EDC Limited whose net worth as of March 2023 stands at 74497.3 Lakhs which is one of the highest among all the PSEs. Followed by GSSTFDCL whose net worth stands at 6641.15 lakhs (2023). GSIDCL under infrastructure ranks 3rd highest at 4395.87 lakhs (2023), all the PSEs under the Agriculture, Food, Allied & Forestry sector have a positive net worth where GFDC ranks the 4th highest at 2750.62 lakhs as of March 2021. GAPL the only PSE in the manufacturing sector has a negative net worth of -1812.54 lakhs as of March 2023. With regards to the Information, Technology &

Communication sector two PSEs have a positive net worth (ITCGL and GEL) while the remaining two have a negative net worth. GIDCL net worth as of March 2023 is minus 4057.54 lakhs, 2nd lowest among all PSEs. Under the services sector, there are three companies of which GTDCL has a high net worth of 2355.60 lakhs (2023) while KTCL has the lowest net worth compared to all the PSEs (-6300 as of March 2023).

The net worth of three out of these PSEs like KTCL, GIDC and GAPL is negative as it has been completely eroded by accumulated losses.

Figure 9.14: Net Worth of PSEs as per the last audited statement of the PSEs



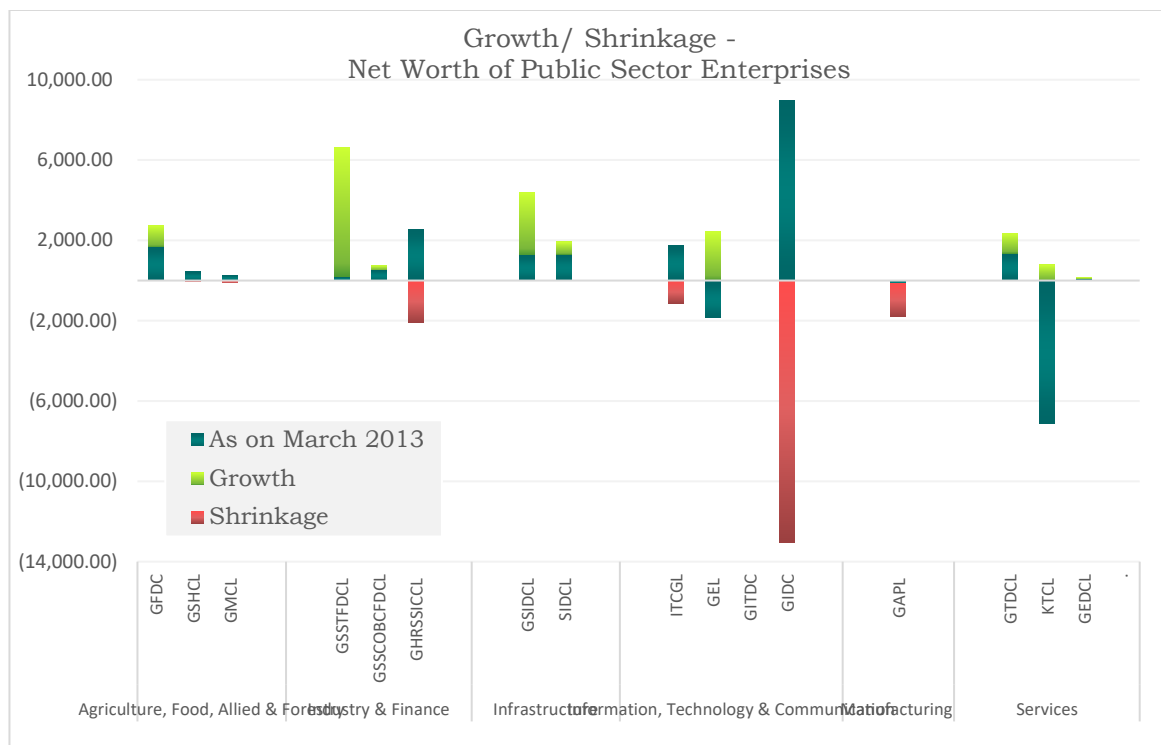
Source: Authors calculations based on Financial Statement of PSEs (Various years)

In the next graph we look at the growth of net worth considering 2012-13 as the base year. This graph is colour coded as dark green reflecting the base year in the series. Colour light green represents the growth in net worth and colour red represents shrinkage in net worth. For the GSSTFDCL the net worth grew more than 32 times, in 2012-13 it was 199 lakhs while in 2022-23, the net worth was 6641.15 lakhs. GSIDCL's net worth increased by 2.4 times, while for EDC in 2012-13 had net worth of 30441.35 lakh and in 2022-23 it increased to 74497.30 lakh. GIDC had a shrinkage in the net worth as they started incurring losses from 2018-19.

State Government may review the functioning of all loss-making SPSEs, especially those whose net worth had been completely eroded and take necessary steps to improve their financial performance.

In order to ascertain the performance and growth of the PSEs we now compare the growth of the PSEs in terms of their Net worth. Considering 2012-13 as the base year we observe the growth/ shrinkages of PSEs as of their last audited financial statement.

Figure 9.15: Growth/ Shrinkage - Net Worth of PSEs



Source: Authors calculations based on Financial Statement of PSEs (Various years)

The above graph shows the growth/ shrinkage in the net worth of the PSEs considering 2012- 13 as the base year which is represented by the blue colour in the graph. The growth and the shrinkage are represented as green and red colours in the graph respectively. The net worth of GSSTFDCL achieved the highest growth from 199 lakh in 2012-13 to 6641.15 in 2022-23, it grew more than 32 times. GSIDCL had the second highest growth rate in net worth which grew by 2.4 times, followed by EDC whose net worth grew from 30441.35 lakh in 2012-13 to 74497.30 lakh in 2022-23(not shown in the graph). There is a substantial growth rate observed in the net worth of GFDC, GTDCL and GEDCL which was more than 50%. GSSCOBCFDCL and SIDCL had a positive growth in net worth but less than 50%. With regards to GEL, in 2012-13 GEL had a negative net worth of -1822.92 lakh however, it managed to grow positively and its net worth stands at 630.33 lakhs as of March 2023. It is also worth noting that KTCL, which has the lowest net worth amongst all the PSEs for most of the years shows positive growth. However, it still has a negative net worth as of March 2023. On the contrary, GIDC which had the 2 nd highest net worth of 8981 lakhs in 2012-13 had a drastic fall in its net worth. Furthermore, GHRSSICCL, ITCGL, GMCL and

GSHCL show a shrinkage in their net worth and the net worth of GAPL has further deteriorated. From this analysis, we observe an improvement in the performance of GEL and KTC. GSSTFDCL and GSIDCL have achieved high growth rates. While the condition of GIDC and GAPL is ominous. GHRSSICCL, ITCGL, GMCL and GSHCL indicate a decline in their performance on account of their shrinking net worth. Overall, the PSEs of the infrastructure sector are performing well, followed by the Industry & Finance sector in which EDC Limited has an outstanding performance. The service sector has one of the most important PSE (KTCL) which is showing signs of improvement which are also observed across other parameters as seen earlier. The performance of most of the PSEs in Manufacturing, Information, Technology & Communication and Agriculture, Food, Allied & Forestry is deteriorating.

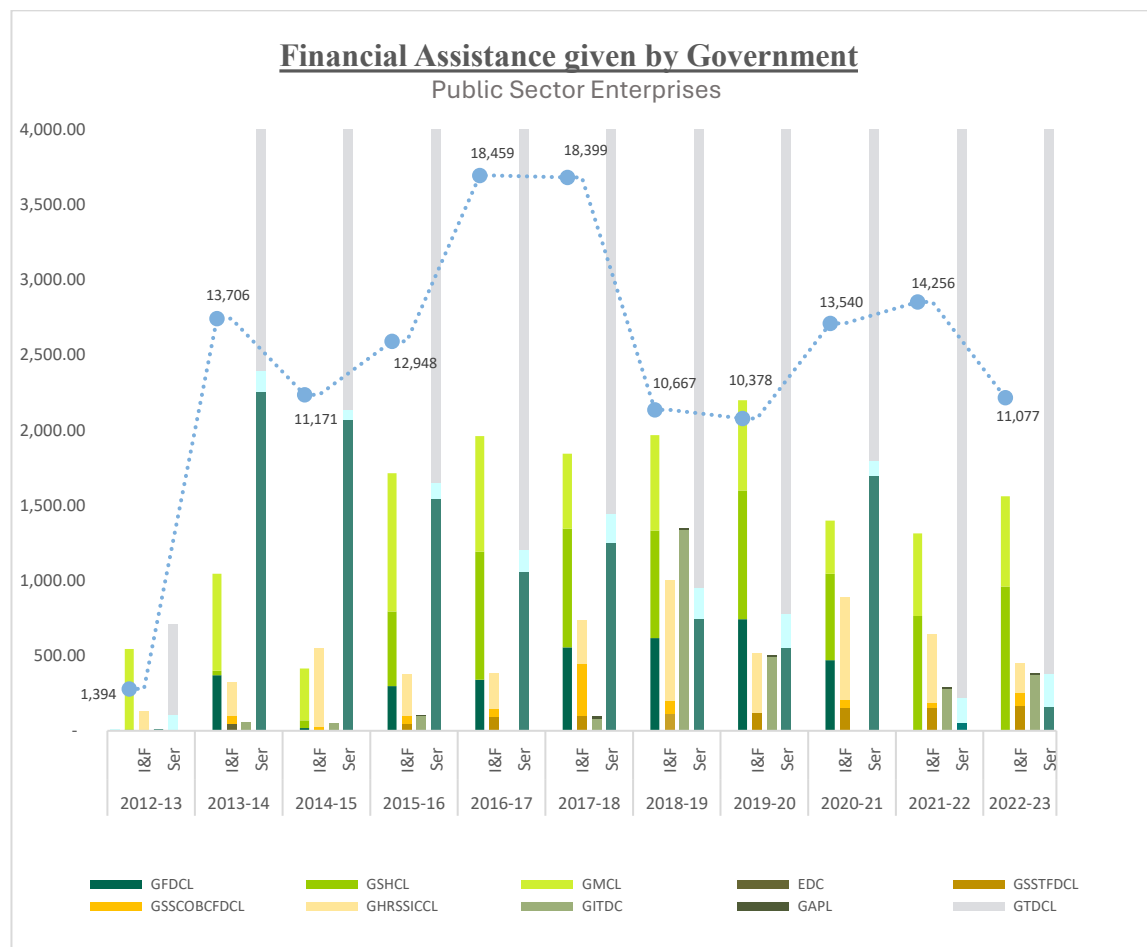
9.7.4 Non-functional or defunct state PSES and examine their financial burden on the exchequer

Among the PSEs in Goa, Goa Auto Accessories Limited (GAAL) was a subsidiary of EDC Limited in the past and operated from Honda, Sattari, Goa. Since operation of GAAL was not viable it has been liquidated and dissolution was completed in 2022. Among all the PSEs, under the Agriculture, Food, Allied and Forestry category, the GSHCL has incurred losses for almost throughout the period. The functioning of the GSHCL could be made more widespread, municipal markets which are run by the municipalities need to be brought under the domain of the GSHCL. GSHCL have increased the number of outlets in the state for greater outreach and in addition to stocking vegetables they are now also selling a variety of fruits. Under Information and Technology category, GITDCL and GEL seem to perform similar functions, indicating duplication of activities. Moreover, by and large both bodies are dependent on Government business. In view of this, Government should explore the possibility of amalgamating GITDCL with GEL. In case of the service sector, the KTCL incurred losses for almost all the years except for 2015-16. However, it is necessary to note that Goa has for long dependence on privatized bus-transport as well Kadamba Transport. To a large extent, KTCL is seen as having accomplished the objective of providing point-to-point and affordable services to the multitude of Goans.

9.8 Financial Assistance to the PSEs by the Government

In this section, we observe the direct financial assistance given to the public sector enterprises by the state and central government.

Figure 9.16: Financial Assistance to the PSEs



Source: Finance Accounts, Various years and Audited Financial statements of the PSEs

The role of public sector enterprises is to provide essential services and promote economic growth across different sectors. To ensure public sector enterprises' smooth functioning and survival, the government offers financial assistance to PSEs through grants and subsidies. The financial assistance through grants is given to meet the revenue expenditure as well as fund capital-intensive projects of the PSEs, and the subsidies enable the PSEs to offer their services at a subsidized rate.

The data was collected from audited financial statements of the PSEs and various financial accounts of Goa. The graph displays the financial assistance given by the government to PSEs across different sectors.

The financial assistance provided by the government to public sector enterprises primarily comes in the form of grants, with most of this funding sourced from state governments. Between the years 2012-13 and 2016-17, a positive trend was observed in financial assistance, increasing from 1,394 lakhs in 2012-13 to 18,459 lakhs in 2016-17. However, in

the following three years, financial assistance declined, reaching 10,378 lakhs in 2019-20. During the next two years, there was an increase in financial assistance due to the impact of the pandemic; however, this funding decreased again in 2022-23. Overall, the trend in financial assistance over the study period has been fluctuating.

The service sector which includes KTCL, GTDCL and GEDCL, receives the highest amount of financial assistance as compared to other sectors throughout the period. It has always been more than 50% in proportion to the total assistance received by all the PSEs. Compared to all PSEs, GTDCL has received the highest funding (not depicted in the graph on account of high values). On average, GTDCL received around 7-8 thousand lakhs from the state government during the period 2013-14 to 2022-23. The state government has given grants to GTDCL for various purposes including Infrastructure Works, Marketing & Promotion and grants for Administrative Charges from SPV Works. Additionally, GTDCL received a grant from the central government (Swadesh Darshan) from 2016-17 to 2021-22 which amounted to Rs. 21,782.78 lakhs.

Following GTDCL, KTCL receives the second-highest financial support from the government. In the financial year 2015-16, KTCL was granted 1,299.82 lakhs from the central government under the JNNRUM Scheme, and in 2016-17, it received 506 lakhs under the AMRUT scheme. Additionally, in 2013-14, KTCL was provided 55.46 lakhs by the Ministry of Road Transport and Highways, New Delhi for the implementation of the Intelligent Transport System Project.

KTCL also benefits from regular financial assistance from the state government, which includes various grants and subsidies. One of the largest forms of support has been the Debt Reduction grant, amounting to 7,041.48 lakhs, received by KTCL from 2013-14 to 2020-21. Other grants provided to KTCL cover expenses for purchasing new buses, upgrading existing ones, repair and maintenance, and bus shelters and platforms.

During the study period, KTCL received two subsidies: 225.75 lakhs in 2013-14 and 325.80 lakhs in 2014-15 for vehicle replacement. Additionally, in 2014-15, a subsidy of 282.45 lakhs was granted towards the Seasonal Pass Scheme for daily commuters and students. Although there has been a fluctuating trend in the financial support provided to KTCL, overall funding has been declining over the years.

The agricultural sector, which includes Public Sector Enterprises: GFDCL, GSHCL, and GMCL, receives the second-highest level of financial support. Among these, GMCL has

received the largest amount of financial assistance from the government, totalling Rs. 6,450.33 lakhs. This includes a grant of 61.70 lakhs from the central government and 580 lakhs from the state government specifically for the modernization of the abattoir. GMCL also receives regular grants from the state government to help cover its annual expenses.

GSHCL has been given a total of Rs. 6,093.92 lakhs as financial assistance from the government over the years. Meanwhile, GFDCL primarily receives financial assistance from the state government, totalling Rs. 3,406.89 lakhs between 2012-2013 and 2022-2023. This assistance includes salary grants of 1,316 lakhs, in addition to several other grants for plantation enrichment, cashew rejuvenation, and maintenance of botanical garden.

Following the agricultural sector, the Industry and Finance sector receives the third-highest financial assistance from the government. Financial assistance to the public sector enterprises in this sector has been gradually increasing since 2012-13, peaking in 2018-19, after which it began to decline. This sector includes four PSEs: EDCL, GSSTFDCL, GSSCOBCFDCL, and GHRSSICCL.

EDCL received a single grant of 50 lakhs from the state government in 2013-14. Among the PSEs in this sector, GHRSSICCL has received the highest amount of financial assistance, followed by GSSCOBCFDCL. GSSCOBCFDCL primarily receives revenue grants, but in 2017-18, it also received a capital grant of 250 lakhs. The financial assistance given to GSSTFDCL is showing a positive trend over the years.

The Manufacturing sector includes only one Public Sector Enterprise, GAPL, which has received a total of 60.57 lakhs in financial assistance from the government. The Information Technology and Communication sector consists of four PSEs; however, data was only available for one of them: GITDC. It received a total of Rs. 2,784.53 lakhs from the state government. Unfortunately, data for the PSEs in the Infrastructure sector is not available.

Based on the available data, we conclude that the government is strategically leveraging its economic advantage by promoting and supporting enterprises with the potential to drive growth, both directly and indirectly. The service sector, which plays a crucial role in the Goan economy, receives significant financial assistance from the government. Throughout the study period, the Goa Tourism Development Corporation Ltd has received the highest level of financial support. Additionally, KTCL also benefits from substantial funding from both state and central governments, which is essential for its role in facilitating the mobility of the labour force, students, and both domestic and interstate passengers.

Moreover, the agricultural sector receives considerable financial support, followed by the industrial and financial sectors. Despite some fluctuations in the financial assistance provided to public sector enterprises, the overall trend indicates that total financial assistance has decreased in recent years. This signifies a reduced dependence of PSEs on government funding.

9.9 Discussion

From the above analysis we can conclude that the ratio of PSEs' turnover to GSDP and the ratio of PSEs total revenue to GSDP, has been higher in the initial years, but has subsequently declined. Among all the PSEs, GSIDCL had highest of both the ratios and contributed more towards GSDP. The State Government provides financial support to the State PSEs in the form of equity, loans and grants/subsidy from time to time. The state government demonstrated commitment to the State PSEs by increasing its investment in the form of equity, and therefore has higher share in total equity for most of the PSEs. Nine PSE's received equity support from the central government as well. Besides, the government support, the PSEs received equity from other sources. Most of the PSEs have loans provided by the State government, GSSTFDCL, GSSCOBCFDCL, GSIDCL and SIDCL received loans from the centre as well, while GIDC received loans from other sources. Among all the sectors, Infrastructure had highest investment- both equity and loans, followed by Industry and Finance, and then the Service sector enterprises. The investment in the infrastructure sector constituted 18 to 65 percent of the total investment.

As far as profitability ratios are concerned, for Return on Capital Employed (RoCE), which measures how efficiently the equity and debt resources have been employed to earn profits, we find that most of the PSEs had positive returns. EDC had positive RoCE for all the years ranging from 9 percent to 18 percent, followed by GSSTFDCL, GSSCOBCFDC, ITCGL. In contrast, for GMCL, GHRSSICCL, the percentage of negative returns was higher. For Return on Equity Ratio, that measures the profitability in relation to shareholders' equity, EDC and GSIDCL had positive returns for all the years, while, GMCL, GIDC, ITCGL and KTCL had negative returns for most of the years. Net Profit Ratio (NPR) that is concerned with revenue that turns into profit after all expenses are made, has been high for EDC between 46.62 to 76.8 percent.

PSEs like EDC, GSSTFDCL, GTDCL and GIDC have relied on their own finances that includes equity capital and their reserves, with debt equity ratio being either 0 (implying no

debt) or below 1 (low borrowings). EDC has also displayed the most ideal Debt Service Coverage Ratio (DSCR) followed by GEL. The liquidity ratio that is the ratio of current assets to current liabilities, GIDC and KTCL had current ratio of less than one for all the years, while EDC and GHRSSICCL has shown an improvement.

As far as Net profits/losses, are concerned, highest net profits were made by EDC ranging between Rs 2510.57 lakhs to Rs 6669.21 lakh. Higher profits were also made by GFDCL, and GSIDCL, throughout the years, while GMCL, ITCGL, GIDC and KTCL (except 2022-23) has incurred losses for almost all the years.

As far as accumulated losses are concerned, KTCL had the highest amount of accumulated losses followed by GAPL, GIDC, ITCGL, GHRSSICCL, GSHCL and GITDCL. The net worth of KTCL, GIDC and GAPL is negative as it has been completely eroded by accumulated losses.

9.10 Review of Profitability and Measures Taken to Improve performance

The PSEs in Goa are established to carry out activities of a commercial nature and occupy an important place in the State's economy. However, accumulated losses continued to be worrisome for the PSEs in Goa.

Under the **Agriculture, Food, Allied and Forestry** category, the GSHCL has incurred losses for almost throughout the period. The functioning of the GSHCL could be made more widespread, for this the municipal markets which are run by the municipalities need to be brought under the domain of the GSHCL. GSHCL have increased the number of outlets in the state for greater outreach and in addition to stocking vegetables they are now also selling a variety of fruits. The functioning of the GSHCL could be made more widespread, for this the municipal markets which are run by the municipalities need to be brought under the domain of the GSHCL. GSHCL have increased the number of outlets in the state for greater outreach and in addition to stocking vegetables they are now selling a variety of fruits. Local fruits like 'Mankurad' and 'Manguilal' mangoes, 'Mandolli' bananas and local vegetables like 'Tambdi Bhaji', 'Saath Shirache Bhende', Majorda and Taleigao Brinjals, Khola chillies already having GI tags, local paddy varieties, Cashew nuts needs to be effectively branded and sold.

Under **Industry and Finance sector**, Goa GHRSSIDC has been incurring losses. The marketing strategies could be improvised and a purely professional approach could be adopted. GHRSSIDC could follow the trend of mixing traditional art with the modern contemporary art, this would lead to a value addition made to the field of handicraft and the GHRSSIDC would

be committed to sustainability. The Chairman, Vice Chairman and the Board of Directors appointed by the government could be experts in the field.

Under **Information and Technology**, GITDCL and GEL seems to perform similar functions, indicating duplication of activities. Moreover, by and large both bodies are dependent on Government business. Government should explore the possibility of amalgamating GITDCL with GEL.

Under the **manufacturing sector**, the GAPL has made losses throughout. It is necessary that all the Government hospitals and pharmacies should give preference to purchase medicines and pharmaceuticals from the GAPL especially generic drugs. If they are not in a position to provide only then private options should be explored. Presently this does not seem to happen in totality.

Under the Information Technology and Communication sector, there has been fluctuations in the profits made by GEL. In the case of the electronics-related companies, GEL and the GITDCL could be merged to reduce costs of operation and increase profitability. In the case of GITDCL, the purchases made by the state Government could be routed to the GEL and not to the private enterprises.

In case of the **service sector**, the KTCL has incurred losses for almost all the years except for 2015-16. However, it is necessary to note that Goa has long dependence on privatized bus-transport as well Kadamba Transport. The ticket prices are regulated. KTCL also provides school buses, college buses and thus fulfils a social need. To a large extent, KTCL is seen as having accomplished the objective of providing point-to-point and affordable services to the multitude of Goans, KTCL has also introduced pass system for the daily commuters within different cities (Vasco, Panjim, Margao & Ponda). As such, the cost of providing all these services has been substantial. While the KTC provides transport and connectivity to Goa's main towns (profitable routes) as well as the rural hinterland (unprofitable routes), the private owners prefer to ply only in the commercially viable routes -- the main towns and cities like Panaji, Margao, Vasco, Mapusa, Ponda and Curchorem. All the routes could be declared only for the KTCL, and if private owners want to provide transport facilities to the profitable areas, they could pay some form of fee to KTCL, so that the income earned from this source can make the KTCL sustainable to provide the services. This amount can be utilised to provide services on loss making routes. Similar strategy could be adopted for the interstate transport provided by KTCL.

For GSIDCL, the loan outstanding from state government increased from 5000 lakh in 2012-13 to 69135.80 in 2018-19 but later declined to 28467.96 lakh in 2022-23. Investments in

loss making PSEs do not contribute to the economic growth of the State. For GIDCL, there is no reason as to why GIDCL should make losses in recent years, which was performing well in the past, but for mismanagement. Government should invariably appoint experts from industrial and business, as Chairman as well as on Board of Directors.

Chapter 10 Power Sector

10.1 Introduction

Power sector is critical for the growth of the economy of any state providing the energy needed to drive industries, support infrastructure development, and improve the quality of life for residents. Reliable and affordable electricity attracts investment, fuels industrialization, and enhances productivity across sectors such as agriculture, manufacturing, and services. It also enables technological advancements, supports urbanization, and creates employment opportunities both directly and indirectly.

The power sector in Goa is primarily managed by the Goa Electricity Department (GED), responsible for power generation, transmission, and distribution in the state. As per the Census 2011, Goa has highest electrification coverage 98 percent for urban and 96 percent for the rural area (GoG, n.d). Goa does not have significant power generation capacity of its own and relies on power imports from neighbouring state. Its sources of electricity are from various power stations in neighbouring states and central power utilities like NTPC (National Thermal Power Corporation) and other entities.

The state faces challenges such as high transmission and distribution (T&D) losses, aging infrastructure, and a rising demand for electricity driven by tourism, industrial growth, and urbanization. Goa is also looking to increase its focus on renewable energy, especially solar power, to diversify its energy mix and ensure long-term sustainability. Efforts to improve grid efficiency, reduce T& D losses, and promote clean energy projects are ongoing. In recent years, the state has also been working to modernize the grid by incorporating smart metering and enhancing customer services through digitization.

10.2 Power consumption in the state

Goa's power consumption is driven by its residential, industrial, and tourism sectors, with tourism playing a significant role in demand fluctuations. The state has nearly 100 percent electrification, and its per capita electricity consumption is relatively high due to its well-developed infrastructure and urbanized population. Industrial consumers, operations and manufacturing units, account for a substantial portion of energy use, followed by commercial establishments like hotels and restaurants catering to tourists. Despite limited local power generation, Goa ensures a steady supply by importing electricity from the

national grid. Efforts are underway to reduce energy losses and promote renewable energy adoption.

Table 10.1: Power consumption in Goa (In M.kwh)

Purpose	At the time of statehood (1987-88)	2018-19	2019-20
Domestic consumption	94.4	1152.05	1206.37
Commercial consumption	27.8	541.73	611.02
Industrial consumption	170.5	1882.81	2077.14
Consumption for irrigation purposes	6.3	26.37	27.29
Other purposes	77.2	58.51	57.94

Source: Goa Economy in Figures (2020). GoG. [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.goa.gov.in/wp-content/uploads/2020/11/Goa-Economy-in-Figures-2020.pdf](https://www.goa.gov.in/wp-content/uploads/2020/11/Goa-Economy-in-Figures-2020.pdf).

The Table 1 indicates that, there is a continuous increase in the consumption of electricity in Goa since statehood. Industrial consumption of power which is 2077.14 M. kwh. is highest compared to domestic consumption of power i.e., 1206.37 M. kwh. While there is an substantive increase in the consumption of industrial and domestic consumption of power since statehood. The consumption of power for other purposes has decreased from 77.2 M. kwh. To 58.51 M. kwh. In 2018-19 which further reduced to 57.94 M.Kwh. in 2019-20.

10.3 Power sector and Goa State Finance

Power is an important component of the Finance Account in the revenue account. The receipts of power (revenue account) falls under Economic Services of the non-tax revenue. The receipts of power are divided into Transmission and Distribution and General account. The receipts under these two heads are given in the Table 2. The total receipts from power is given in the Table 1.

Table 10.2: Receipts from power (Revenue Accounts) (in Lakh)

Year	Total receipts
2011	100049.32
2012	113996.92
2013	118795.02

2014	132166.47
2015	170890.87
2016	176579.55
2017	211908.93
2018	191979.88
2019	196052.10
2020	205105.47
2021	219111.79
2022	275705.50

Source: Finance Account GOG various years

The Table presents the receipts from Power (Revenue Account) from 2011 to 2022. It shows a steady increase over the years with some fluctuations. Receipts grew from Rs.100,049.32 lakh in 2011 to rs275,705.50 lakh in 2022, reflecting a significant rise in revenue generation from power-related activities. The slight decline in 2018 and stabilization in subsequent years suggests a period of revenue adjustment or demand moderation before resuming growth. Overall, the trend highlights the growing importance of power as a revenue-generating sector.

Table 10.3: Receipts of power under different heads (Revenue Account) (in Lakh)

Year	Transmission and Distribution	General
2011-12	99848.50	200.82
2012-13	113854.51	142.41
2013-14	118605.25	189.77
2014-15	132045.02	121.45
2015-16	170679.21	211.66
2016-17	176460.09	119.46
2017-18	211808.63	100.30
2018-19	191881.83	98.05
2019-20	195895.23	156.87
2020-21	204914.71	190.76
2021-22	218936.50	175.29
2022-23	275461.10	244.40

Source: Finance Account GOG various years

The analysis of the revenue receipts under "Transmission and Distribution" and "General" heads from 2011-12 to 2022-23 shows a consistent upward trend in the former, reflecting growing revenue generation in the power sector. Starting at Rs.99,848.50 lakh in 2011-12, it surged to Rs.2,75,461.10 lakh by 2022-23, indicating significant increase in the receipts over the years. In contrast, under the "General" head receipts remain relatively minor and

fluctuated, peaking modestly at Rs.244.40 lakh in 2022-23. Transmission and distribution remains as the primary revenue contributor to receipts of power in the revenue account.

The Transmission and Distribution includes receipts from power development scheme in Goa, receipts towards power system development, other receipts and also includes Deduct-refund. The Table depicts the receipts of power (Revenue Account) under Transmission and Distribution.

Table 10.4: Receipts under Transmission and Distribution

Year	Power Development Scheme in Goa	Receipts towards Power System Development	Other Receipt	Deduct - Refund	Total
2011-12	99,022.38		826.12		99,848.50
2012-13	1,13,233.05		630.15	(8.69)	1,13,854.51
2013-14	1,18,045.94		564.43	(5.12)	1,18,605.25
2014-15	1,31,384.15		668.25	(7.38)	1,32,045.02
2015-16	1,69,838.73		841.92	(1.44)	1,70,679.21
2016-17	1,74,558.87		1,901.54	(0.32)	1,76,460.09
2017-18	2,10,937.86		870.77	-	2,11,808.63
2018-19	1,90,796.77		1,085.06		1,91,881.83
2019-20	1,94,948.15		947.08		1,95,895.23
2020-21	2,02,969.26		1,945.45		2,04,914.71
2021-22	2,17,611.40		1,325.10		2,18,936.50
2022-23	2,73,959.74	55.97	1,469.01	(23.62)	2,75,461.10

Source: Finance Account GOG various years

The Table shows the receipts under Transmission and Distribution head of the revenue account from 2011-12 to 2022-23 under different heads. The Power Development Scheme in Goa is the dominant contributor to the receipts under transmission and distribution. Receipts under this showed a steady increase from Rs.99,022.38 lakh in 2011-12 to Rs.2,73,959.74 lakh in 2022-23. Receipts towards Power System is added since 2022-

23. Other Receipts, are relatively small and fluctuated, peaking in 2020-21 at Rs.1,945.45 lakh. Refunds, are negligible and have minimal impact on the totals.

Table 10.5: Receipts under General Head

Year	Other Receipt	Deduct -refund	Total
2011-12	200.82		200.82
2012-13	142.41		142.41
2013-14	189.77		189.77
2014-15	121.50	(0.05)	121.45
2015-16	211.66		211.66
2016-17	119.46		119.46
2017-18	100.30		100.30
2018-19	98.05		98.05
2019-20	156.87		156.87
2020-21	190.76		190.76
2021-22	175.29		175.29
2022-23	244.40		244.40

Source: Finance Account GOG various years

The Table 4, provides the details of receipts under General head of the revenue account. Other receipts are part of the General receipts. It also includes deducts or refunds if any.

From the Table 4 it is evident that, the Other Receipts showed fluctuations across the years. The receipts peaked at Rs.244.40 lakh in 2022-23, marking a significant increase compared to previous years, and were lowest in 2018-19 at Rs. 98.05 lakh. Deductions under Refunds are negligible, recorded only in 2014-15 at Rs.0.05 lakh, minimally reducing the total.

Overall, while the General head contributes a relatively minor share compared to Transmission and Distribution, its values reflect year-on-year variations. However, there is a steady growth seen in recent years in the receipts under general head.

Table 10.6: Revenue and Capital Receipts Explanatory Notes

Year	Increase / (Decrease) Amount (in lakhs)
2011-12	3,143.04
2012-13	13,947.60
2013-14	4,798.10
2014-15	13,371.45
2015-16	38,724.40
2016-17	5,688.68
2017-18	35,329.38

2018-19	19,929.05
2019-20	4,072.22
2020-21	9,053.37
2021-22	14,006.32
2022-23	56,593.71

Source: Finance Account GOG various years

The Table provides the year-wise Increase or Decrease in Revenue and Capital Receipts. In the above table the amount mentioned from the year 2011-12 to 2017-18 is the receipts from the sale of power and power exchange under power development scheme. From 2018-19 onwards the receipts are under power development schemes and other receipts. Over the years, there has been a consistent increase in revenue and capital receipts, with substantial fluctuations in the amounts year-to-year. A significant rise of Rs.38,724.40 lakh, marking a sharp increase compared to previous years. The highest increase in the period, with Rs.56,593.71 lakh, indicating robust financial performance. The data reflects varied increments rather than a steady linear trend.

10.3.1 Expenditure under Revenue Account

The main expenditure heads under revenue account of power included include the expenditure on Transmission and Distribution, General and Non-conventional sources of energy. The total expenditures for power including all these heads is provided in the Table.

Table 10.7: Total expenditure of power (Revenue Account) Rs. In Lakh

Year	Total
2011-12	1,16,370.86
2012-13	1,25,024.08
2013-14	1,17,797.79
2014-15	1,32,029.13
2015-16	1,48,897.37
2016-17	1,56,313.10
2017-18	1,67,033.54
2018-19	1,89,382.99
2019-20	2,22,019.01
2020-21	2,04,322.03
2021-22	2,22,698.16
2022-23	2,74,414.49

Source: Finance Account GOG various years

The total expenditure of power includes expenditure under Transmission and Distribution and General. Transmission and Distribution further includes the expenditure of Direction and Administration, Suspense, Other expenditure and Deduct-Recoveries of Over Payment. While the General expenditure includes Other expenditure and Deduct-Recoveries of Over Payment. The Table gives the expenditure of power under Transmission and General.

Table 10.8: Expenditure under different heads of power (Revenue Account) Rs. in lakhs

Year	Transmission & Distribution	General
2011-12	116346.45	24.41
2012-13	124931.39	92.69
2013-14	117639.22	158.57
2014-15	131907.96	121.17
2015-16	148693.98	203.39
2016-17	156057.16	255.94
2017-18	166319.08	714.46
2018-19	189397.48	-14.49
2019-20	221617.75	401.26
2020-21	203935.08	386.95
2021-22	222282.36	415.8
2022-23	273966.82	447.67

Source: Finance Account GOG various years

The table provides an overview of expenditure under different heads of power (Revenue Account) for the years 2011-12 to 2022-23.

Transmission and distribution accounts for the vast majority of expenditure, showing a steady rise over the years, from Rs.1,16,346.45 lakh in 2011-12 to Rs.2,73,966.82 lakh in 2022-23. Expenditures grew substantially after 2017-18, with significant hikes in 2019-20 and 2022-23.

The expenditures under General head are comparatively minor and fluctuated over the years. Starting at Rs.24.41 lakh in 2011-12, it peaked at Rs.714.46 lakh in 2017-18 but fell briefly into the negative in 2018-19 (Rs.-14.49 lakh). For the year 2018-19, the expenditure under General was Rs. -14.40 lakh, because the Other Expenditure was Rs.305.67 lakh while the Deduct-Recoveries of over payment was Rs. - 320.16 lakh which was in negative. By 2022-23, the expenditure under General had increased to Rs.447.67 lakh, showing a stabilization and modest upward trend in recent years.

Table 10.9: Expenditure under Transmission and Distribution (Revenue Account) (In Lakh)

Year	Direction & Administration	Suspense	Other Expenditure	Deduct - Recoveries of overpayment	Total
2011-12	13,748.32	730.99	1,01,872.39	(5.25)	1,16,346.45
2012-13	14,841.51	(2,910.76)	1,13,015.46	(14.82)	1,24,931.39
2013-14	16,328.22	224.05	1,01,532.49	(445.54)	1,17,639.22
2014-15	19,466.71	(639.80)	1,13,086.36	(5.31)	1,31,907.96
2015-16	21,382.20	126.43	1,27,189.13	(3.78)	1,48,693.98
2016-17	21,864.59	1,005.86	1,33,189.74	(3.03)	1,56,057.16
2017-18	31,140.72	762.59	1,34,420.60	(4.83)	1,66,319.08
2018-19	31,033.21	720.51	1,57,646.65	(2.89)	1,89,397.48
2019-20	32,813.05	1,335.64	1,87,474.79	(5.73)	2,21,617.75
2020-21	29,869.17	4,462.69	1,69,622.67	(19.45)	2,03,935.08
2021-22	31,209.95	5,387.73	1,85,700.26	(15.58)	2,22,282.36
2022-23	31,801.28	6,036.14	2,36,169.24	(39.84)	2,73,966.82

Source: Finance Account GOG various years

The Table outlines the breakdown of expenditure under Transmission and Distribution (Revenue Account) across four categories - Direction and Administration, Suspense, Other Expenditure, and Deduct - Recoveries of Overpayment, from 2011-12 to 2022-23.

Direction and Administration expenditures under this head steadily increased over the years, from Rs.13,748.32 lakh in 2011-12 to Rs.31,801.28 lakh in 2022-23. Suspense category shows significant variability, with occasional negative entries (e.g., Rs. -2,910.76 lakh in 2012-13) and a steady rise in later years, peaking at Rs.6,036.14 lakh in 2022-23. Other Expenditure is the major component under expenditure has seen a sharp rise from Rs.1,01,872.39 lakh in 2011-12 to Rs.2,36,169.24 lakh in 2022-23. Deduct - Recoveries of Overpayment are negligible for many years.

Table 10.10: Expenditure under General (Revenue Account) (In Lakh)

Year	Other Expenditure	Deduct - Recoveries of overpayment	Total
2011-12	24.41		24.41

2012-13	92.90	(0.21)	92.69
2013-14	158.57	-	158.57
2014-15	121.73	(0.56)	121.17
2015-16	204.05	(0.66)	203.39
2016-17	255.94		255.94
2017-18	714.46		714.46
2018-19	305.67	(-320.16)	(-14.49)
2019-20	401.26	-	401.26
2020-21	388.09	(1.14)	386.95
2021-22	415.80	-	415.80
2022-23	447.68	(0.01)	447.67

Source: Finance Account GOG various years

The table highlights expenditure under General (Revenue Account), comprise of two components: Other Expenditure and Deduct - Recoveries of Overpayment, from 2011-12 to 2022-23. Other Expenditure is the primary component, showing variability over the years. Starting at Rs.24.41 lakh in 2011-12, it peaked at Rs.714.46 lakh in 2017-18. After a notable decrease in expenditure in 2018-19 (Rs.305.67 lakh), it recovered to Rs.447.68 lakh in 2022-23. Deduct - Recoveries of Overpayment are small amounts but are present in several years. Importantly an amount of Rs.-320.16 lakh in 2018-19 in this category resulted in a net negative expenditure for that year. However, these deductions generally have minimal impact on the overall totals. The total expenditure fluctuated significantly, with the lowest value in 2018-19 (Rs.-14.49 lakh due to high recoveries) and the highest in 2017-18 (Rs.714.46 lakh). Recent years (2020-23) show steady growth in the expenditure.

Expenditure for Non-conventional source of energy (Revenue Account)

Non-conventional energy sources, such as solar, wind, geothermal, tidal, and biomass, are renewable, eco-friendly alternatives to fossil fuels. These sustainable sources help reduce greenhouse gas emissions, combat climate change, and promote energy security. By leveraging abundant natural resources, they offer cost-effective and reliable energy solutions, fostering a cleaner and greener future. Government of Goa is making an effort to

increase the non-conventional energy sources with a focus on expanding renewable energy infrastructure to reduce reliance on conventional sources of energy. The expenditure under the non-conventional sources of energy includes expenditure of bio-energy, direction and administration, other expenditure. The Table 10 provides total expenditure of the government on the non-conventional sources of energy under revenue account.

Table 10.11: Expenditure under non-conventional sources of energy (In Lakh)

Year	Total expenditure
2011-12	49.44
2012-13	115.86
2013-14	5.30
2014-15	-
2015-16	97.15
2016-17	4.17
2017-18	85.80
2018-19	254.00
2019-20	-
2020-21	255.00
2021-22	995.83
2022-23	-

Source: Finance Account GOG various years

The table outlines the expenditure under Non-Conventional Sources of Energy from 2011-12 to 2022-23. Expenditure between 201-12 to 2014-15 was sporadic and generally low, with amounts ranging from Rs.4.17 lakh in 2016-17 to Rs.115.86 lakh in 2012-13. Between 2017-18 to 2020-21 a noticeable increase in the expenditure on non-conventional energy occurred peaking at Rs.254 lakh in 2018-19 and Rs.255 lakh in 2020-21. There is a significant increase in the expenditure during 2021-22 (Rs.995.83 lakh), possibly indicating a large-scale investment or program under non-conventional energy sources.

Table 10.12: Expenditure of bio-energy (Revenue Account) (In Lakh)

Year	Community and institutional Biogas Development	Deduct - Recoveries of overpayment	Total
2011-12	4.44	-	4.44
2012-13	5.86	-	5.86
2013-14	5.32	(0.02)	5.30
2014-15			-
2015-16	15.04	-	15.04
2016-17	4.17	-	4.17
2017-18	4.00	-	4.00
2018-19	-	-	-

2019-20	-	-	-
2020-21	-	-	-
2021-22	-	-	-
2022-23	-	-	-

Source: Finance Account GOG various years

The Table outlines the expenditure on Bio-Energy (Revenue Account), specifically for Community and Institutional Biogas Development, along with deductions for overpayment recoveries, from 2011-12 to 2017-18. Expenditure under this category is relatively low and fluctuating. It starts at Rs.4.44 lakh in 2011-12, peaks at Rs.15.04 lakh in 2015-16, and decreases again to Rs.4.00 lakh by 2017-18.

Table 10.13: Expenditure on Direction and Administration (In Lakh)

Year	Amount
2011-12	45.00
2012-13	110.00
2013-14	
2014-15	
2015-16	82.11
2016-17	
2017-18	81.80
2018-19	254.00
2019-20	-
2020-21	255.00
2021-22	995.83
2022-23	-

Source: Finance Account GOG various years

The Table shows the expenditure on Direction and Administration from 2011-12 to 2022-23, reflecting intermittent and highly variable spending. Spending began modestly, with Rs.45.00 lakh in 2011-12 and peaked at Rs.110.00 lakh in 2012-13. A spike to Rs.254.00 lakh in 2018-19 and Rs.255.00 lakh in 2020-21 reflects notable administrative investments. The sharp surge to Rs.995.83 lakh in 2021-22 marks the highest recorded expenditure, indicating a major administrative initiative or reorganization.

Table 10.14: Total Expenditure on Energy (power and non-conventional energy) (Revenue Account)

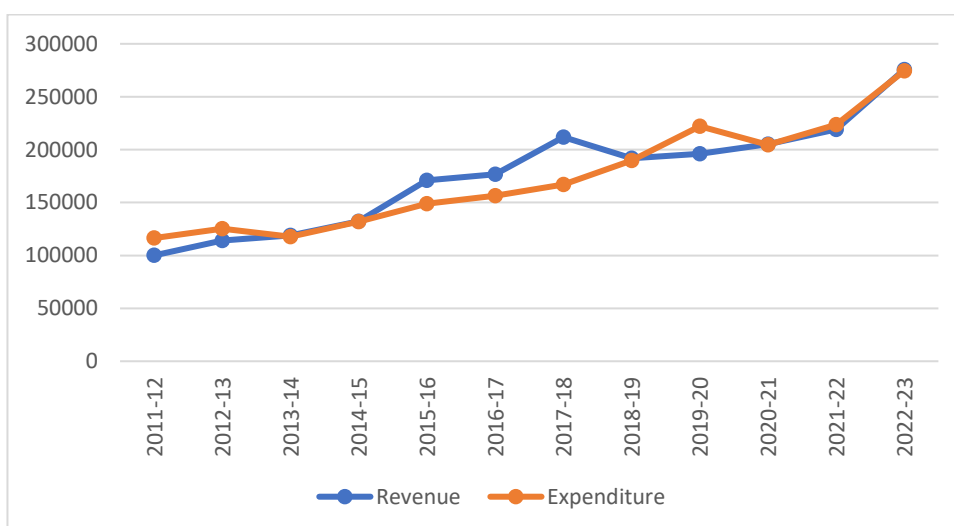
Year	Total
2011-12	1,16,420.30
2012-13	1,25,139.94
2013-14	1,17,803.09
2014-15	1,32,029.13
2015-16	1,48,994.52
2016-17	1,56,317.27

2017-18	1,67,119.34
2018-19	1,89,636.99
2019-20	2,22,019.01
2020-21	2,04,577.03
2021-22	2,23,693.99
2022-23	2,74,414.49

Source: Finance Account GOG various years

The Table reflects the Total Expenditure on energy including both expenditure of Power and Non-Conventional Energy, under the Revenue Account from 2011-12 to 2022-23. The table shows a general upward trend with periodic fluctuations. Expenditure rose consistently from Rs.1,16,420.30 lakh in 2011-12 to Rs.2,74,414.49 lakh in 2022-23, indicating a steady increase in resource allocation for energy-related activities. A sharp rise between 2021-22 (Rs.2,23,693.99 lakh) and 2022-23 (Rs.2,74,414.49 lakh) highlights intensified spending on renewable energy.

Figure 10.1: Total revenue and expenditure from power under revenue account (In Lakh)



Source: Finance Account GOG various years

It is evident from the Figure above, that there is an increase in the total revenue and expenditure of the power. In the year 2011-12 the revenue of power was less compare to the expenditure. Since 2013-14 to 2018-19 the revenue of increased substantially while the expenditure was less. In the year 2017-18 there is a wide gap between revenue and expenditure with expenditure much below the revenue generated. This changed in 2019-20 when the expenditure was more compared to the revenue generated. Since 2020-21 the revenue generated and the expenditure are almost the same.

10.3.1.1 Outlay on Energy under Capital Account

The total outlay of energy under capital account is broadly categorized into capital outlay on power project, transmission and distribution and non-conventional sources of energy. The table provides the outlay on transmission and distribution under capital account.

Table 10.15: Outlay on Transmission and Distribution (Power Project) (In Lakh)

Year	Direction and Administration	Special Component plan for Scheduled castes	Tribal Area Sub-Plan	Other Expenditure	Deduct Receipts and recoveries of capital Account	Total
2011-12	-		3,002.94	13,872.05		16,874.99
2012-13	-		1,749.69	18,770.85		20,515.43
2013-14	-		1,662.25	12,810.99		14,473.24
2014-15	-		2,961.62	13,917.71		16,879.33
2015-16	-		2,022.14	36,076.56		38,098.70
2016-17	-		2,377.34	19,855.46		22,232.80
2017-18	-		1,068.33	16,659.46	(824.62)	16,903.17
2018-19	-		371.23	17,329.21	-	17,700.44
2019-20	-		521.11	17,124.24	-	17,645.35
2020-21	-		2,690.38	19,446.80	-	22,137.18
2021-22	-	5.37	1,752.02	24,623.01	-	26,380.40
2022-23	-	199.95	4,197.91	43,414.59	-	47,812.45

Source: Finance Account GOG various years

The table outlines the Outlay on Transmission and Distribution (Power Projects) under various components from 2011-12 to 2022-23, reflecting the allocation of resources for direction and administration, and special plans for marginalized groups and other expenditure. The outlay on Tribal Area Sub-Plan shows fluctuation over the years with the highest peak in 2022-23 with Rs. 4,197.91lakh and the lowest in 2018-19 with Rs. 371.23 lakh. Other expenditure consistently constitutes the largest share in the outlay

The total expenditure starts on Transmission and distribution starts at Rs.16,874.99 lakh in 2011-12, increases significantly in some years to Rs.38,098.70 lakh in 2015-16 and Rs.47,812.45 lakh in 2022-23. Deductions are minimal and only appeared in 2017-18, reducing the net expenditure slightly by Rs.824.62 lakh.

Table 10.16: Outlay on non-conventional energy (Capital Account) (In Lakh)

Year	Other Expenditure	New and Renewable Sources of energy	Total
2011-12	-	339.27	339.27
2012-13	31.81	-	31.81
2013-14	-	-	-
2014-15	-	-	-
2015-16	-	-	-
2016-17	-	-	-
2017-18	-	-	-
2018-19	-	-	-
2019-20	-	-	-
2020-21	232.85	-	232.85
2021-22	73.58	-	73.58
2022-23	171.68	-	171.68

Source: Finance Account GOG various years

The table presents the outlay on Non-Conventional Energy (Capital Account), detailing expenditures under Other Expenditure and New and Renewable Sources of Energy from 2011-12 to 2022-23. In 2011-12, Rs.339.27 lakh was allocated entirely to New and Renewable Sources of Energy, marking a strong initial focus on promoting renewable energy development. From 2020-21 onwards, allocations resumed under Other Expenditure, with Rs.232.85 lakh spent in 2020-21, followed by Rs.73.58 lakh in 2021-22 and Rs.171.68 lakh in 2022-23.

Table 10.17: Total outlay on energy (Capital Account)

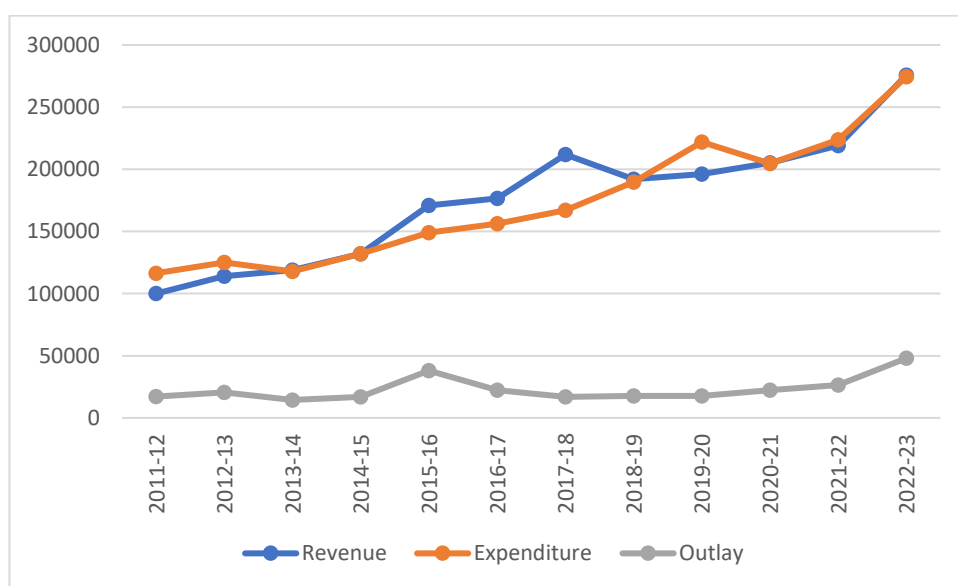
Year	Total
2011-12	17,214.26
2012-13	20,547.24
2013-14	14,473.24
2014-15	16,879.33
2015-16	38,098.70
2016-17	22,232.80
2017-18	16,903.17
2018-19	17,700.44
2019-20	17,645.35
2020-21	22,370.03
2021-22	26,453.98
2022-23	47,984.13

Source: Finance Account GOG various years

The Table provides the Total Outlay on Energy (Capital Account) from 2011-12 to 2022-23, reflecting the financial allocations for energy projects, including conventional and non-

conventional energy. The outlay remained relatively steady during this period, fluctuating between Rs.14,473.24 lakh (2013-14) and Rs.20,547.24 lakh (2012-13), suggesting consistent investment in energy infrastructure. A sharp increase to Rs. 38,098.70 lakh in the year 2015-16 indicates a significant push in energy-related projects. Outlays saw substantial increases in recent years, reaching Rs.47,984.13 lakh in 2022-23, the highest in the observed period. The total Outlay on Energy (Capital Account) demonstrates fluctuating but generally increasing investments over the years, with notable peaks in 2015-16 and 2022-23. This trend suggests a growing emphasis on enhancing energy infrastructure to meet evolving needs, especially in recent years, aligning with policy and economic priorities.

Figure 10.2: Total outlay compared to revenue and expenditure



Source: Finance Account GOG various years

The Figure above depicts that the capital outlay of power is much less compared to the revenue and expenditure. The capital outlay has increased steadily during the last ten years with the 2022-23 having more outlay compared to previous years.

10.4 Allocation of Power from Central Sector Power Generating Stations

Power from central generating stations to the beneficiary state/ Union Territories is allocated in accordance with formula for allocation of power which is being treated as guideline from April 2000' (MoP. n.d.). The guidelines Central government provides for the allocation of power in two parts, viz., firm allocation of 85 percent and 15 percent unallocated power. Firm allocation is the portion of power that is allocated to states or union territories (UTs)

and is intended to be available at all times. The unallocated power can be used for meeting any urgent of overall requirement.

Further the Firm allocation is done in two parts: 12 percent free power to affected states, 1 percent for local area development in case of hydro power stations and 10 percent not free power to the home state in case of thermal and nuclear power station. The balance 72/75 percent power is distributed among states/UTs of the region in accordance with the pattern of central plan assistance and energy consumption during previous five years, both factors having equal weightage. Central plan assistance is determined in accordance with the Gadgil formula, in which population of the state is also taken into consideration.

Table 10.18: Allocation of Power from Central Sector Power Generating Stations

Year	Share from firm Allocation (MW)	Share from unallocated capacity (MW)	Total share (Allocated + unallocated) (MW)
2012-13	438.7	45.68	484.38
2013-14	458.37	30.19	488.56
2014-15	449.9	50.08	499.98
2015-16	449.9	50.08	499.98
2016-17	462.33	30.8	493.18
2017-18	502.13	72.32	564.23
2018-19	501.5	100.09	601.59
2019-20	501.5	100.09	601.59
2020-21	507.36	100.38	607.74
2021-22	518.28	101.8	620.08

Source: GoG. Compiled from the Statistical Handbooks of Goa from 2012-13 to 2021-22.

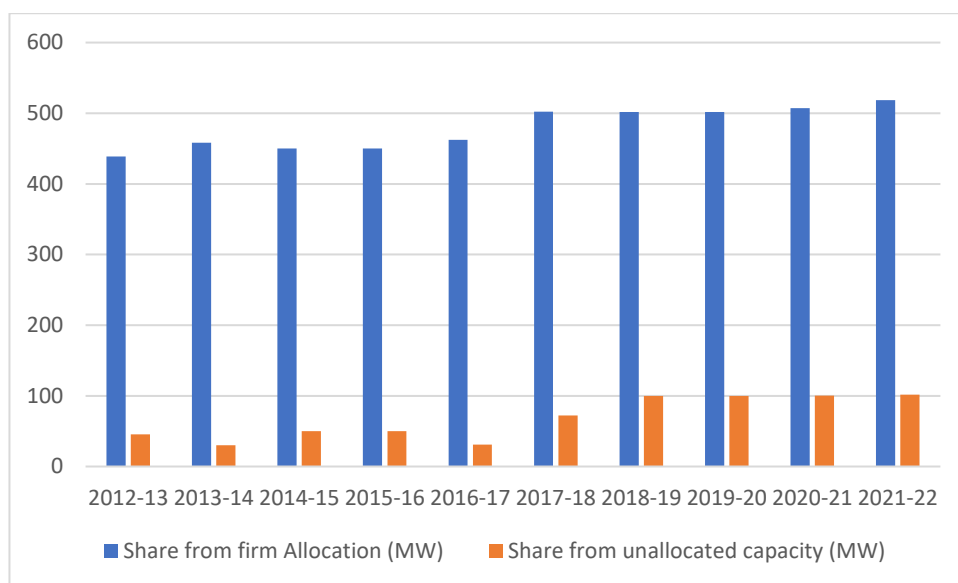
The Table presents data on power allocation from central sector power generating stations from 2012-13 to 2021-22, showing two types of power allocations: firm allocation and unallocated capacity. The share from firm allocation shows a gradual increase over the years. In 2012-13, it started at 438.7 megawatt (MW) and steadily rose to 518.28 MW by 2021-

22, marking an increase of 79.58 MW over the decade. This growth suggests improved or negotiated allocations of a firm power share to the region or state.

The unallocated capacity fluctuates significantly over the years. It started at 45.68 MW in 2012-13, dipped to 30.19 MW in 2013-14 and 2016-17, and then jumped sharply in 2017-18 to 72.32 MW. This share increased even further, peaking at 101.8 MW in 2021-22, which indicates the region had access to a substantial amount of surplus power in later years.

The total share (firm allocation + unallocated capacity) shows a general upward trend, starting at 484.38 MW in 2012-13 and reaching 620.08 MW in 2021-22. There was a notable jump between 2016-17 (493.18 MW) and 2017-18 (564.23 MW), which can be attributed to the increase in both firm allocation and unallocated capacity. The total share of power allocation shows a clear increase from 2017-18 onward. The increasing total share, especially in recent years, reflects a positive trend in securing more power from central sources, possibly meeting rising demand or contributing to energy security.

Figure 10.3: Allocation of power from CSP generating stations between 2012-13 to 2021-22



Source: GoG. Compiled from the Statistical Handbooks of Goa from 2012-13 to 2021-22.

The above graphs shows that the growth in allocation power under share from firm allocation and also unallocated capacity. The share from firm allocation which is 85 percent of the total power allocated, has shown an upward increase since 2012-13. The unallocated power also have seen upward increase with fluctuation in between. The total allocation of power has witnessed an significant increase between 2016-17 to 2018-19 which remained constant for couple of years and seen an increase in the year 2021-22. The increasing total

share, especially in recent years, reflects a positive trend in securing more power from central sources, possibly meeting rising demand or contributing to energy security.

Table 10.19: Power allocation in the state for the year 2020-21

Total Central Sector Power Allocation	2020-21
Firm Allocation	507.36 MW
Unallocated Share	100.38 MW
Present demand in the State	650 MW
Renewable Power	
Solar	
Solar Energy Corporation of India Ltd.	25 MW
NTPC Vidyut Vyapar Nigam Ltd.	6 MW
Non-Solar	
SECI Wind Tanche II	50 MW
Hindustan Waste Pvt. Ltd.	2 MUs per annum
Generation within the State	
i) Vedanta – I (Co-generation)	14-21 MW
II) Vedanta – II (Co-generation)	2 MW
Goa Spring & Power Ltd. (Cogeneration)	2 MW

Source: Economic Survey 2020-21. Government of Goa.

It is evident from the above table that, the present demand for the power is more compared to the total central sector power allocation under firm allocation and unallocated share. However, under the renewable power generation. The non-solar generated power is more compared to the solar. The power generated within the state is approximately between 18 MW to 25 MW.

10.5 Income and expenditure of the electricity department

Table 10.20: Revenue collected by the electricity department (in Crores)

Year	Revenue Collected
2019-20	1994.06
2020-21	1885.51
2021-22	2100.96
2022-23	2670.29
2023-24	2125.24

Source: GoG. Economic Survey 2023-24. <https://www.dpse.goa.gov.in/Economic-Survey-2023-24.pdf>

Note: Figure for 2023-24 are till December 2023

The revenue collected by the Electricity Department from 2019-20 to 2023-24 demonstrates fluctuation. Starting at Rs.1994.06 crore in 2019-20, revenue saw a decline to Rs. 1885.51 crore in 2020-21. A strong recovery followed in 2021-22, with revenue rising to Rs. 2100.96 crore and reaching a peak of Rs. 2670.29 crore in 2022-23. However, the revenue dropped to Rs. 2125.24 crore in 2023-24.

10.5.1 Receipts and expenditure

Table 10.21: Receipts of Electricity Department (Actuals) (Rs. In Lakh)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Electricity	114003.4		132167.1		176612.1	211935.4	191981.0	196052.2	205105.8	219112.0
Power	113996.9		132166.4		176579.5	211908.9	191979.8	196052.1	205105.4	219111.7
Transmission and Distribution	113854.5		132045.0		176460.0	211808.6	191881.8	195895.2	204914.7	218936.5
Power Development Scheme in Goa	113233.0		131384.2		174558.8	200937.8	190796.7	194948.1	202969.2	217611.4
Receipts towards Power System Development										
Other Receipts	630.1		668.2		1901.5	870.7	1085.0	947.0	1945.4	1325.1
Deduct-Refund	-8.69		-7.38		-0.32					
General	142.4		121.4		119.4	100.2	98.0	156.8	190.7	175.2
Other Receipts	142.4		121.4		119.4	100.2	98.0	156.8		175.2

Other Administrative Services	0.13		0.22		32.56	26.50	1.18	0.18	0.34	0.23
Other Services	0.13		0.22		32.56	26.50	1.18	0.18	0.34	0.23
Receipts under Right to Information Act, 2005	0.13				32.56					0.23
Other Receipts							1.18	0.18		
Interest Receipts			0.45							0.02
Interest Receipts of State/Union Territory Governments with Legislature			0.45							0.02
Other Receipts										0.02

Source: Data compiled from the budget documents of Government of Goa available on website: <https://goabudget.gov.in/>

The Electricity Department's receipts from 2012-13 to 2021-22 demonstrate substantial growth. The receipts of electricity witnessed robust growth since 2012-13 to 2021-22. The total receipts almost doubled during this period.

10.6 Major achievements

In the year 2021-22, An “Ultra-Modern” GIS substation 33/11KV, 2 x 20 MVA capacity has been commissioned at Navelim (Economic Survey. 2021-22). This will benefit around 18000 consumers.

10.6.1 Solar power

The Goa State Solar Policy was notified on 7th February 2019 and was subsequently amended on 6th August 2020. The policy is further amended on 23rd March 2023 to allow consumers with demand load of 1MW and above to take power under Open Access from Solar project during day time generation and during the peak hours (6 pm to 11 pm) through Battery Enabled Storage System with maximum of 15% of demand of the State (Economic Survey. 2023-24).

Table 10.22: Year wise data of solar power generation

Year	Total power generated

2019-20	4.46
2020-21	12.65
2021-22	16.03
2022-23	36.13
2023-24	41.64

Source: GoG, Economic Survey 2023-24. <https://www.dpse.goa.gov.in/Economic-Survey-2023-24.pdf>

The table presents a year-wise increase in solar power generation from 2019-20 to 2023-24, showing significant growth over this five-year period. The sustained growth in solar power generation will likely contribute significantly to renewable energy goals, helping the state meet its clean energy targets.

10.6.2 Bio gas

Every day 5000 kgs of wet organic waste is brought to the Biogas Plant feed shed area. Approx. 300 cu.m. per day of biogas is generated which can generate around 250 to 300 units per day of electricity. Total electricity requirement for Wealth out of waste (WOOW) plant: - 500 units. Energy generated from Biogas therefore has saved 300 units per day, thus paying for only 200 units per day.

10.6.3 Goa Energy Development Agency

Goa Energy Development Agency (GEDA) was established in the year 1996 to undertake the programmes in the field of non-conventional and renewable energy sources. GEDA is also the nodal agency to the Ministry of New and Renewable Energy (MNRE), Government of India to implement the centrally funded and sponsored schemes. It is also the State Designated Agency(SDA) to undertake the work of installation of Solar Rooftop projects for government departments, autonomous bodies, etc.

‘The Agency promotes Renewable Energy activities through its approved schemes are as under:-

- 1) New and Renewable Sources of Energy (NRSE)
- 2) Integrated Rural Energy Programme (IREP)
- 3) Solar Photo-Voltaic (SPV) +(Wind) Hybrid projects

- 4) Wind Power Programme
- 5) Solar Roof Top Scheme
- 6) Rural Village Electrification (RVE) Programme.
- 7) Kitchen Waste Bio Gas plant
- 8) Biomass Briquetting' (Citizen Charger of GEDA, n.d.)

10.6.4 Goa State Solar Policy 2017

The state government in exercise of in exercise of the powers conferred by the Section 108 and 109 of the Electricity Act, 2003 formulated Goa State Solar Policy 2017.

Scheme for Promotion of Grid Connected Solar Rooftop System with Net Metering System

The Government of India has set the target of achieving 450GW of Renewable Energy in the country by 2030 (Official Gazette, 2024). Goa Government has notified the scheme for promotion of grid connected Solar Rooftop installations. The scheme is formulated with an objective to 'promote Grid Connected Solar Rooftop Installations with Net Metering System to all the Prosumer's eligible for subsidy as provided in the Goa State Solar Policy, 2017 and its amendments from time to time' (GEDA, n.d.). The scheme provides financial assistance to residential, commercial, educational, institutional and industrial sectors.

Subsidy incentives:

The subsidy incentives was categorised under three categories in the Official Gazette (2021) of Government of Goa.

- i) Residential
- ii) For Group Housing Societies/Residential Welfare Associations (GHS/RWA)
- iii) Educational institutions/Commercial/industrial establishments

This was revised in the year 2024 and the subsidy incentives is categorised under four categories in the Official Gazette (2024) of Government of Goa.

- i) Residential
- ii) For Group Housing Societies/Residential Welfare Associations (GHS/RWA)
- iii) Educational institutions
- iv) Commercial/industrial establishments

As per the Official Gazettee (2024), Government of Goa the Central Financial Assistance for the residential sector under this scheme shall be provided as per Official Memorandum issued by Ministry of New and Renewable Energy (MNRE) and the operational guidelines for implementation of Phase-II of Grid Connected Rooftop Solar Programme issued by MNRE, Government of India from time to time.

A. Residential: Residential subsidy is provided to all consumers of Department of Electricity in the State having service connection under residential category.

Table 10.23: Subsidy incentives provided for residential consumption 2021

Capacity	Central	State subsidy
1KW - 3 KW	40%	10%
3KW- 10KW	20%	10%above
10KW	nil	10%B.

Source: Official Gazette. (2021). Government of Goa. Accessed from: <https://geda.goa.gov.in/wp-content/uploads/2023/09/PHASE-II-AMMENDE-07-10-2021-134-37.pdf>

The table outlines the subsidy incentives provided to residential consumers based on their electricity consumption capacity, with separate contributions from the central and state governments. This breakdown helps residential users reduce their overall electricity costs through targeted subsidies. Residential consumers with a lower capacity range of 1 kW to 3 kW receive the highest subsidy, with a total of 50 percent covered which includes both centre and state subsidy. This provides significant financial relief, making electricity more affordable for smaller households. For users consuming between 3 kW and 10 kW, the central subsidy drops to 20 percent, while the state subsidy remains the same at 10 percent. This results in a combined 30% subsidy, which still offers cost relief but at a lower rate than for smaller consumers. For households with a capacity requirement above 10 kW, the central government does not provide any subsidy, while the state continues to offer a 10 percent subsidy. This suggests a focus on supporting lower and moderate-capacity households over high-consumption users.

The highest subsidy is allocated to households with lower consumption (1 kW - 3 kW), reflecting a policy goal to make electricity more affordable for smaller and potentially more economically vulnerable households. As consumption capacity increases, the central subsidy declines, with none provided for capacities above 10 kW. The state government consistently offers a 10% subsidy across all capacity ranges, ensuring some level of support regardless of consumption levels.

Table 10.24: Subsidy incentives provided for residential consumption 2024

Capacity	Subsidy
First 10 kWp	50%
10 kWp upto 30 kWp	10%

Source: Official Gazette. (2021). Government Printing Press, Government of Goa.

B. For Group Housing Societies/Residential Welfare Associations(GHS/RWA)

Table 10.25: Subsidy incentives provided for Group Housing Societies/Residential Welfare Associations(GHS/RWA) 2021

Capacity	Central Subsidy	State Subsidy
10 kWp per house and total not more than 500 kWp	20%	10%

Source: Official Gazette. (2021). Government of Goa. Accessed from: <https://geda.goa.gov.in/wp-content/uploads/2023/09/PHASE-II-AMMENDED-07-10-2021-134-37.pdf>

The above table indicates that, the central government provides a 20 percent subsidy and the state government offers an additional 10 percent subsidy for Group Housing Societies/Residential Welfare Associations. The table outlines subsidy incentives specifically provided for Group Housing Societies (GHS) and Residential Welfare Associations (RWA) based on electricity consumption capacity per house, with subsidies offered by both central and state governments. These capacity restrictions ensure that each individual house within a GHS/RWA and the entire association benefit from subsidies but remain within set limits, likely intended to support moderate electricity use rather than large-scale or high-capacity consumption. Combining the central and state subsidies provides a total of 30 percent in subsidies (20 percent central + 10 percent state) for eligible systems within GHS/RWA.

Table 10.26: Subsidy incentives provided for Group Housing Societies/Residential Welfare Associations (GHS/RWA) 2024

Capacity	Subsidy
Upto 500 kWp	50%

Source: Official Gazette. (2021). Government Printing Press, Government of Goa.

C. Educational institutions/commercial/industrial establishments

The table outlines the subsidy provided to educational institutions, commercial, and industrial establishments.

Table 10.27: Educational institutions/commercial/industrial establishments 2021

Capacity	Central Subsidy	State Subsidy
1-90 KW	Nil	10%

Source: Official Gazette. (2021). Government of Goa. Accessed from: <https://geda.goa.gov.in/wp-content/uploads/2023/09/PHASE-II-AMMENDED-07-10-2021-134-37.pdf>

The absence of a central subsidy reflects a policy focus on allocating resources more toward residential or smaller, communal setups rather than large or business-focused entities. By offering a 10 percent subsidy, the state aims to support educational, commercial, and small-to medium-sized industrial establishments in reducing energy costs, possibly to promote energy efficiency or renewable adoption without heavily subsidizing larger-scale operations.

Table 10.28: Educational institutions/commercial/industrial establishments 2024

Capacity	Subsidy
Upto 90 kWp	50 %

Source: Official Gazette. (2021). Government Printing Press, Government of Goa.

10.6.5 Rural Village Electrification (RVE) programme

This is the scheme introduced by the state government for providing Solar Photo Voltaic (SPV) based stand alone system for un-electrified households located in remote villages/habitations where grid extension is not possible.

Under the scheme 100 percent financial assistance is provided to household with a maximum limit of Rs.90,000/- per household for 500Wp solar system (including transport, installation and the cost of Annual Maintenance Contract (AMC) for 5 years) (Citizen Charter. n.d.). Electricity charges as determined by Government on monthly basis be charged from each households (depend on number of units consumed) to create corpus fund(village wise/hamlet wise) which can be used for maintenance of the systems after expiry of AMC period.

10.6.6 Kitchen Waste Biogas Plant Scheme

The scheme for promotion of biogas plant based on “kitchen/organic waste in the state of Goa was notified in the year 2020. The scheme was launched with an objective to overcome the waste management problem and to save energy by providing renewable energy. The main aim of the scheme is to provide incentive to the user in the form of subsidy for the installation of Biogas plant based on Kitchen organic waste. ‘The total amount of financial subsidy will be restricted to Rs. 32.00 lakhs only and shall vary as per the sanctioned GIA

from BCA for that year’ (Goa Gazette, 2020). The subsidy details are provided in the below table.

Table 10.29: Subsidy under Kitchen Waste Biogas Plant Scheme

Sr. No.	Capacity of the Plant	Subsidy amount	Beneficiary
1	Cat. I (1Kg to 5 Kg waste)		Domestic Households
	1 Cum	10,000/-	
	1.5 Cum	12,000/-	
	2.0 Cum	14,000/-	
2	Cat. I (>5 Kg to 10 Kg waste)		Domestic Households
	2.5 Cum	20,000/-	
	3.0 Cum	26,000/-	
3	Cat. II (>10 Kg to 50 Kg waste)		Residential Societies, Institutions, Hotels, Hospital Canteens, Restaurants etc.
	4 Cum	24,000/-	
	4.5 Cum	27,000/-	
	6.0 Cum	34,500/-	
	7.5 Cum	40,000/-	
	8.0 Cum	40,000/-	
	9.0 Cum	40,000/-	
	10.0 Cum	40,000/-	

Source: Citizen Charter. (n.d.). Goa Energy Development Authority. Accessed from: file:///C:/Users/alakn/OneDrive/Documents/Alaknanda%202024%20new/Fiscal%20Decentralization/Finance%20Commission/Power/Citizen-Charter-GEDA.pdf

10.6.7 Scheme for Promotion of Biomass Briquetting Machines

The state government has notified the scheme for promotion of Biomass Briquetting Machines on 4th December 2014 and called as grant for subsidy for Biomass Briquetting Plants Scheme. The government has launched the scheme for promoting efficient biomass utilization and to provide assistance for promotion and setting up the Biomass Briquetting Plants as Renewable Sources of Energy (Official Gazette, 2014). The financial subsidy of ‘25 percent or Rs. 4,00,000/- whichever is less of the machinery cost as the subsidy borne by State Government while balance cost is to be borne by the prospective beneficiary/entrepreneur’ (Official Gazette, 2014). Assistance for purchase of machinery to the beneficiary is provided in two stages – 50 percent on delivery of the machine and 50 percent on the successful operation for Six months against the sale.

10.7 Conclusion

The energy purchased have consistently been higher than energy sold in the last 10 years, the gap between the two has narrowed in recent years, particularly in 2020-21 and 2021-22. There is also an increase in the income and corresponding expenditure of power sector in Goa. There is also an increase in the expenditure on the non-conventional energy. In recent years there are reforms in the energy sector through introduction of various schemes to support non-conventional energy resource generation with special focus on solar energy. This necessitates separate financial allocation to the energy sector and necessitates increased expenditure on energy under conventional and non-conventional energy.

Chapter 11 Contingent Liability

For the period, 2012-13 to 2020-21, the contingent liability of the state in nominal terms rose from Rs 12,267 lakh to Rs 96, 718 lakh and in terms of GDP, from a mere 0.32 percent to 1.30 percent. For the corporation and the cooperatives, the share of corporations was high at 84.3 percent and the remaining was accounted for by the cooperatives. The high share of corporations increased further from 84.3 percent to 99.7 percent by the end of the period under study, ie, 2020-21.

There was a change in the classification since 2021-22. It was classified into two major components: Urban Development and Housing and other infrastructure. For the year, 2022-23, there was a fall in the contingent liability from Rs 66,240 lakh to Rs 40,492 lakh, a significant fall from 0.82 percent to 0.45 percent in terms of GSDP. The share of Urban Development and Housing rose had a 10 percentage points fall (30.9 percent to 20.3 percent) which was accompanied by a similar gain for other infrastructure from 65.1 to 74.6 percent. From 2021-22 there was a change in the classification.

Table 11.1: Outstanding Government Guarantees at the end of the Financial Year (In Rs. Lakh) (2012-13 to 2020-21)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Contingent Liabilities (CL) Total	12,267	29,274	33,706	62,255	84,191	74,094	109,290	88,285	96,718
Corporations	10,346	26,649	31,433	59,479	81,416	70,868	100,028	85,535	96,453
Corporations as a % of total CL	84.3	91.0	93.3	95.5	96.7	95.6	91.5	96.9	99.7
Cooperatives as a % of total CL	15.56	7.04	6.12	4.13	3.06	4.12	2.82	2.93	0.10
CL as a % of GSDP	0.32	0.81	0.70	1.13	1.34	1.07	1.52	1.18	1.30

Source: Finance Accounts, Government of Goa, Various issues

Table 11.2: Outstanding Government Guarantees at the end of the Financial Year (In Rs. Lakh) (2021-22 to 2022-23)

Contingent Liability of the state of Goa		
	2021-22	2022-23

Contingent Liabilities (CL) Total	66,240	40,492
Urban Development and Housing	20,467	8,234
Other Infrastructure	43,138	30,190
Any Other	2,635	2,068
Urban Development and Housing as a % of CL	30.9	20.3
Other Infrastructure as a % of CL	65.1	74.6
Any Other as a % CL	3.98	5.11
CL as a % of GSDP	0.82	0.45

Source: Finance Accounts, Government of Goa, Various issues

The table below shows the Guarantee Redemption Fund for 2012-13.

Table 11.3: Guarantee Redemption Fund 2012-13

Guarantee Redemption Fund 2012-13 for Govt of Goa (In Rs lakh)	
Opening Balance	34,981.81
Add-Amount transferred to the Fund during the year	5100.33*
Total	40,082.14
Deduct: Amount met from the Fund for discharge of guarantees	Nil
Closing Balance	40,082.14

*Interest accrued on Guarantee Redemption Fund during the financial year is 3,100.33 lakh.

Source: Finance Accounts 2022-23 Vol 2, GoG, Statement 20, p. 304

Since the limit for contingent liability as decided by the state government has been above the contingent liability of the state, contingent liability ceases to be a matter of concern for the state.

Chapter 12 Subsidy

12.1 Analysis of Subsidies in Goa

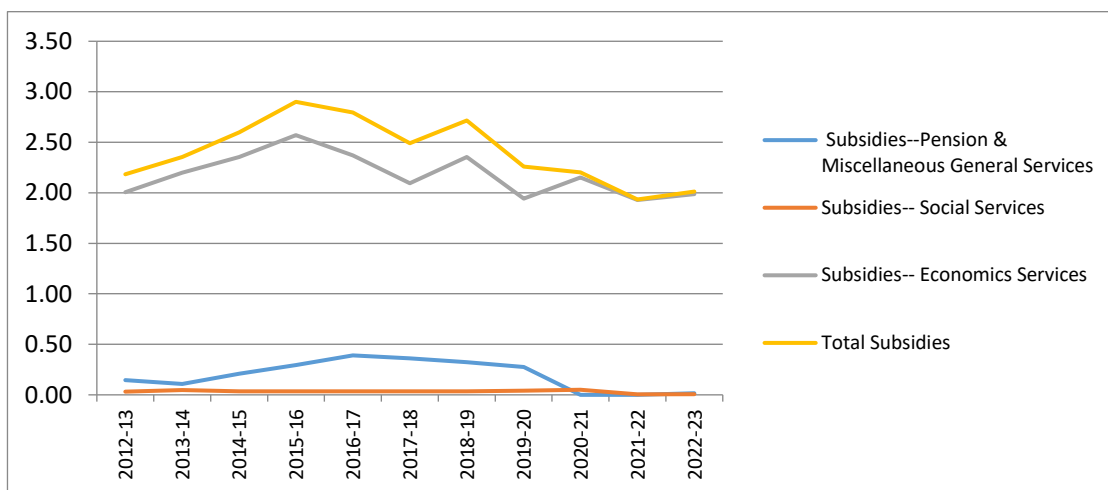
The objective of the subsidies is to reduce the cost burden of beneficiary to promote a consumption of the social and economic services. On the other side, subsidies increase public expenditure, which brings in important question of justifying subsidies. Subsidies are unrecovered cost of goods and services provided by the government. Sometimes a service or good is provided at lower than marginal social cost to encourage its optimal consumption, such as education and health. The various services provided by the government are divided into three categories, general services, economic services and social services. In general services, expenditure on various heads like administrative services, judiciary, and police are included; these services are to be provided by the state and are pure public goods. These goods are not supplied by the market and it is difficult to impose user charges on them. For some services within the category of general services may be individually chargeable, it is difficult to disentangle public and private elements and charge for the latter. Government of Goa actively participates in the provision of a range of non-public goods under the head of social and economic services where users or groups of users are identifiable and user charges can be levied. Clearly, some subsidies are less justifiable than others are. So, the pattern of tax financing and financing through user charges is an important policy matter. In this chapter we will be analysing only the explicit subsidies as implicit subsidies are beyond the scope of this analysis. This chapter discusses two types of subsidies, one reported in the finance accounts of the government of Goa and the second is unrecovered cost.

12.2 Subsidies as reported by State Government

In this section we analyse the subsidies as reported on the Goa Finance accounts. On an average, total subsidies comprised of 2.4 per cent of revenue expenditure from 2012-13 to 2022-23. However, subsidies on an average declined slightly from 2.57 per cent of revenue expenditure from 2012-13 to 2016-17 to 2.27 per cent of revenue expenditure in the later period of the study (2017-18 to 2022-23). Total subsidies peaked in 2018-19 to 2.71 as a per cent of revenue expenditure (mainly due to increase in subsidies to road transport, agriculture and allied activities) and then onwards witnessed a declining trend. Although subsidies as a percentage of revenue expenditure show a declining trend since 2020-21

onwards however in actual amounts (rupees) subsidies have been increasing. Subsidies are mainly granted to the economic services which on an average comprised of 2.18 per cent of revenue expenditure during 2012-13 to 2022-23. Subsidies to social services on an average comprised of 0.03 per cent and subsidies to general services comprised of 0.19 per cent of revenue expenditure during 2012-13 to 2022-23.

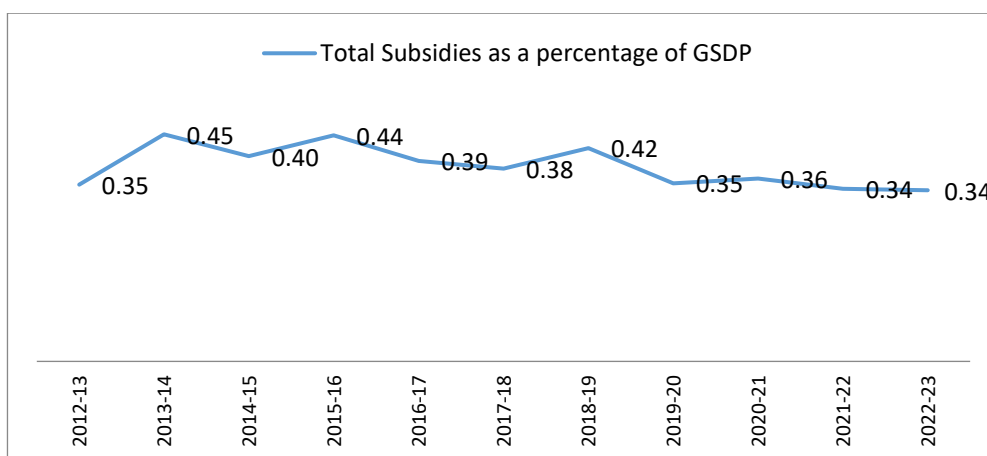
Figure 12.1: Subsidies as a percentage of Revenue Expenditure, 2012-13 to 2022-23



Source: Finance Accounts, GoG, Various years.

On an average from 2012-13 to 2022-23, subsidies have been around 0.38 per cent of GSDP. However subsidies as a per cent of GSDP were slightly higher in the earlier period (2012-13 to 2016-17) at 0.41 per cent as compared to 0.36 per cent in the later period of the study (2017-18 to 2022-23). There were peaks in subsidies as a percentage of GSDP in 2015-16 (0.44) and 2018-19 (0.42) mainly due to an increase in subsidies to agriculture and road transport.

Figure 12.2: Total Subsidies as a percentage of GSDP, 2012-13 to 2022-23

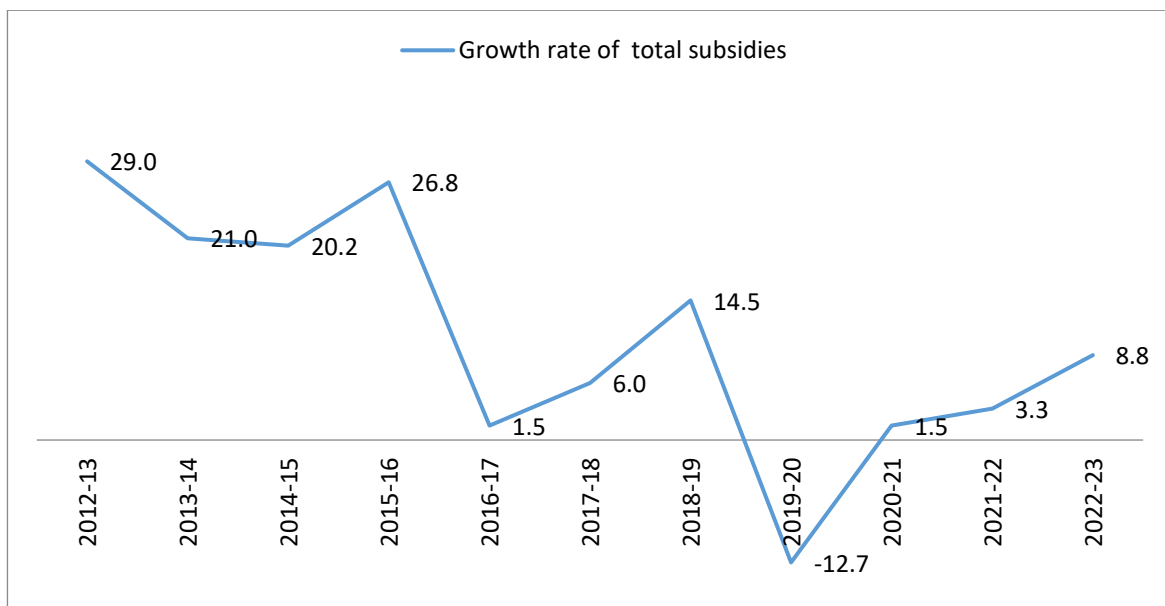


Source: Finance Accounts, GoG, Various years.

The growth rate of subsidies can be divided into time periods. From 2012-13 to 2015-16, the average growth rate of subsidies was higher at 24.27 per cent. However, from 2016-17 to 2022-23 the growth rate of subsidies on an average declined substantially to 3.27 per cent.

Subsidies had a growth rate of 29 per cent in 2012-13 (which is the year in which mining of iron ore was banned) and dropped to 21 per cent in the following year and to 20.2 per cent in 2014-15. Subsidies growth rate peaked in 2015-16 at 26.8 per cent and dropped drastically the next year to 1.5 per cent. Subsidies growth rate once again peaked to 14.5 per cent in 2018-19 (Mining was banned for a second time in this year) but had a negative growth rate of -12.7 per cent in 2019-20. This was also the year Goa had a revenue deficit of Rs. (-325) crore. Since 2020-21 the growth rate of subsidies has been steadily rising and reached 8.8 per cent in 2022-23.

Figure 12.3: Goa: Growth rate of Subsidies, 2012-13 to 2022-23



Source: Finance Accounts, GoG, Various years.

Next we analyse subsidies under the major categories that is general services, social services and economic services. Subsidies to general services are mainly granted to the sub-category pension and miscellaneous general services. The subsidies to general services increased from 7.3 crore in 2013-14 to a peak of 38.1 crore in 2017-18 after which it began to decline. During 2020-21 to 2021-22 (covid outbreak) there were no subsidies granted under general services and in 2022-23 the subsidies granted was 2.4 crore. Subsidies to the social services sector increased from 2.5 crore in 2014-15 to a peak of 6.1 crore in 2020-21 and dropped drastically to 0.7 crore and 1.2 crore in the next two years respectively. The subsidies to

economic services increased from 121.6 crore in 2012-13 to a peak of 299.9 crore in 2022-23. The only two years in which the subsidy amount for economic services dropped as compared to previous year were 2016-17 and 2019-20.

Table 12.1: Subsidies to major sectors of the Economy (Rs. Crore)

Year	General Services	Social Services	Economics Services	Total Subsidies
2012-13	8.9	1.8	121.6	132.3
2013-14	7.3	3.2	149.7	160.2
2014-15	15.5	2.5	174.6	192.6
2015-16	24.9	2.9	216.5	244.2
2016-17	34.6	3.1	210.1	247.9
2017-18	38.1	3.7	220.9	262.7
2018-19	36.0	3.8	261.1	300.8
2019-20	32.0	4.6	225.8	262.5
2020-21	0.0	6.1	260.3	266.4
2021-22	0.0	0.7	274.4	275.1
2022-23	2.4	1.2	295.9	299.5

Source: Finance Accounts, GoG, various years.

12.3 Subsidies to Social Services

Subsidies under social services is mainly given to three sectors which are Education, Sports, Art and Culture, Welfare of SC's ST's and OBC's and Social Welfare and Nutrition. On an average during 2012-13 to 2022-23, Social welfare and nutrition comprised of 71 per cent of the subsidies to the social sector, Education comprised of 25 per cent of social sector subsidies and welfare of SCs STs and OBCs comprised of around 4 per cent of social sector subsidies. Subsidies to the welfare of SCs, STs and OBCs is in the form Special Central Assistance to the tribal population. For the year 2012-13 and from 2016-17 to 2019-20 there were zero subsidies to the welfare of tribal people. Only from 2020-21 onwards some funding was given for this purpose. Subsidies on social welfare and nutrition as a percentage of total subsidies to social services dropped from 91 per cent in 2012-13 to 39 per cent in 2019-20. On the other hand subsidies on education, sports, art and culture increased from 9 per cent in 2012-13 to 61 per cent in 2019-20. However in 2020-21, when there was a covid outbreak in India, subsidies on social welfare and nutrition increased to 95 per cent of social

sector subsidies and subsidies to education dropped to 3 per cent. In 2021-22 there were zero subsidies for education and 25 per cent subsidies were given to Welfare of tribal population and 75 per cent of subsidies were given for social welfare and nutrition. With the reopening of the schools in 2022-23, the subsidies for education was 34 per cent of social sector subsidies, Welfare of tribal population comprised of 11 per cent and social welfare and nutrition comprised of 55 per cent of social sector subsidies.

Figure 12.4: Subsidies to different components of social services as a % of total social sector subsidies



Source: Finance Accounts, GoG, Various years.

In order to get a clearer picture we analyse subsidies to social services sector in actual amounts. Subsidies to education sports art and culture increased from Rs. 16.45 lakhs in 2012-13 to 172.25 lakhs in 2018-19 and then peaked to Rs.285.84 lakhs in 2019-20. The rise in education subsidies in 2018-19 and 2019-20 can be explained due to the introduction of the scheme for creation and enhancement of infrastructure and overall development of educational sector in Goa 2018, to promote overall development of educational institutions, to create state of art infrastructure, to purchase necessary equipment, machinery furniture etc. Under this scheme there would be an educational development capital fund and a separate revenue fund (O Herald, 2018). The foundation stone was laid for infrastructure works at the integrated school complex at Cujira – the Pandit Deendayal Upadhyaya Vidhya Sankul in 2019 (Shetye, 2019).

Subsidies to education, sports, art and culture dropped to Rs.18.93 lakhs in 2020-21 after the outbreak of covid. However in 2022-23 (the year of reopening of educational institutes) it received 39.29 lakh subsidies. Subsidies to social welfare and nutrition decreased from

Rs. 281.67 lakhs in 2013-14 to Rs.179 lakhs in 2019-20. However, in 2020-21 it peaked to 580.76 lakhs but dropped to 53.96 lakhs and 63.23 lakhs respectively in the following two years. Expenditure for Welfare tribal population picked up only during covid. It received a subsidy of 11.85 lakhs in 2020-21, 17.9 lakhs in 2021-22 and 12.5 lakhs in 2022-23.

Table 12.2: Subsidies to Components of Social Services (Rs. Lakhs)

Year	Education, Sports Art and Culture	Welfare of SC's, ST's and other backward classes (Special Central Assistance to Tribal S.P.)	Social Welfare and Nutritio n
2012-13	16.45	0	167.7
2013-14	33.66	1.35	281.67
2014-15	29.71	1.26	217.46
2015-16	66.86	0.3	221.96
2016-17	118.07	0	195.42
2017-18	155.96	0	210.96
2018-19	172.25	0	202.99
2019-20	285.84	0	179.05
2020-21	18.93	11.85	580.76
2021-22	0	17.9	53.96
2022-23	39.29	12.5	63.23

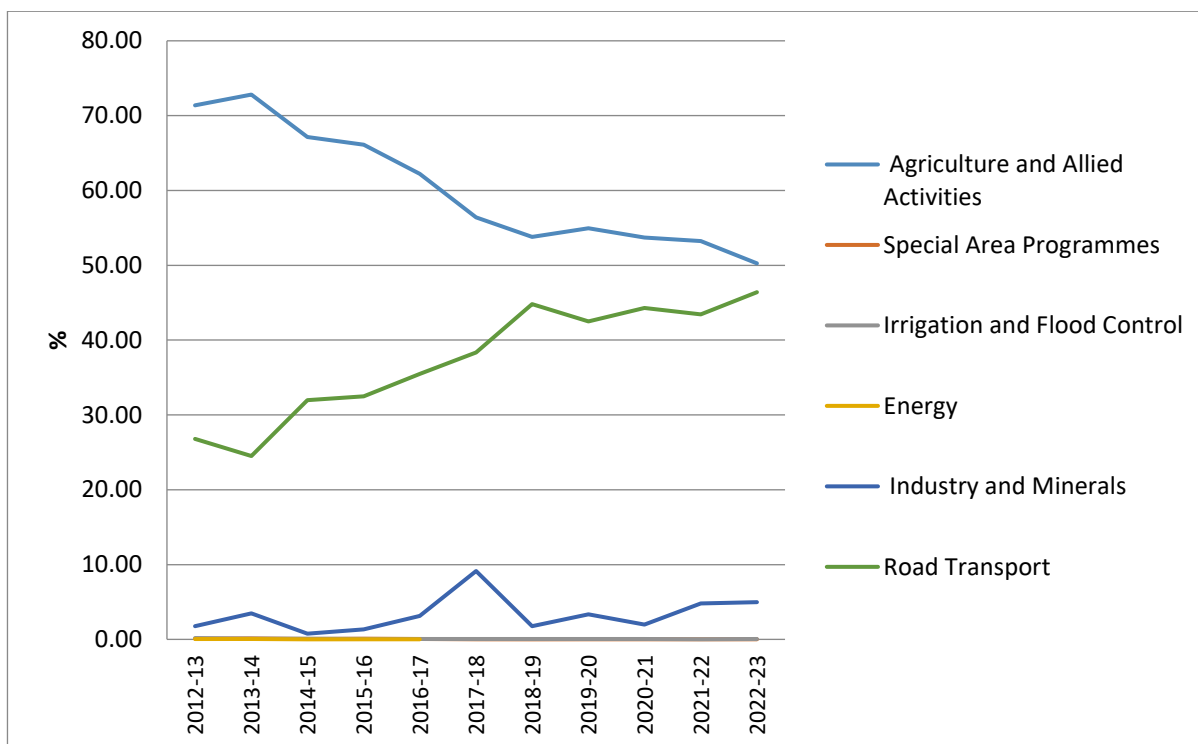
Source: Finance Accounts, GoG, various years.

12.4 Subsidies to Economic Services

As mentioned above most of the subsidies are directed to the economic services amongst which agriculture and allied activities and road transport receive the major share of the subsidies. On an average agriculture and allied activities comprised of 60 per cent of subsidies to the economic services, road transport comprised of 37 per cent and industry and mines comprised of 3 per cent of subsidies to economic services during 2012-13 to 2022-23. The share of agricultural subsidies has been declining over the period of the study and share of road transport has been increasing. Agriculture and allied activities decreased from 71 per cent in 2012-13 to 50 per cent in 2022-23. On the other hand subsidies for road transport increased from 27 per cent in 2012-13 to 46 per cent in 2022-23. The industry and mines which comprised of 1.75 per cent of economic subsidies in 2012-13 peaked to close to 5 per cent of subsidies to economic services from 2021 onwards. The energy sector, which

refers to Community and Institutional Biogas received zero subsidies from 2017-18 onwards. Share of subsidies to energy, irrigation and flood control and Special areas programmes have been almost very minimal compared to the other three sectors mentioned above.

Figure 12.5: Subsidies to components of Economic Services as a % of total Economic Sector Subsidies



Source: Finance Accounts, GoG, Various years.

Subsidies on agriculture and allied activities increased from Rs 8678 lakhs in 2012-13 to 14872 lakhs in 2022-23. After the Mining ban, the locals who were affected by the mining ban turned back to their traditional occupation of farming (O Herald, 2022). Subsidies to agriculture peaked in 2018-19 to 14043 lakhs and dropped slightly in the years of deficit (2019 to 2020), but picked up after 2021 onwards. Subsidies for special areas programme (hill areas) peaked in 2013-14 to 20.21 lakhs and then dropped to a low of 0.95 lakhs in 2018-19 and finally settled at 3.21 lakhs in 2022-23. Subsidies on irrigation and flood control dropped from 22.01 lakhs in 2012-13 to 11.62 lakhs in 2022-23.

Subsidies on road transport increased from Rs. 3257 lakhs in 2012-13 to Rs.13732 lakhs in 2022-23. Since 2018-19 onwards (except for 2019-20) there has been a big jump in the subsidies allocated for road transport. Some of the schemes of the Directorate of transport are summarized here. The scheme for the promotion of electric vehicles which was earlier launched in December 2021 was discontinued in July 2022. Under the re-launched scheme

financial assistance will be provided for vehicles purchased from August 2022 to December 2024 (Digital Goa, 2024). Besides this there is a 25 per cent subsidy for replacement of Yellow /black vehicles (auto rickshaws, taxis motorcycles subject to a ceiling of Rs.18,000 for motorcycles, Rs.40000 for auto Rs.2,00000 for taxis and Rs.2,50,000 for tourist taxis. There is a fuel subsidy of Rs. 3 per kilometre of operational distance for intra-state private buses. Other schemes include road accident claim, insurance subsidy scheme , bus replacement scheme (GOG, 2024a).

Subsidies on industries and minerals decreased from 212.6 lakhs in 2012-13 to Rs.133 lakhs in 2014-15, despite the government announcing a 35% subsidy in 2014 to help truck owners, barge owners and machinery owners to help repay their loans after mining was abruptly stopped in 2012 (The Economic Times, 2014). In 2017-18, there was a huge peak of Rs. 2018 lakhs to industries and minerals. This may be explained by the implementation of the Goa State Incentives to Encourage Investments Scheme, 2017 which was launched for a period of 5 years. It is an umbrella scheme which includes separate target schemes for separate incentives. The schemes included were Employment subsidy scheme, 2017 Capital subsidy scheme 2017, Incentives to green investments scheme 2017, Interest subsidy scheme 2017, Incentives to encourage purchases from local suppliers scheme 2017, Incentives to industries for training prospective employees scheme 2017 (GOG, 2018). Besides this, the Department of IT along with Government of Goa has notified the IT Policy 2018 which includes the following (GOG, 2024c):

- 1) Capital investment subsidy schemes
 - a) 20 % capital investment subsidy for developing office spaces
 - b) Additional 10% subsidy for establishment of Mega Business Units
 - c) Existing units who qualify as mega units are eligible for 20% subsidy for capital investments incurred in the last three years.
 - d) Additional 10 per cent subsidy on capital investment for office spaces for industries identified as key area focus for government.
- 2) Power subsidy: 20% subsidy on power bills on all units operating in Goa for a maximum of Rs.5 lakh annually
- 3) Other subsidies include Solar power subsidy, internet subsidy, campus recruitment assistance scheme, salary subsidy, Empower ST/SC communities using ICT tools through IT knowledge centre (ITKC) free of cost
- 4) Goa Start-up policy 2020-21 was initiated by the Department of IT which includes seed capital scheme, grant for incubation centers within educational units, R&D reimbursement,

skill development promotion scheme, trademark reimbursement scheme and salary reimbursement scheme. (GOG, 2024c)

Besides the above schemes soft loans are provided to young entrepreneurs to take up new projects under the Chief Ministers Rozgar Yojana (CMRY) which was started in 2001. The effective interest rate is only 2 per cent and borrowers need not have immovable collateral. The CMRY scheme supported has disbursed close to Rs.250 crore and has benefitted 8,000 Goans in becoming self-employed as of August 2024 (NT, 2024).

Table 12.3: Subsidies to Components of Economic Services (Rs. Lakhs)

Year	Agriculture & Allied Activities	Special Area Programmes	Irrigation and Flood Control	Energy (Community and Institutional Biogas)	Industry and Minerals	Road Transport	General Economic Services
2012-13	8678.8	14.22	22.01	5.66	212.6	3257.4	
2013-14	10898.6	20.21	12.77	5.12	522.46	3668.0	
2014-15	11723.6	5.85	20.22	1.01	133.4	5580.4	
2015-16	14308.9	16.57	13.02	7.04	285.6	7035.4	
2016-17	13080.1	8.54	10.49	3.87	658.9	7453.1	
2017-18	12457.6	3.57	14.15	0	2018.4	8466.9	
2018-19	14043.1	0.95	11.29	0	459.03	11702.1	
2019-20	12406.1	0.85	8	0	753.41	9596.8	
2020-21	13978.8	1.4	12.5	0	515.9	11530.8	
2021-22	14606.0	1.33	6.1	0	1312.6	11923.2	
2022-23	14872.8	3.21	11.62	0	1470.9	13732.0	1.25

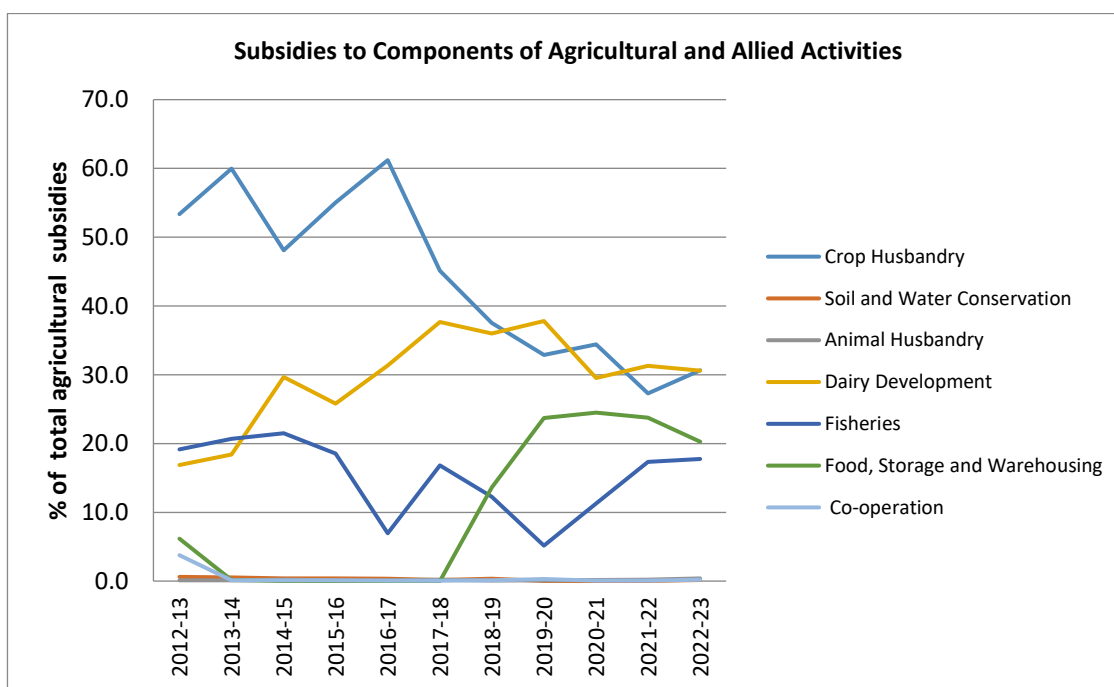
Source: Finance Accounts, GoG, Various years.

12.4.1 Agriculture and allied activities

Since agriculture and allied activities are a major component of economic services we have further analysed its various sub-categories in order to get a better understanding. On an average crop husbandry comprised of 44 per cent and dairy development comprised of 30 per cent of agricultural subsidies during 2012-13 to 2022-23. Crop husbandry which comprised of 53 per cent of agricultural subsidies in 2012-13, peaked to 60 per cent in 2013-

14 and 61 per cent in 2016-17 after which its share began to decline. The percentage share of crop husbandry in agricultural subsidies was 27 per cent in 2020-21 and 31 per cent in 2022-23. Dairy development which comprised of 16.9 per cent of agricultural subsidies in 2012-13 witnessed an increasing trend and peaked to 38 per cent in 2017-18 and 2019-20 after which it began to decline. In 2019-20 and 2021-22 the share of subsidies for dairy development surpassed that of crop husbandry. In 2022-23 the share of dairy development subsidies were equal to that of crop husbandry at 31 per cent. Food storage and warehousing received a share of 6 per cent and 0.2 per cent of subsidies in 2012 and 2013 (the years of mining ban). From 2014-15 to 2017-18 this sector received zero subsidies. However in 2018 when mining was banned for a second time, the share of subsidies to this sector comprised of 13.6 per cent of agricultural subsidies which peaked to 25 per cent in 2020-21. On average subsidies to this sector comprised of around 21 per cent of agricultural subsidies during 2018-19 to 2022-23. Fisheries on an average comprised of 15 per cent of agricultural subsidies. Fisheries comprised of 19 per cent of agricultural subsidies in 2012-13, which dropped drastically to 7 per cent in 2016-17 and 5 per cent in 2019-20. However it picked up after that and comprised of 17 per cent and 18 per cent of total agricultural subsidies in 2021-22 and 2022-23 respectively. Animal husbandry, soil and water conservation and Co-operation received on an average less than one per cent of agricultural subsidies during 2012-13 to 2022-23.

Figure 12.6: Subsidies to Components of Agricultural and Allied Activities



Source: Finance Accounts, GoG, various years.

12.4.2 Schemes under Agriculture and Allied Activities

In 2001 the Goa State Horticultural Corporation Ltd (GSHL) launched a scheme to procure locally grown vegetables (TOI, 2015). In 2021-22 1038 MT of locally produced vegetables worth Rs. 3.13 crore were procured benefitting 1047 farmers (NABARD, 2022). In 2022-23, GSHL sourced 1091 MT of vegetables valued at Rs 4.3 crore from 1,115 farmers (NT, 2023).

The state government implemented the New National Agricultural Insurance Scheme from the rabi 1999-2000 season at the taluka level in collaboration with Agriculture Insurance company of India Ltd with effect from October 2012. The scheme would cover Paddy, pulses and groundnut crops (GOG, 2013).

The government has assisted in establishing around 114 farm machinery banks (Hiring centres) in Goa to overcome shortage of labour and improve efficiency of agricultural operations by 2021-22 (NABARD, 2022).

Purchase of machineries scheme has been amended to provide farmers at source subsidy for purchasing any agricultural machinery (NABARD, 2022).

State sector scheme of 50 to 75% subsidy on the cost of organic inputs like organic fertilizer, vermin-compost bio-fertilizers etc was launched in 2016 (TOI, 2016).

50-75 % subsidy for purchase of agricultural machineries like tractors , power tillers etc. 50 % assistance for promotion of mechanized transplanting , harvesting paddy and use of tractors for land preparation for planting paddy, pulses sugarcane and groundnut (NABARD, 2022).

50-90% subsidy for creation of irrigation infrastructure like wells, irrigation pumps etc. (NABARD, 2022).

75 to 90% subsidy for construction of barbed wire, wire mesh, stonewall etc. to protect crops (NABARD, 2022).

The Goa state agricultural marketing board has been implementing the assured price of agricultural produce since 2013. Minimum support price for coconut Rs. 22/, paddy Rs.125 per kg and Rs.3,000/ per ton for sugarcane is provided by the government in 2022-23 (digitalgoa, 2023). Selected vegetables like chillies, lady finger, cluster beans etc are procured by Goa state horticultural corporation limited at prefixed rates from local farmers and are marketed through GSHCL outlets called Krishi Ghars (NABARD, 2022).

Interest subsidy on loans for agricultural and allied activities up to 5 lakhs for a cumulative period of 5 years was launched from 2020 (TeamLease RegTech, 2021). State government's

subvents the balance 4% interest for crop loans taken under the GOI ISS, thus making crop loan upto Rs. 3 lakhs at 0% interest rate for farmers. For other term loan activities , the government subvents a maximum of 8% interest so that farmers can avail bank credit at 4% rate of interest for loans up to 5 lakhs (NABARD, 2022).

The sub-scheme/component state sector scheme, special component plan was implemented in 2013-14. Financial Assistance of up to 75 per cent for purchase of agricultural inputs for Scheduled Castes farmers would be provided under this scheme. Maximum subsidy limit is Rs.12,000 per hectare and maximum area is 2 hectares (GOG, 2012)

In 2015, Goa Government launched the National food security act, 2013 where the targeted population would receive 5kgs subsidised rice or wheat at Rs.3 per kg (India Today, 2015). The Central government would grant 65 crores and Goa government would provide Rs.25 crores annually for this scheme (India Today, 2015). Implementation of national food security act which has been strictly enforced covering 5.43 lakhs eligible persons in 2021-22 (NABARD, 2022).

The Government intervention for control of price rise scheme was implemented in 2008. Under this scheme 16832.25 tonnes of vegetables and 264 tonnes of groceries were sold to public at subsidized rates through Goa State Horticultural Corporation in 2021-22 (NABARD, 2022).

Dairy and Fisheries

Sudharit Kamdhenu Scheme by the Department of animal husbandry & veterinary science, government was started in 2012 and amended in 2021 with an aim to increase the average milk collection per day. The government provides upto 90 per cent subsidy for the purchase of milch animals on unit cost of Rs.70,000 (GOG, 2024d). Besides this dairy farmers of milk incentives based on volume of milk poured to Dairy Cooperative Societies and Batchat Gats of SUMUL (NABARD, 2022).

Table 12.4: Beneficiaries under Sudharit Kamdhenu Scheme (Amended 2021)

Year	No. of farmers	Animals Purchased
2021-22	300	1739
2022-23	149	729

Source: (GOG, 2024d)

During 2019-20, the state government notified a community dairy scheme to encourage large units with a provision of upto Rs.1 crore subsidy per unit (NABARD, 2022).

As on June 2022, 1719 dairy farmers were covered by Kisan credit card (KCC) with outstanding loan of Rs.22.23 crore. The number of fishery KCCs as on June 2022 were 693, the total outstanding loan was 11.44 crore. Similarly, 12,356 farmers have been issued KCCs, the outstanding loan being Rs. 122.38 crore in June 2022 (NABARD, 2022).

To provide hygienic transportation of fish a 40% subsidy (limited to 8 lakhs) for purchase of insulated truck of minimum 10 tonne capacity for general category and 60% subsidy (maximum Rs. 12 lakh per) truck will be provided to SC/ST/women & their cooperatives in 2022 (NABARD, 2022).

In 2015, the state government had launched a unique mobile fish stall along with four other similar vehicles. In 2019, four more such mobile fish vans were added at a cost of 47.26 lakhs to sell subsidised fish at various locations in Goa. However it saw opposition from local vendors and as of 2022 most of these vans have turned non-functional (NT, 2022).

12.5 Unrecovered Costs and Cost Recovery for Social and General services

Secondly we consider subsidies as unrecovered cost of non-public goods under social and economic services. Subsidies are calculated by subtracting revenue receipts from revenue expenditure. If the value is positive, it implies unrecovered cost (subsidies).

On an average unrecovered costs comprise of around 6.8 per cent of GSDP. Unrecovered costs had a negative growth rate in 2014-15 (-9.54 per cent) and 2016-17 (-2.58 per cent). Unrecovered costs had a peak in the growth rate at 29 per cent in 2013-14. From 2012-13 to 2016-17 the average growth rate of subsidies was 10.7 per cent and average growth of GSDP was 9.4 per cent. From 2017-18 to 2022-23, the growth rate of subsidies was 8.7 per cent and growth rate of GSDP was 6.8 per cent.

Table 12.5: Goa: Unrecovered costs and GSDP, 2012-13 to 2022-23

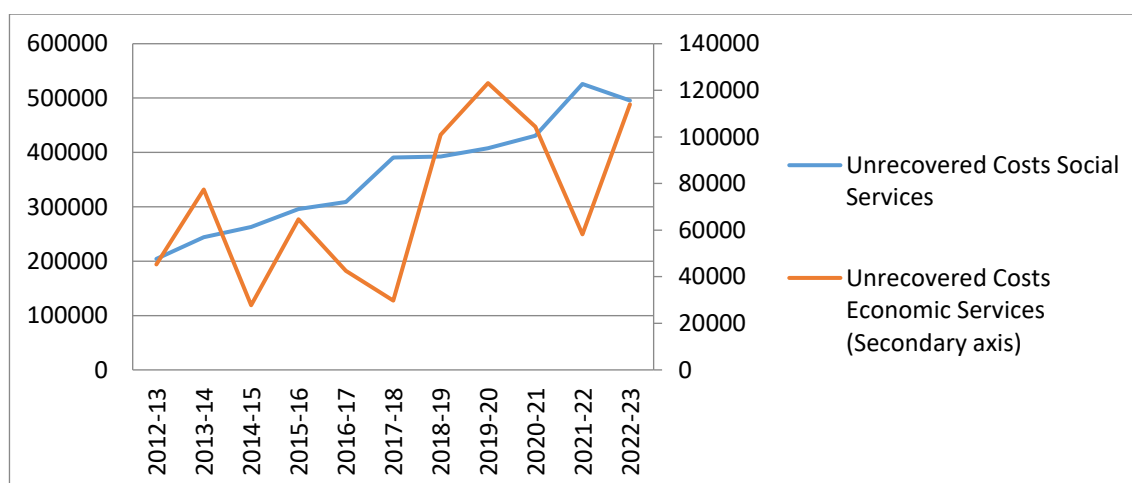
Year	Total unrecovered costs (Rs. Lakhs)	GSDP (Rs. Lakhs)	Unrecovered costs as a percentage of GSDP	Growth rate of total unrecovered costs	Growth rate of GSDP
2012-13	249474.4	3812002	6.54	12.99	-10.02
2013-14	321560.7	3592110	8.95	28.90	-5.77
2014-15	290878.6	4781418	6.08	-9.54	33.11
2015-16	360582.2	5505385	6.55	23.96	15.14

2016-17	351272.9	6297631	5.58	-2.58	14.39
2017-18	420604.4	6935205	6.06	19.74	10.12
2018-19	493531.3	7185334	6.87	17.34	3.61
2019-20	531148.6	7503209	7.08	7.62	4.42
2020-21	535220.9	7415792	7.22	0.77	-1.17
2021-22	584101.9	8122613	7.19	9.13	9.53
2022-23	609451.7	8912974	6.84	4.34	9.73

Source: Finance Accounts, GoG, Various years.

Majority of the unrecovered costs accrue from the social services sector as expected. If we look at the pattern of unrecovered costs, social services show a positive and increasing trend during the study period. Economic services which are shown on the secondary axis had huge lows in 2014-15, 2017-18 and 2021-22 which means recovery rate was higher in these years.

Figure 12.7: Unrecovered Costs for Economic and Social Services (Rs. Lakhs)



Source: Finance Accounts, GoG, various years

Next we analyse the percentage of cost recovery for economic and social services. Cost recovery is measured by calculating revenue receipts as a percentage of revenue expenditure. On an average the recovery rate for social services from 2012-13 to 2022-23 was 6.56 per cent and the average recovery rate of economic services was 75.79 per cent during 2012-13 to 2022-23.

Table 12.6: Cost Recovery for Social and Economic Services

Year	Percentage of cost recovery- social services	Percentage of cost recovery economic services
2012-13	7.43	77.30

2013-14	7.30	63.03
2014-15	6.52	87.53
2015-16	7.01	75.83
2016-17	7.69	83.96
2017-18	5.94	89.63
2018-19	7.03	67.10
2019-20	5.95	63.16
2020-21	4.84	69.50
2021-22	5.38	84.30
2022-23	7.09	72.33
Average (2012-13 to 2022-23)	6.56	75.79

Source: Finance Accounts, GoG, Various years

Under social services the highest cost recovery has been for the sector of water supply and sanitation, housing and urban Development with an average cost recovery of 42 per cent. In 2021-22, the cost recovery dropped to 21 per cent, and in 2022-23 it reached to a peak of 73 per cent. Medical and Public Health on an average had a cost recovery of 2.98 per cent and Education, Sports Art and Culture on an average had a cost recovery of 1.6 per cent.

Table 12.7: Cost Recovery for Components of Social Services (%)

Year	Education, Sports Art and Culture	Medical and public health	Water supply and Sanitation, Housing , Urban Development	Information and Publicity	Welfare of SC's, ST's and other backward classes	Labour and Labour welfare	Social Security and Welfare
2011-12	1.69	2.97	37.09	0.13	0.00	0.13	0.07
2012-13	2.57	1.91	42.77	0.09	0.00	0.14	0.10
2013-14	1.87	2.64	47.88	0.20	0.0002	0.15	0.08
2014-15	1.40	2.47	41.64	0.01	0.57	0.15	0.03
2015-16	2.24	2.70	40.67	0.01	0.00	0.14	0.02
2016-17	1.78	3.65	51.93	0.03	0.0001	0.16	0.14
2017-18	1.48	4.64	28.99	0.09	0.0001	0.13	0.05
2018-19	1.22	3.83	56.88	0.08	0.0001	0.12	0.06
2019-20	1.27	2.85	35.73	0.003	0.02	0.11	0.02
2020-21	1.06	2.22	32.43	0.02	0.05	0.09	0.02
2021-22	1.19	2.46	20.66	0.01	0.12	0.11	0.18
2022-23	1.51	3.39	72.73	0.00	0.00	0.14	0.69

Average (2012-13 to 2022- 23)	1.61	2.98	42.45	0.06	0.06	0.13	0.12

Source: Finance Accounts, GoG, various years

Power has had on an average a cost recovery of 102 per cent which means that it is able to earn higher revenue as compared to its expenditure. Major & medium irrigation and minor irrigation had an average cost recovery of 38 per cent and 36 per cent respectively. However during 2021-22 (covid outbreak) its cost recovery peaked to 628 per cent and 180 per cent respectively. Ports and light houses had full cost recovery from 2012-13 to 2016-17 (except for 2013-14). After 2016-17 its cost recovery though still high has declined.

Table 12.8: Cost Recovery for sub category of economic services (%)

Year	201 1-12	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	201 8-19	201 9-20	202 0-21	202 1-22	202 2-23
crop husbandry	1	2	1	2	1	2	2	2	2	1	1	1
Animal husbandry	10	7	8	8	7	12	9	8	7	7	8	6
Dairy development	7	3	2	2	2	2	3	4	4	2	2	3
Fisheries	9	11	7	7	3	27	9	13	20	17	17	14
Forestry and wild life	6	9	7	10	8	9	9	9	7	6	5	8
Cooperation	5	5	5	9	5	6	7	5	5	8	5	6
Other agricultural programmes	5	3	6	3	34	8	11	16	4	1	14	13
Other Rural Development programs	0.05	0.08	0.03	0.04	0.04	0.04	0.04	0.04	0.03	0.02	0.01	0.04
major and Medium irrigation	55	25	35	39	59	35	52	11	50	115	628	23
Minor irrigation	36	46	40	29	17	24	15	21	96	64	180	34
Power	86	91	101	100	115	113	127	101	88	100	98	100

Source: Finance Accounts, GoG, Various years

Table 12.9: Cost recovery for sub category of economic services -Part 2 (%)

	201 1-12	2012- 13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	201 8-19	201 9-20	202 0-21	202 1-22	202 2-23
Village and small industries	31	18	16	20	1	0.5	0.00	0.00	27	0.02	0.2	2
Industries	1	0	1	1	2	4	3	2	5	0.00	2	4
Non-Ferrous Mining and Metallurgical Industries	367	124	1	11	3	7	22	3	1	27	22	9

Ports and lighthouses	823	216	69	118	101	119	87	78	70	89	79	96
Civil Aviation	0	0	0	0	0	0	0	0	72	71	33	71
Roads and Bridges	7	2	23	24	22	35	24	52	29	15	56	25
Inland water transport services	7	5	7	5	8	3	4	6	5	5	7	7
Tourism	4	11	9	15	3	2	3	4	6	3	17	35
Civil Supplies	6	4	19	2	5	2	0.4	0.3	0.2	16	0.1	2

Source: Finance Accounts, GoG, various years

12.6 Summary

In this chapter we have analysed explicit costs with respect to subsidies reported in the Finance account books of the government of Goa. On an average from 2012-13 to 2022-23, subsidies have been around 0.38 per cent of GSDP and around 2.4 per cent of revenue expenditure. Subsidies both as a per cent of GSDP and as a percentage of revenue expenditure seemed to be marginally higher in the later period of the study. Average growth rate of subsidies has declined in the later period of the study to 3.27 per cent (2016-17 to 2022-23) as compared to 24.27 per cent in 2012-13 to 2015-16. Subsidies are mainly granted to the economic services which on an average comprised of 2.18 per cent of revenue expenditure during 2012-13 to 2022-23. Subsidies to social services on an average comprised of 0.03 per cent and subsidies to general services comprised of 0.19 per cent of revenue expenditure during the same period. Subsidies to general services are mainly granted to the sub-category pension and miscellaneous general services. The subsidies to general services increased from 7.3 crore in 2013-14 to a peak of 38.1 crore in 2017-18 after which it began to decline. During 2020-21 to 2021-22 there were no subsidies granted under general services. Subsidies under social services is mainly given to three sectors which are Education, Sports, Art and Culture, Welfare of SC's ST's and OBC's and Social Welfare and Nutrition. Subsidies on social welfare and nutrition as a percentage of total subsidies to social services dropped from 91 per cent in 2012-13 to 39 per cent in 2019-20. On the other hand subsidies on education, sports, art and culture increased from 9 per cent in 2012-13 to 61 per cent in 2019-20. However in 2020-21, due covid outbreak in India, subsidies on social welfare and nutrition increased to 95 per cent of social sector subsidies and subsidies to education Sports, Art and Culture dropped to 3 per cent. In 2021-22 there were zero subsidies for education. Agriculture and allied activities and road transport receive the major share of the subsidies under economic services. The share of agricultural subsidies has been declining over the period of the study and share of road transport has been increasing.

Agriculture and allied activities decreased from 71 per cent in 2012-13 to 50 per cent in 2022-23. On the other hand subsidies for road transport increased from 27 per cent in 2012-13 to 46 per cent in 2022-23. The industry and mines which comprised of 1.75 per cent of economic subsidies in 2012-13 peaked to close to 5 per cent of subsidies to economic services from 2021 onwards. Under agriculture and allied activities on an average crop husbandry comprised of 44 per cent and dairy development comprised of 30 per cent of agricultural subsidies during 2012-13 to 2022-23. In 2019-20 and 2021-22 the share of subsidies for dairy development surpassed that of crop husbandry and in 2022-23 the share of dairy development subsidies were equal to that of crop husbandry at 31 per cent.

Appendix

Table A 1 Unrecovered Costs for sub-categories of Social Services (Rs. Lakhs)

Year	Education, Sports Art and Culture	Medical and public health	Water supply and Sanitation, Housing , Urban Development	Information and Publicity	Welfare of SC's, ST's and other backward classes	Labour and Labour welfare	Social Security and Welfare
2011-12	94014.79	35913.35	21119.36	1846.84	2125.02	2944.73	18952.49
2012-13	102095	39580.55	16558.86	1969.04	1511.49	3111.02	36867.84
2013-14	119788.9	42300.65	16520.96	1668.1	6171.25	3372.89	51704.11
2014-15	120861.9	46671.46	20647.71	1528.77	11277.1	3696.12	54674.44
2015-16	130712.3	51681.25	25074.26	1986.69	12233.98	3968.45	66557.31
2016-17	144055.6	57678.95	18598.22	2324.25	13535.64	4036.08	65046.52
2017-18	176502.1	78794.74	42606.16	4274.1	10966.65	5235.26	68680.11
2018-19	202088.4	79510.12	17624.33	2592.85	15039.25	5345.25	66562.51
2019-20	196159.7	93251.69	35506.91	2826.64	7559.72	6119.17	61373.17
2020-21	203001	104858.3	35024.31	2531.67	6727.94	5516.06	64874.81
2021-22	211217.6	126160	89660.03	6942.58	4829.92	5903.58	73493.59
2022-23	234724.8	128929.8	10545.08	6541.48	12672.44	5901.91	90133.41

Table A 2 Unrecovered Costs for Sub-categories Economic Services (Rs. Lakhs)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
crop husbandry	8105	7151	10883	8912	11676	12810	10645	10005	9493	14957	13639	12781
Animal husbandry	1803	2172	2119	2195	2993	2780	3333	3653	3765	3709	4594	5740
Dairy development	827	2144	2701	4169	4398	4858	5574	5913	5549	5310	5705	5788
Fisheries	2053	2193	3389	3598	3887	1340	3504	2415	1608	2417	3046	3647
Forestry & wild life	3541	3148	3888	4040	4512	4057	4975	5232	5992	6749	8442	8194
Cooperation	921	1149	976	946	1079	997	1303	1329	1503	1278	1425	1974
Other agricultural programmes	86	94	97	94	57	73	103	75	111	118	106	142
Other Rural Development programs	6397	7065	8063	5631	10186	11953	12224	11542	12760	22675	27917	16966
Major & Medium irrigation	1200	2143	2274	2446	2007	4258	4151	5066	2790	-801	-	4181
Minor irrigation	1958	2091	2082	2549	3465	3393	4317	4653	219	2237	-3433	3569

Power	1632 2	11027	-997	-137	- 21994	- 20266	- 44875	-2597	25967	-783	3586	-1291

Table A 3 Unrecovered costs for Subcategories of Economic Services -Part 2 (Rs. Lakhs)

Year	Village and small industries	Industries	Non-Ferrous Mining and Metallurgical Industries	Ports and lighthouses	Civil Aviation	Roads and Bridges	Inland water transport services	Tourism	civil Supplies
2011-12	1534.46	4705.71	-95069.4	-3519.31	29.9	13232.6	2254.59	3752.92	247.04
2012-13	2273.13	3713.39	-33652.6	-709.04	22.04	14656.53	2689.27	2534.91	301.85
2013-14	2192.04	4459.77	2728.69	192.22	2.3	10840.26	2791.69	4136.13	303.2
2014-15	1353.92	4540.5	-48236.6	-118.82	32.35	10838.9	3146.3	4747.44	578.72
2015-16	1803.1	4276.79	-14469.4	-9.32	153.57	13020.58	3079.61	14169.86	607.43
2016-17	2069.64	2897.19	-29849.7	-147.51	120.7	8012.4	3355.22	7590.95	596.53
2017-18	1951.32	4849.12	-31775.1	129.73	338.39	11380.4	4411.95	7799.28	813.25
2018-19	3660.84	5702.58	-2067.38	199.52	456.67	4902.76	4017.92	6294.42	807.15
2019-20	1577.69	3235.6	-155.83	285.88	69.89	6046.98	3598.69	7103.02	952.17
2020-21	1928.77	3468.81	-16178	98.36	184.15	12010.48	3843.06	5655.94	731.13
2021-22	2899.57	8154.77	-12329.7	197.12	180.74	5339.36	3938.79	3108.72	1409.42
2022-23	2436.46	6110.23	-8811.06	43.12	196.46	6393.56	4293.14	4032.87	1206.9

Chapter 13 Outcome Evaluation of State Finances in the context of recommendations of the 14th and 15th Finance Commission

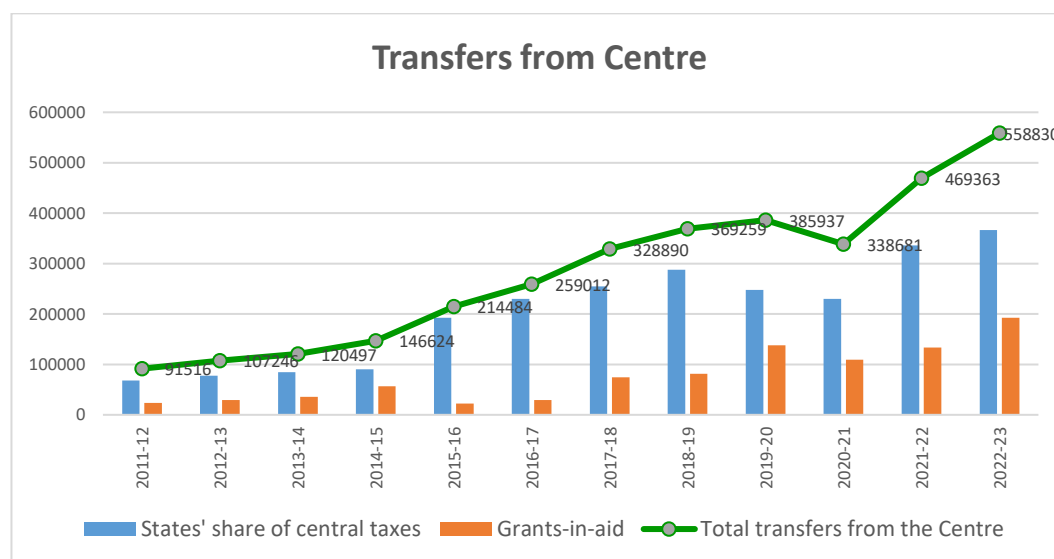
13.1 Introduction

The Constitution of India clearly defines the role of Central and State Governments in the federal structure. As per the constitutional provision, all activities in Government sphere are categorized as falling in Central List, State List or Concurrent List. Though there is clarity on the Central List and State List, activities falling under Concurrent List are subject to overlapping of jurisdiction of the Government of India and the State Governments. Based on the recommendation of the FC XIV, the tax devolution to the states was enhanced by the Government and was substantially increased from 32 to 42 percent of the divisible pool of the Union taxes. The FC XV recommended a decrease in the share of States in Central taxes from 42 per cent to 41 per cent. The State's share in Union taxes and duties for 2020-21 was fixed at 0.386 per cent by FC XV (CAG, 2023).

Transfers from the Central Government

Transfers from the Central Government are mainly dependent on Finance Commission recommendations. The figure below shows the trends of Central transfers for the last 10 years covering the periods of 13th, 14th and 15th Finance Commission. In the figure below, Transfers from the Centre increased from Rs 91516 lakh in 2011-12 to Rs 558830 lakh in 2022-23. The 14th Finance Commission significantly increased states' share of central taxes from 32% to 42% in 2015-16, this policy is reflected in the noticeable increase in “states' share of central taxes” transfers from 2015-16 onwards, showing a steady upward trend. We see a rise in the State's share of Central taxes from Rs 192366 lakh to Rs 287799 lakh in 2019-20. On the other hand, the grants-in-aid remained relatively lower in the early years post-14th Finance Commission. There was a decrease in grants-in-aid from Rs 56656 lakh to Rs 29261 lakh in 2016-17, reflecting enhanced tax devolution and the restructuring of flow of grants to the states. The 15th Finance Commission maintained a high devolution rate but introduced some adjustments.

Figure 13.1: Transfer from the Central Government



Source: Finance Accounts, GoG, Various Years

Despite fluctuations in grants, the total transfers continued to rise, as shown by the green line indicating a steady upward trend, with a slight dip in 2020-21 due to COVID-19 pandemic. The total transfers from the Centre, as shown by the green line, reflects the total impact of both Finance Commissions' recommendations. The steady increase in the transfers is in par with the policy of enhancing the states revenue sources, but also shows the Centre's use of grants to address emerging fiscal needs. In the 2015-16 budget, to accommodate the large increase in tax devolution, the Central Government restructured the flow of grants to states. This restructuring had three components: (i) withdrawal of Central support for set of schemes (for 39 schemes central support was withdrawn), (ii) for another set of schemes (20 schemes) the union government changed the funding pattern, and (iii) for certain schemes (34) it continued with the existing arrangement of grants (Chakraborty & Gupta, 2016). The chart below shows the flow of grants-in-aid to the state along with TR and NTR. The flow of grants-in aid shows significant variation, with a rise from 2011-12 to 2014-15 at Rs 56656 lakh, followed by a decline to Rs 22118 lakh in 2015-16.

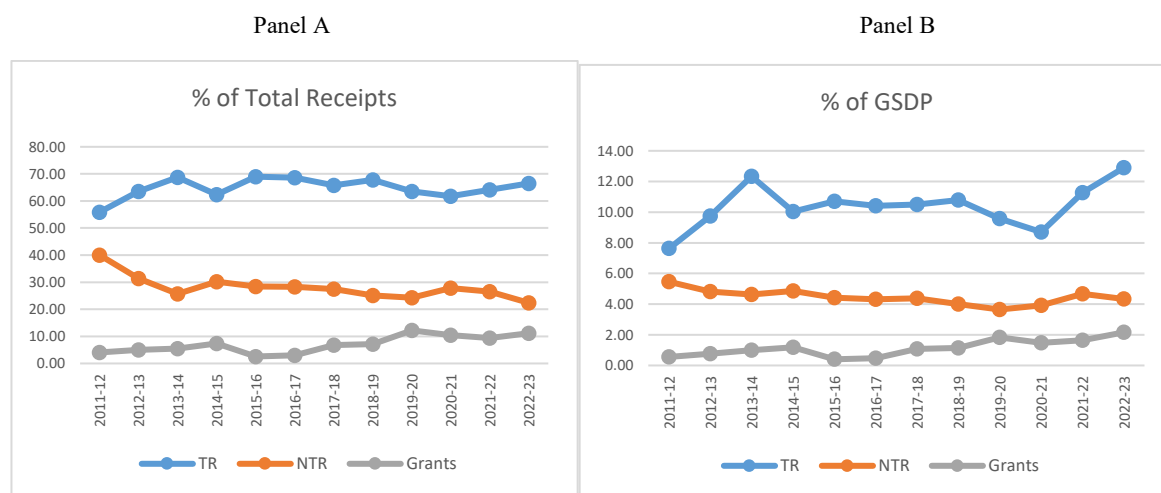
Table 13.1: Total Receipts of the state

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Sparkline
TR	323161	371687	443101	479650	589913	656036	727563	774972	718041	644721	916221	1149212	
NTR	231354	183290	166156	232563	243192	271200	303328	287366	273754	290280	378724	386847	
Grants Total	23559	29565	35721	56656	22118	29261	74462	81460	137956	109028	133681	192311	
receipts	578073	584543	644977	768869	855224	956497	1105352	1143798	1129752	1044029	1428627	1728369	
GSDP	4236666	3812002	3592110	4781418	5505385	6297631	6935205	7185334	7503209	7415792	8122613	8912974	

Source: Finance Accounts, GoG, Various Years

As a percentage to the GSDP, the grants-in-aid has been between 0.40 percent to 2.16 percent, while as a percentage of Total Receipts, it has varied between 2.59 to 12.21 percent.

Figure 13.2: Grants as a percentage of total receipts and GSDP



Source: MoSPI, Economic Survey, GoG, various years and Finance Accounts, GoG, Various Years

13.2 Flow of resources from Centre to States through various schemes

Grants-in-aid from Central Government is determined by the amount of Central tax receipts and anticipated Central assistance for schemes. In addition to the tax devolution and grants given by the Centre to the states based on the recommendations of the Finance Commissions, the Central government gives specific purpose grants for various purposes through the respective ministries (Rao, 2015). The Central Government transfers funds through grants in aid or grants through various schemes of the Central ministries, either Centrally Sponsored Schemes (CSS) or Central Sector (CS) schemes. The CSS are programmes designed and funded by the Union government on subjects in the State and Concurrent Lists, to be implemented by various State governments. Grants for CSS are meant to supplement the resources of the state governments, who are responsible for the implementation of these schemes.

There has been restructuring of grants to rationalize Centrally Sponsored Schemes. The initial restructuring of grants was during the 12th Plan (2012-17) based on the recommendation of the Committee chaired by Mr. B. K. Chaturvedi. The process of restructuring continued, as in 2015, the Union government established a subcommittee of chief ministers in March 2015 to rationalize and restructure the CSS. The sub group emphasized that the focus of the CSS should be on the schemes that comprise the National Development Agenda and the Centre and the States should work together in the spirit of

Team India (NITI Aayog, 2015). The sub group also recommended rationalisation of schemes by grouping them into Core of Core, Core and Optional Categories, with greater financial contribution by states for Core schemes. The funding pattern for general states for Core schemes was also changed from 75:25 earlier to 60:40 (Jha et al., 2021). Based on the recommendations of this subgroup, grants were further rationalised.

It has been observed that after the FC XIV, there has been 1) Quantum jump in the devolution of taxes post the FC XIV award and resultant fiscal autonomy to states, 2) Restructuring of grants based on the revised funding pattern proposed by the Sub-group of Chief Ministers on the rationalization of CSS, and 3) The effective outcome-based monitoring of implementation of schemes and doing away with the plan and non-plan expenditure distinction in the budget after the completion of the Twelfth Five Year Plan (Chakraborty & Gupta, 2016).

The grants-in-aid component includes a) Non Plan Grants, b) Compensation for loss of Revenue arising out of implementation of GST and c) Finance Commission Grants besides the grants given for different schemes. The figure below shows the distribution of grants-in-aid in different sub components of which the transfers to schemes are divided into the following:-

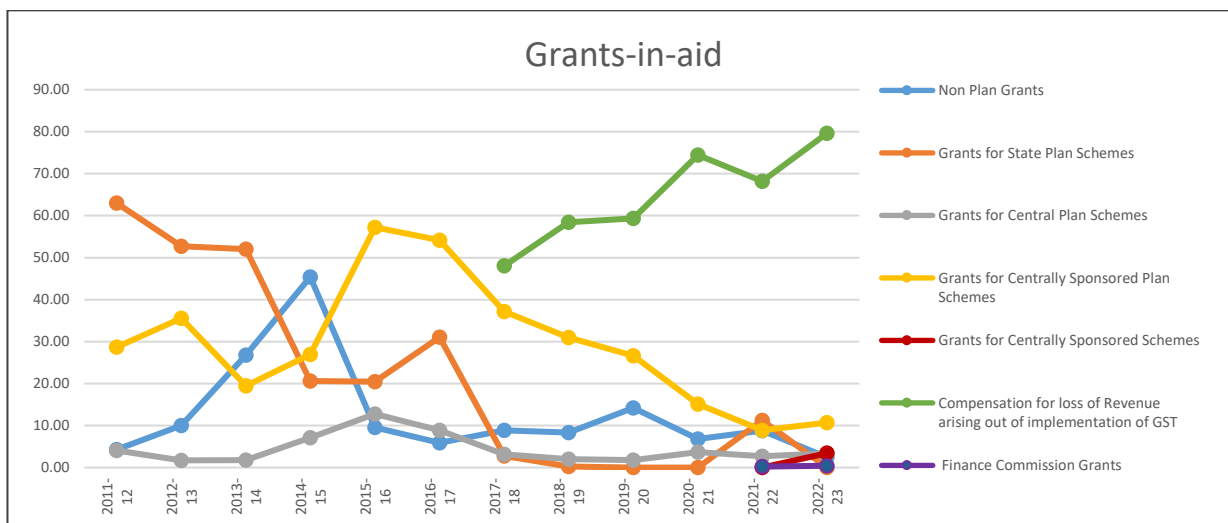
- 1) Grants for State Plan Schemes
- 2) Grants for Central Plan Schemes
- 3) Grants for Centrally Sponsored Plan Schemes
- 4) Grants for Centrally Sponsored Schemes

Table 13.2: Components of Grants in aid

Year	Non Plan Grants	Grants for State Plan Schemes	Grants for Central Plan Schemes	Grants for Centrally Sponsored Plan Schemes	Grants for Centrally Sponsored Schemes	Compensation for loss of Revenue arising out of implementation of GST	Finance Commission Grants
2011-12	1005	14838	962	6754			
2012-13	2963	15579	507	10517			
2013-14	9560	18588	628	6944			
2014-15	25723	11655	4030	15248			
2015-16	2119	4521	2822	12656			
2016-17	1716	9096	2603	15847			
2017-18	6620	2047	2366	27667		35763	
2018-19	6809	209	1635	25206		47600	
2019-20	19633	0	2440	36713		81870	
2020-21	7432	0	3975	16475		81147	
2021-22	11795	14970	3598	11888	13	91116	302
2022-23	4714	23	6474	20588	6580	153070	840

Source: Finance Accounts, GoG, Various Years

Figure 13.3: Grants-in-aid



Source: Author's calculations based on Finance Accounts, GoG, Various Years

There has been restructuring of grants for state plan schemes to rationalize Centrally Sponsored Schemes (CSS) and improve the utilization of funds. This can be noticed by a decline in the Grants for State Plan Schemes from 14838 lakh to only 23 lakh in 2022-23, except for a rise in the grants given by 11795 lakh in 2021-22. This rise was because, Goa, was in its diamond jubilee year of liberation from Portuguese rule and the Finance Minister Nirmala Sitharaman had announced grants of Rs 300 crores from the Union Budget in 2021 (TOI, 2021b). We notice a drastic decline in the grants-in -aid for state plan schemes, from 62.98 percent to 0.01 percent in 2022-23 in the graph above.

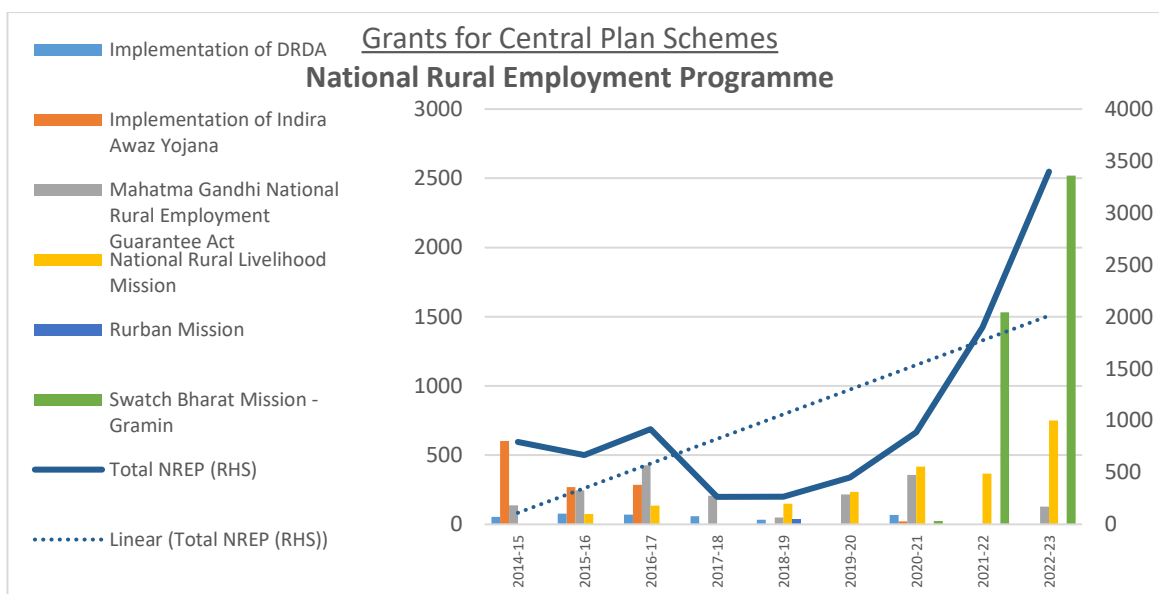
As the focus of CSS was on Schemes that comprise the National Development Agenda for realizing Vision 2022, where the Centre and States need to work together we notice a slight rise in the grants for Central Plan Schemes, from 2014-15 onwards, though it declined from 2016-17 onwards. We need to note that the sharing pattern between States and Union for core schemes is in the ratio of 60:40 and for optional schemes it is 50:50. This reflected in the decline in the grants-in-aid for the centrally plan schemes by the Centre. We next discuss the sub components of the grants for central plan schemes. In the next section we look at the sub components of grants for Central plan schemes which is divided into NREP and Other grants.

13.2.1 Sub components of Grants for Central Plan Schemes

Under the grants for Central Plan Schemes (CPS) we have two categories 1) National Rural Employment Programme (NREP) and Other Grants.

13.2.1.1 National Rural Employment Programme

Figure 13.4: Grants for Central Plan Schemes- NREP



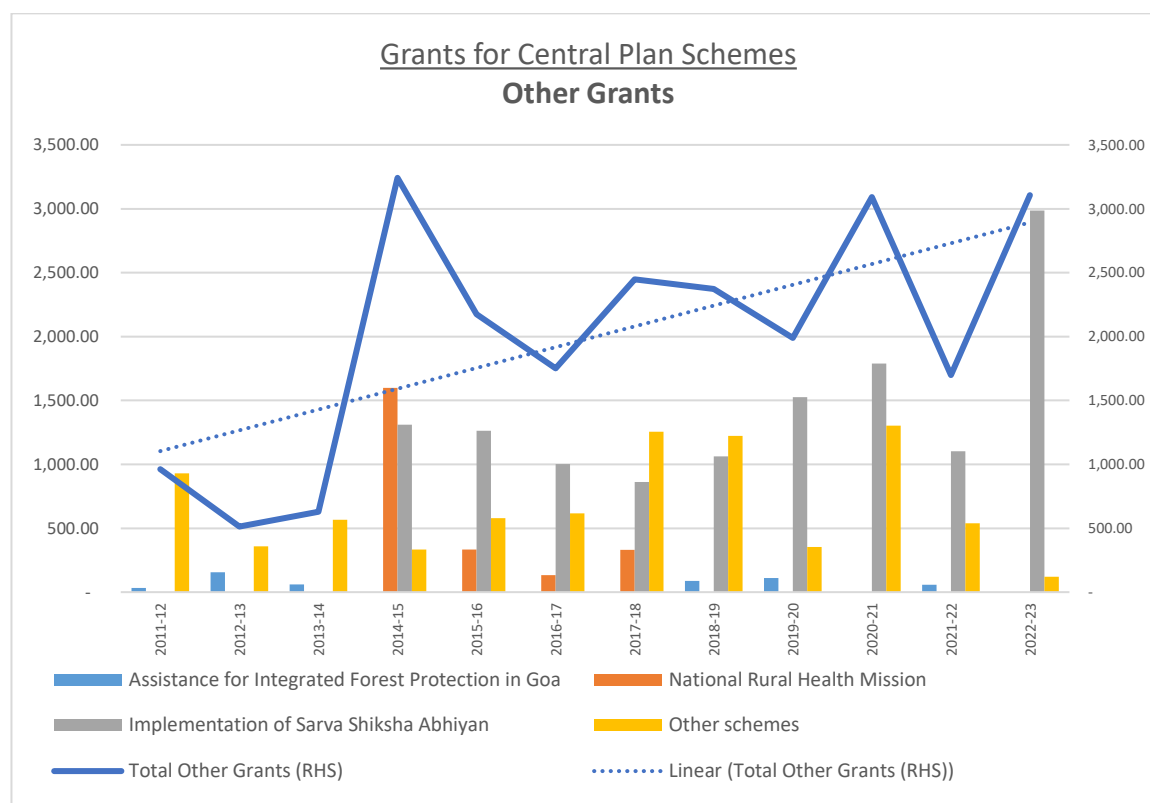
Source: Author's calculations based on Finance Accounts, GoG, Various Years

Under the NREP, the rise in the grants has been seen under the Swachh Bharat Mission – Gramin that was introduced in 2020-21. The idea for "Open Defecation Free" India, could have contributed to this rise in funding, with Goa aligning with national priorities. Secondly, there has been an increase in the grants for National Rural Livelihood Mission, suggesting efforts to reduce poverty through building strong grassroots institution of the poor. Under the Mahatma Gandhi National Rural Employment Guarantee Act, grants received show fluctuations over the years.

13.2.1.2 Other Grants

NRHM, received high funding in the earlier part of the observed period, particularly in 2014-15, which eventually declined. Highest proportion of the grants were received under Sarva Shiksha Abhiyan (SSA) from 2014-15 onwards, the highest proportion was in 2022-23. The rest of the grants given are categorized as other schemes in the graph above.

Figure 13.5: Other Grants



Source: Author's calculations based on Finance Accounts, GoG, Various Years

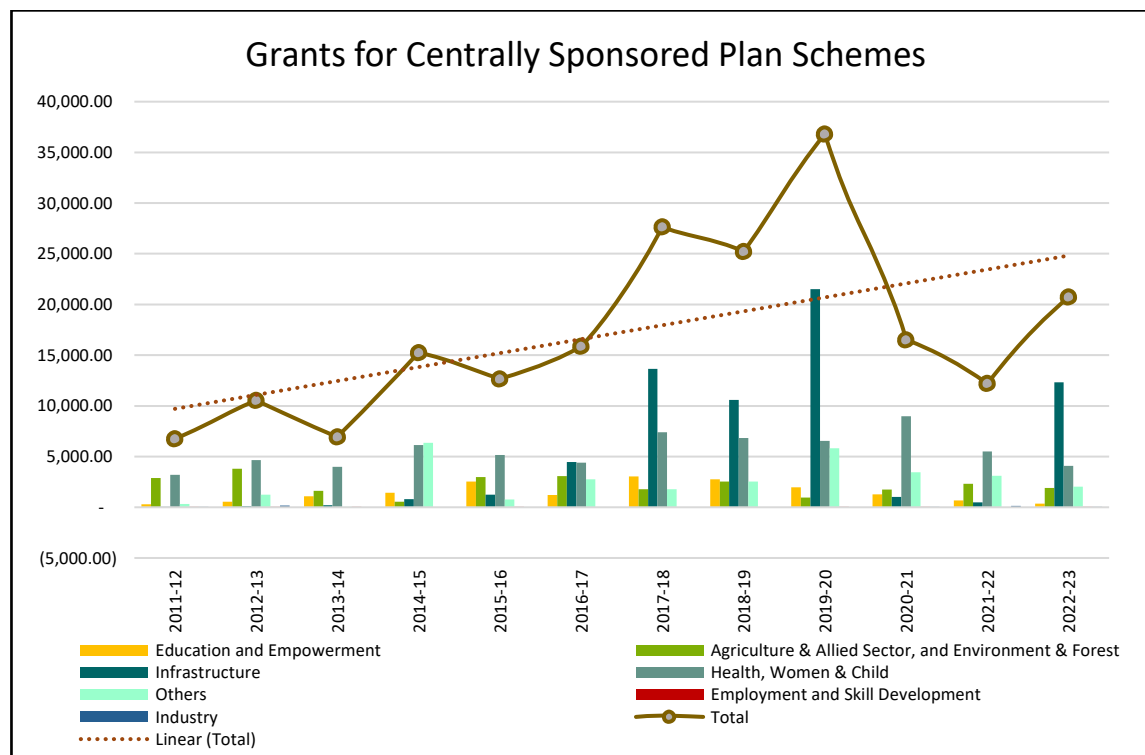
Under this scheme, in 2017-18 1187.95 lakh for National Mental Health Programme. In 2018-19, an increase of 1189.81 lakhs was seen because the grants given under professional efficiency. In 2020-21, there were grants of 1200 lakh were given as State Disaster Response Mitigation Fund.

13.2.2 Sub components of Grants for Centrally Sponsored Plan Schemes (CSPS)

We have classified the grants under CSPS in seven different sectors. The graph displays data on the grants received by Goa for various sectors from the fiscal years 2011-12 to 2022-23

- Education and Empowerment
- Agriculture & Allied Sector, and Environment & Forest
- Infrastructure
- Health, Women & Child
- Employment and Skill Development
- Industry
- Others

Figure 13.6: Grants for Centrally Sponsored Plan Schemes



Source: Author's calculations based on Finance Accounts, GoG, Various Years

Overall grants saw significant fluctuations, with peaks in 2019-20 and dips around 2020-21. There is a general upward trend until 2019-20, after which there is a decline, with a partial recovery in 2022-23.

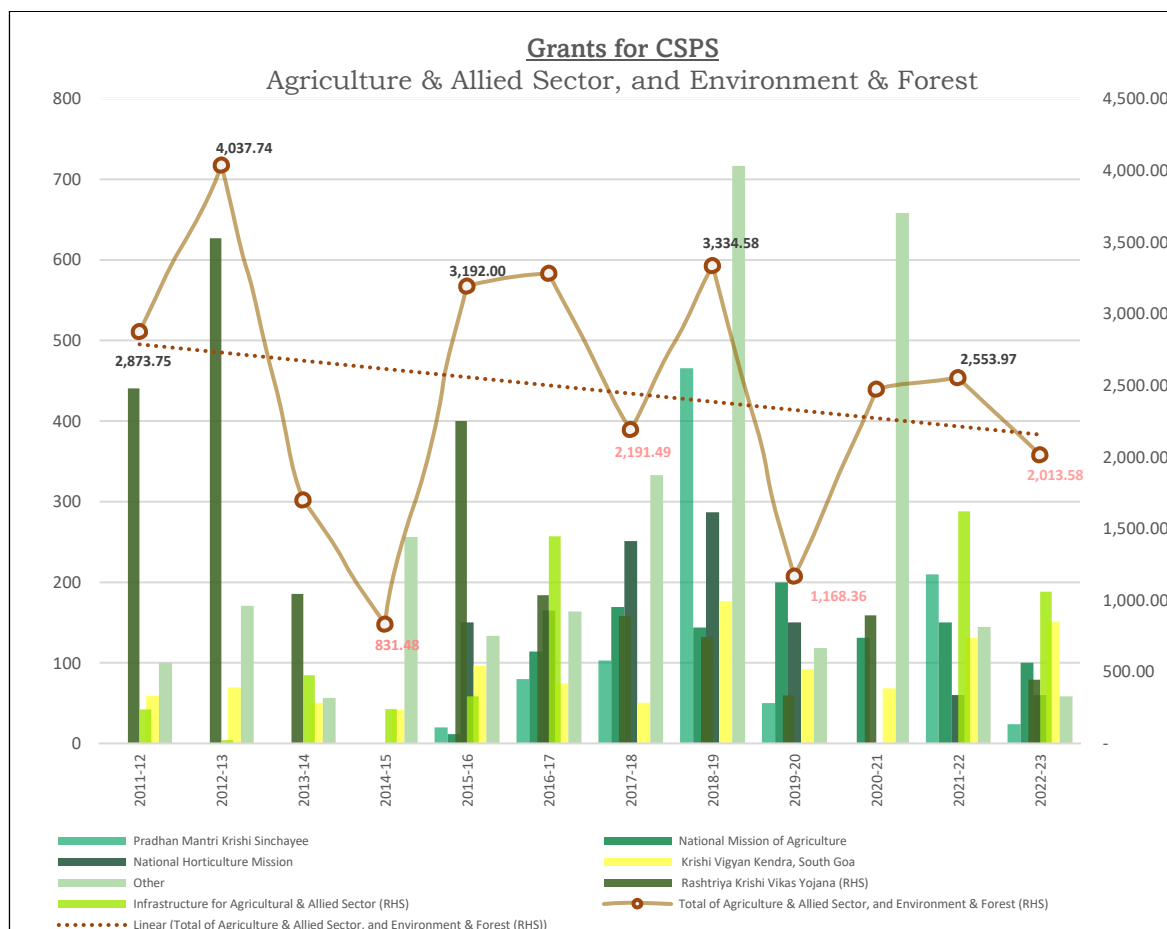
Among all the sectors, we notice that the **grants received for Infrastructure has gone up** from 2011-12 with high increase in 2019-20. This is followed by Health, Women & Child, where the grants for this sector experienced variability, with slight increases around 2017-18 and highest being in 2020-21. The Agriculture and Allied Sector along with Environment & Forest sector shows moderate grants with a visible increase in 2016-17. Under Education and Empowerment, grants for this sector were relatively low compared to others but remain consistent across the years. From 2013-14 to 2018-19 there has been an increase in the grants. Industry, Employment and Skill Development held lower proportion of grants received over the years. We next discuss the grants given under each sector.

a) Agriculture & Allied Sector, and Environment & Forest sector

In this section we discuss the sub components under each sector categorized in the study. In the Agriculture & Allied Sector, and Environment & Forest sector, total grants for the sector (measured on the RHS) fluctuated significantly over the years. 2012-13 saw the

highest allocation of Rs.4,037.74 lakh, reflecting a strong push for agricultural development and environmental initiatives. Under this the Rashtriya Krishi Vikas Yojana got the highest grants of 3527 lakhs.

Figure 13.7: Agriculture, Allied Sector, and Environment & Forest sector



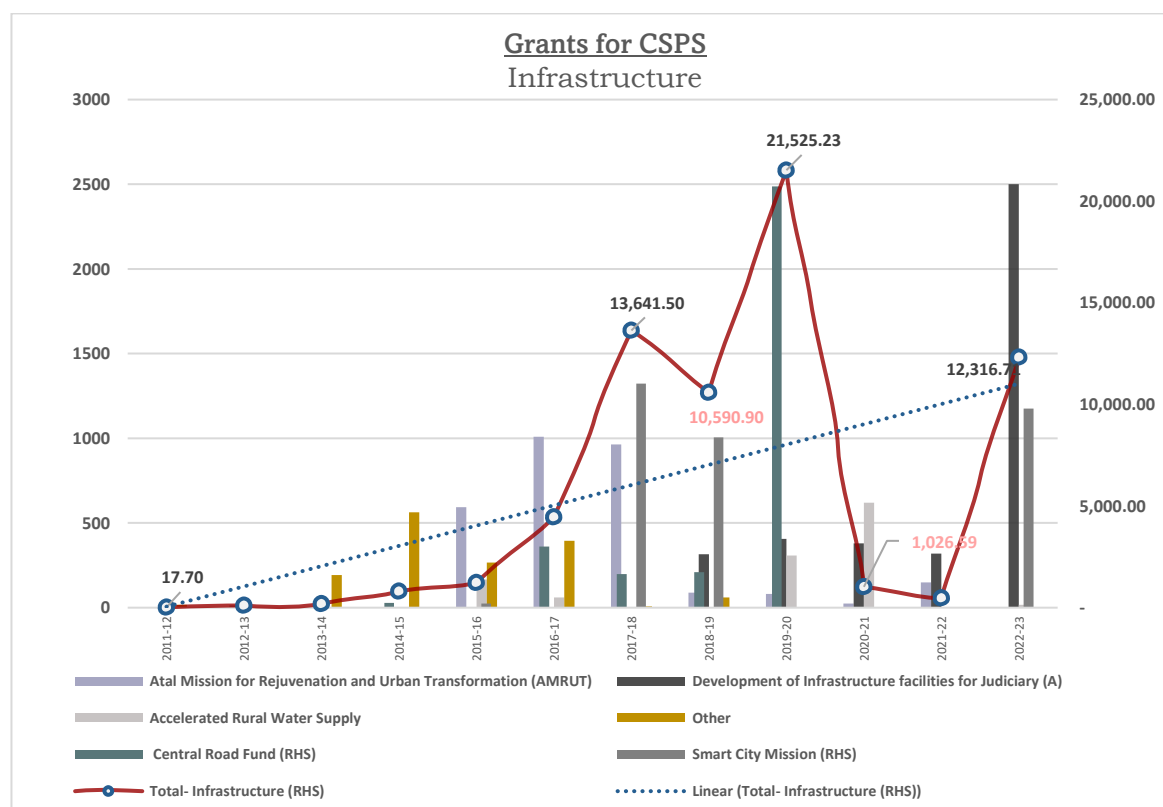
Source: Author's calculations based on Finance Accounts, GoG, Various Years

Though in the later years share has been declining. 2014-15 witnessed a sharp decline to Rs.831.48 lakhs, the Rashtriya Krishi Vikas Yojana did not receive any grants in this year. Besides possibility could be restructured schemes, delayed releases, or reduced priorities for agriculture. From 2015-16, with the introduction of Pradhan Mantri Krishi Sinchayee, major contributor in most years, reflected Goa's focus on irrigation and water management. Also with National Horticulture Mission from 2015-16 there has been support provided to horticultural activities in Goa. Krishi Vigyan Kendra (KVK), South Goa has been the smallest component but represents localized agricultural research and extension services. Infrastructure funding shows notable fluctuations across the years, with peaks and troughs in alignment with the total grant trends.

b) Infrastructure Sector

Under the infrastructure sector, the components of infrastructure funding, such as **AMRUT**, **Accelerated Rural Water Supply**, **Central Road Fund**, **Development of Infrastructure Facilities for Judiciary**, **Smart City Mission**, and others. Fluctuations highlight variability in fund allocation, reflecting changing central government priorities or state-level performance in implementing projects. Highest total funding of Rs.21,525.23 lakh was in 2019-20, suggesting a significant push in infrastructure projects during this year. Significant funding was for Central Rad Fund, supporting the development and maintenance of roads, which are critical for Goa’s connectivity and tourism.

Figure 13.8: Infrastructure Sector



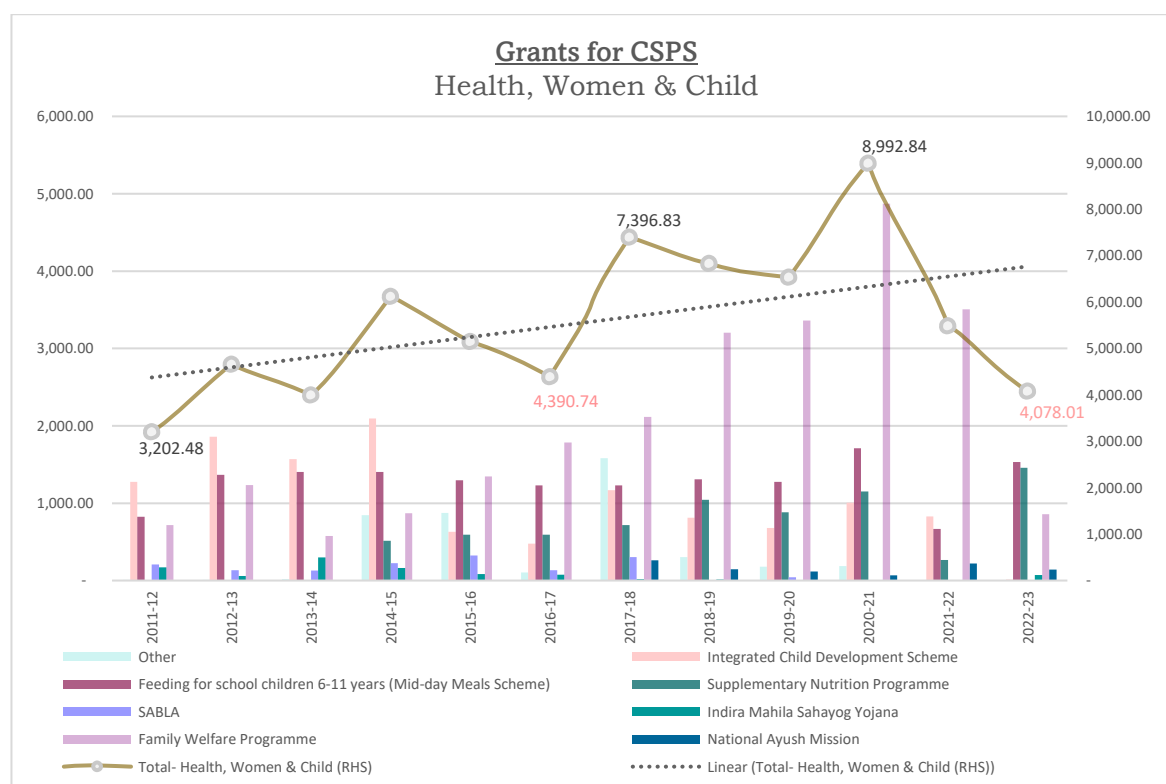
Source: Author’s calculations based on Finance Accounts, GoG, Various Years

For Judicial Infrastructure, grants were given from 2018-19 and there was substantial allocation in 2022-23 suggesting efforts to improve governance and public services. Smart City Mission started in 2015-16, played a prominent role in later years, aligning with efforts to modernize urban infrastructure in Goa. For AMRUT, grants began in 20115-16, gradually growing for next three years, focusing on rejuvenation and urban renewal for improving infrastructure in Goa’s cities.

c) Health, Women and Child Development

Under the Health, Women, and Child Development sector, total grant amounts, shows fluctuations over the years, with major transition taking place in 2014-15. ICDS saw major increase in 2014-15 but reduced in subsequent years. While, there was a major rise in the Family Welfare Programme, majority of the grants are under this head. Mid-day Meal Scheme received high allocations, highest during the 2020-21 fiscal year, but it declined significantly in 2021-22 due to COVID pandemic. Supplementary Nutrition Programme had a moderate rise in the initial years, showing a drastic fall in 2021-22 and rising thereafter.

Figure 13.9: Health, Women and Child Development



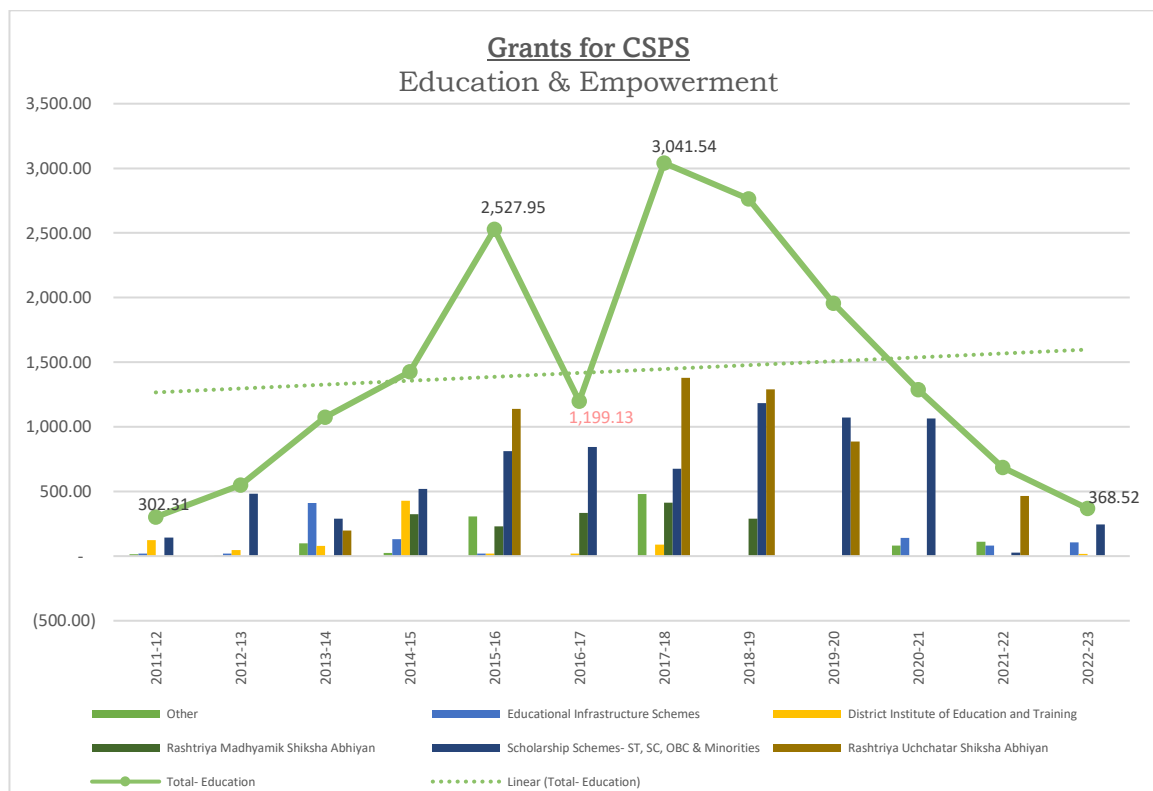
Source: Author's calculations based on Finance Accounts, GoG, Various Years

This indicates resource reallocation or a shift in focus from other nutrition-related schemes like ICDS.

d) Education and Empowerment

Under this sector, there are two peaks observed in 2015-16 and 2017-18. This rise was due to the increase in grants under RUSA. There has been a rise in the Scholarship Schemes- ST, SC, OBC & Minorities show consistent funding across years, and showing consistent funding across years, with moderate fluctuations. However, the funding increased from 2018-19 onwards.

Figure 13.10: Education and Empowerment

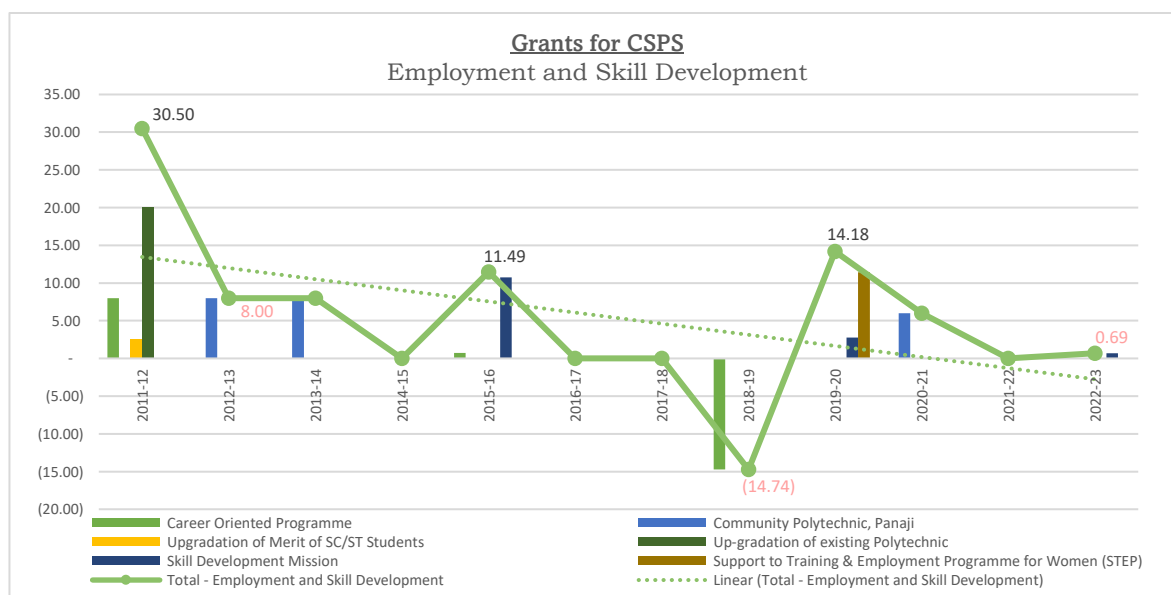


Source: Author's calculations based on Finance Accounts, GoG, Various Years

Educational Infrastructure Schemes have lower grants over the years except for 2013-14. In 2016-17, as no grants were given under RUSA, there has been a fall in the overall grants, there has been a rise in the subsequent year as the RUSA funding increased.

e) Employment and Skill Development

Figure 13.11: Employment and Skill Development sector

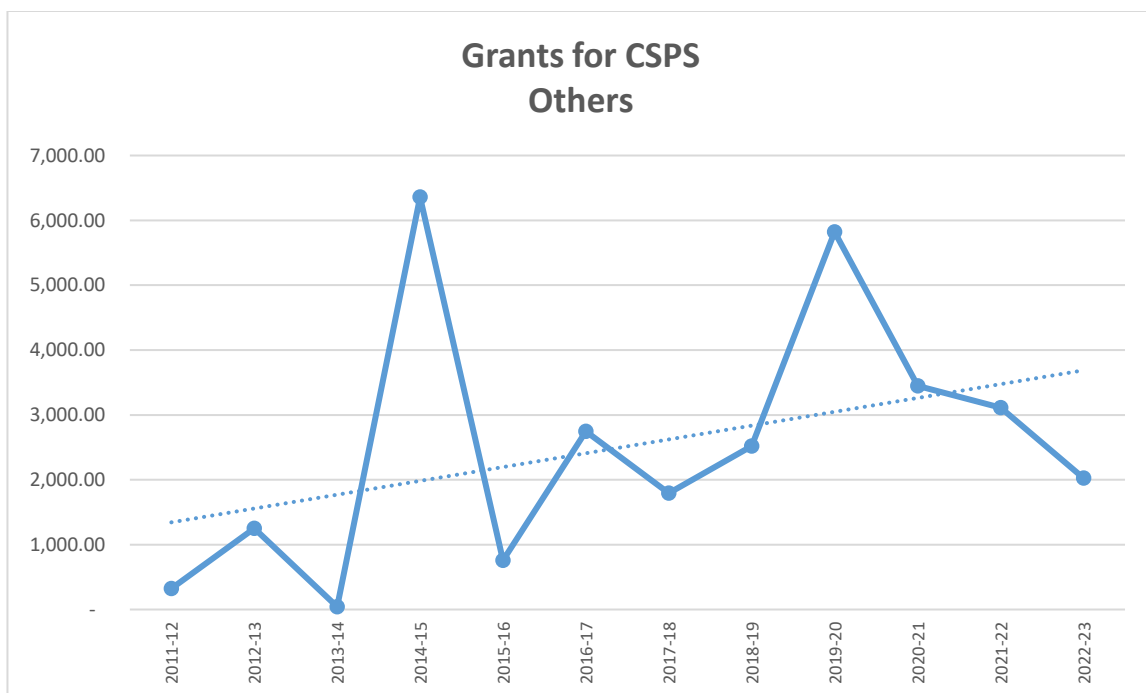


Under the Employment and Skill Development sector, there are various schemes such as: Career-Oriented Programme, Upgradation of Merit of SC/ST Students, Skill Development Mission, Community Polytechnic, Panaji, Upgradation of Existing Polytechnic and Support to Training & Employment Programme for Women (STEP). Total grants started at 30.50 lakh, reflecting strong funding across multiple schemes, especially Career-Oriented Programme and Upgradation of existing polytechnics. Grants reduced dramatically, below **10 lakhs**, with allocations concentrated in fewer schemes in 2013, with no grants seen in 2014-15, 2016-17 and 2017-18. Negative value of 14.74 is due to misclassification of previous years refund.

f) Others

Lastly, under the category of Others, there are peaks in certain years, like in 2014-15 there was a Reimbursement of Salary Grants on Implementation of Sixth Pay Commission from UGC. In 2016-17, there was a rise in grants given under National Cyclone Risk Mitigation. In 2019-20, there was a rise in Reimbursement of Central Share on revision of Pay Scales to 4912 lakh in 2019-20.

Figure 13.12: Grants received for Others Category



From the above discussion we can thus conclude that there has been restructuring of grants for state plan schemes to rationalize Centrally Sponsored Schemes (CSS) and improve the utilization of funds. Under the grants for Central Plan Schemes, grants for National Rural Employment Programme (NREP) has been increasing over the years while for Other Grants saw a steep rise in 2014-15 and has been fluctuating continuously thereafter. Besides there has been variations across different components. For the grants received under the Centrally Sponsored Plan schemes, there has been steep rise from 2011-12 to 2019-20, with a drastic fall till 2021-22 and recovery thereafter. Among the sectors, Agriculture, Allied Sector, and Environment & Forest sector, showed a declining trend in the grants received. Under the infrastructure sector, there has been a steep rise in the grants received that is reflected by the fact that in 2012-13, infrastructure received Rs 17.70 lakh which rose up to Rs 21525 lakh in 2019-20, though in 2020-21 and 2021-22 there has been a fall in the grants received. The Health, Women, and Child Development sector saw a moderate increase in the grants from Rs 3202 lakh in 2011-12 to Rs 8992 lakh in 2020-21 and a decline thereafter. Education and Empowerment sector received Rs 302 lakh in 2011-12 which declined to Rs. 1199 lakh, as there were no funds allocated to RUSA, which otherwise received high grants. Employment and Skill Development sector shows a negative trend as far as the grants are concerned. Lastly, under the category of Others, there has been rise in the grants given. We can thus conclude that the Infrastructure sector has received highest amount of grants. In the next section of the chapter we look at the expenditure of States on those schemes.

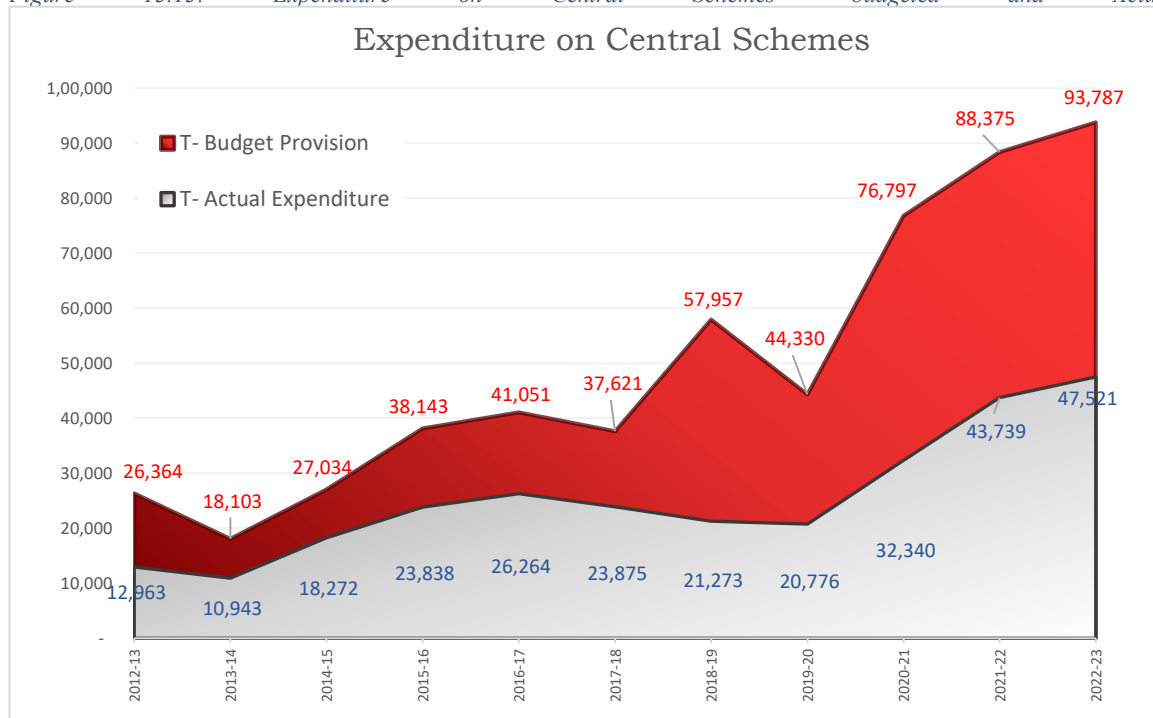
13.3 Budget Provision and Actual Expenditure

In this section we first look at the total budget provision and actual expenditure made on the central schemes (CSS and CS) by the central and the state government. As per the finance account, GoG, as of 2022-23 there were 165 schemes on which expenditure was made by the Central and the State Government.

13.3.1 Expenditures on Central Schemes

In this section, we look at total expenditure on Central Schemes- budgeted and Actual. In 2012-13, the Budget provision for the Central Schemes was Rs 26.364 lakhs and the Actual expenditure made on the schemes was Rs 12963 lakh. The difference in the budget provision and the actual expenditure made on the schemes has been on a rise over the years, particularly after 2016-17. In 2018-19 there was a large difference in the actual expenditures and the budget provision made on the schemes which then reduced in 2019-20.

Figure 13.13: Expenditure on Central Schemes- budgeted and Actual



Source: Author's calculations based on Finance Accounts, GoG, Various Years

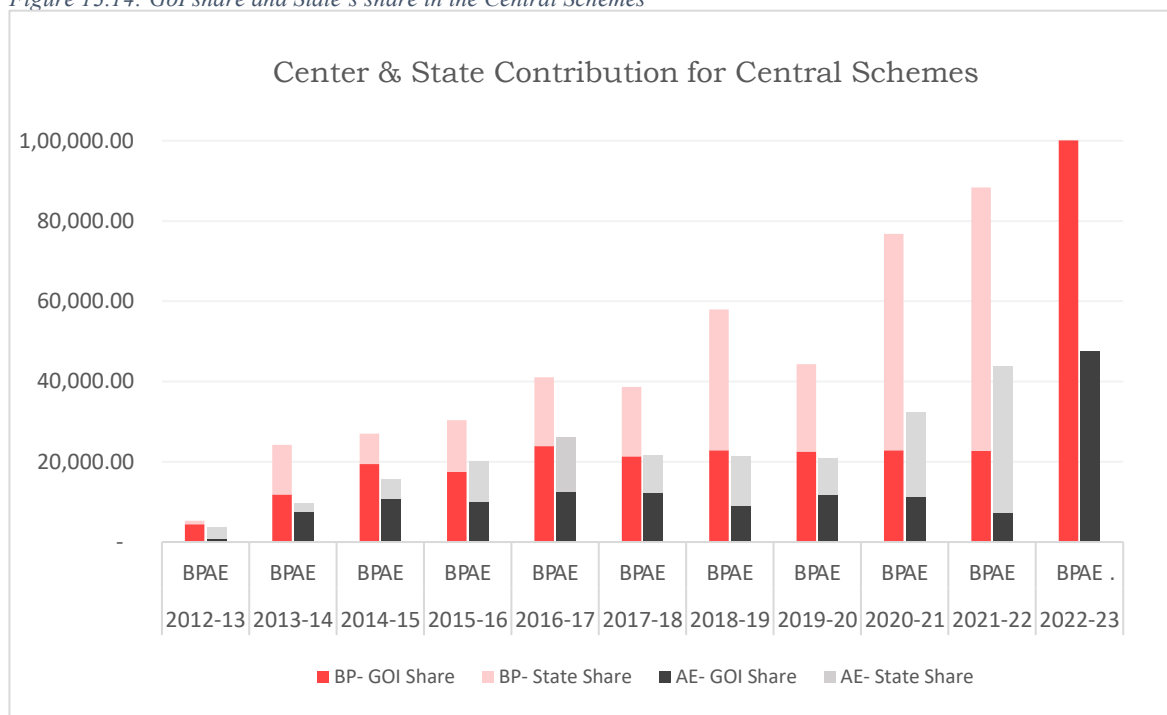
Post 2019-20 there has been a large difference in the actual and the budgeted expenditures indicating underutilization of funds.

GoI share and State's share in the Central Schemes

In the next graph we look at contribution made individually by the Central and the State government as represented as GoI share and State's share in the Central Schemes (CSS and CS).

We have assigned colour codes in the graph. Under the budget provision made, the GoI share as shown by colour red has been steady with minor fluctuations except for 2022-23 which shows only the GoI share in budget provision for the schemes. The state's share in budget provision made for the schemes was minimal in 2012-13 at Rs 849.61 lakh and GoI share was Rs 4456.04 lakh. Thereafter there has been an increase in the State's Share though with many variations over the years. In 2013-14 state's share was Rs 12392.14 lakh, which then rose upto 35124.90 lakh, reaching to the peak of Rs 65705.95 lakh in 2021-22. However, it needs to be noted that the state's share has been lower as compared to the GoI share upto 2017-18 (GoI share-21313.61 lakh and states' share-17307.27 lakh), thereafter the state's share has been increasing as compared to the GoI share. The actual expenditure is shown by colour black and grey. Under this, the GoI share in 2012-13 was Rs 810.86 lakh and state's share was Rs. 2965.73 lakh.

Figure 13.14: GoI share and State's share in the Central Schemes



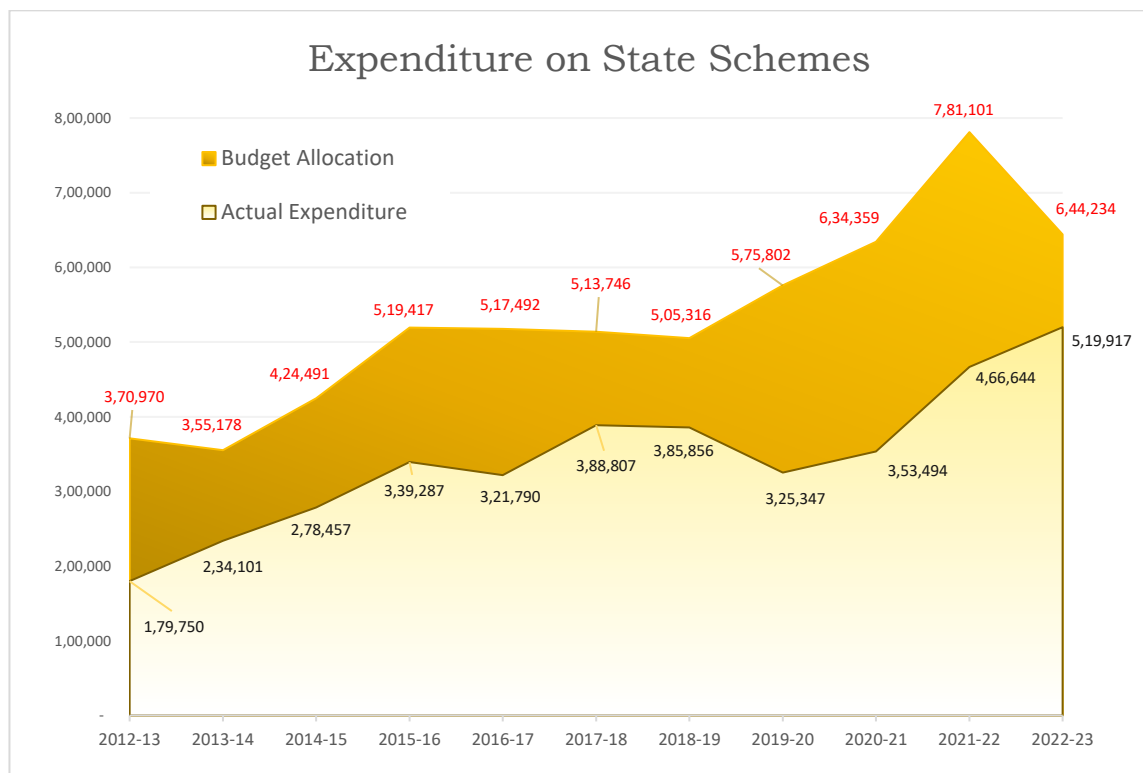
Source: Author's calculations based on Finance Accounts, GoG, Various Years

However, for the subsequent two years the Centre's contribution surpassed the state's share. In 2015-16, state's share was Rs 10107 lakh and GoI share was Rs. 9947 lakh. In 2021-22, there was a higher actual expenditures, the state's share has been Rs 36594.26 lakh while the GoI share has been Rs 7144.62 lakh. It is pertinent to note that, given the restructuring of the flow of grants from the Central Government to states, we see in our data a declining contribution of the Central government towards the central schemes and subsequent increase in the state's contribution towards these schemes. However, only in 2022-23, entire expenditure on the schemes seems to be borne by the centre. Persistent underutilization of funds might be due to inefficiencies in project implementation, delays, or overestimation during budget planning.

13.3.2 Expenditure of State Government on state schemes

In this section we look at the budget allocation and actual expenditure of the state on the state schemes. The schemes on the finance accounts of GoG are spread across 71 different categories.

Figure 13.15: Expenditures on State Schemes



Source: Author's calculations based on Finance Accounts, GoG, Various Years

In the graph given below, we see that in 2012-13, the budget allocation by the state was Rs 370970 lakh and the actual expenditure was Rs 179750 lakh. Over the years, the allocations show a rising trend with significant increases in certain years, peaking in 2021-22 at Rs.781,101 lakh. The expenditure is close to allocation but has been lower, indicating an underutilization of funds. Expenditure peaked in 2022-23 at Rs.519,917 lakh but remained well below the allocation.

From 2012-13 to 2014-15 the budget allocation increased from Rs.370,970 lakh to Rs.424,491 lakh (a rise of about 14%). The Actual expenditure rose steadily from Rs.179,750 lakh to Rs.278,457 lakh, showing improved fund utilization. From 2015-16 to 2018-19, the Budget allocation stabilized around Rs.513,746 lakh in 2017-18 after modest increases in earlier years. The Actual expenditure fluctuated, reaching a high of Rs.388,807 lakh in 2017-18. In 2018-19, the budget allocation increase to Rs.575,802 lakh. However, in 2020-21, the allocation increased significantly to Rs.634,359 lakh. This indicates an increase in budget allocation in 2020-21 despite potential economic challenges, and the COVID-19 pandemic. The increased allocation could have been driven by the need to address health emergencies or support economic recovery measures. However, the Actual expenditure followed a downward trend, falling to Rs.325,347 lakh in 2019-20. The largest

allocation of the decade occurred in 2021-22 (Rs.781,101 lakh). However, the expenditure was significantly lower, at Rs.466,644 lakh. In 2022-23, allocation was reduced to Rs.644,234 lakh, with expenditure increasing slightly to Rs.519,917 lakh. The gap between allocation and expenditure is consistently evident.

13.3.3 States Schemes

Different schemes are launched by the Government of Goa to address specific developmental needs of the state and to improve the standard of living for its residents. The Dayanand Social Security Scheme launched in 2002-2003, and Gruha Aadhar and Laadli Laxmi Schemes launched in the year 2012-13, have become flagship schemes of Goa in social sector (Budget Speech, 2015). Restructuring and strengthening of social welfare, women & child development and tribal welfare department and additional provisions were made under SC and ST sub plan for effective implementation of these schemes. The schemes are categorized into different sectors like Information and Technology, Educational, Health and Family Welfare, Senior Citizen, Unemployment, Physical and Mentally challenged, Business, Fisherman/Entrepreneurs, Agriculture, Transport, Animal Husbandry, Ex Serviceman Welfare, Animal Husbandry and Dairy, and, Art and Culture. We will discuss few Goa Government schemes below.

1) **Dayanand Social Security Scheme (DSSS):**

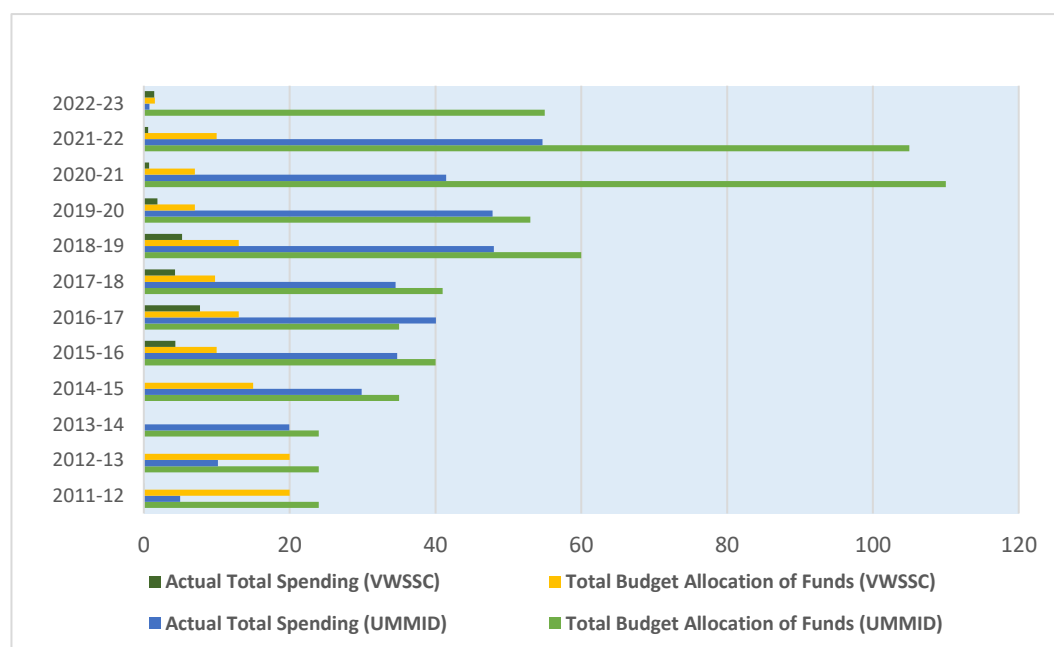
The State Government introduced the Dayanand Social Security Scheme (DSSS) from January 2002 (under the Goa Dayanand Social Security Rules 2001). The then existing social welfare schemes viz. Dayanand Smriti Niradhar Madat Yojana, Scheme of Financial assistance to Young Widows and the Scheme of Grant of Family Pension to the Old, Destitute and the Handicapped persons were amalgamated into the new scheme, to provide financial assistance to the vulnerable sections of the society, i.e. the elderly, the disabled and women in difficult circumstances. The Social Welfare Department is responsible for implementation of the DSSS. The target groups are Senior Citizen, Single Woman, Widow and Person with Disabilities. The Scheme is implemented by the Social Welfare Department. The first phase of the scheme was implemented in January 2002 through the Life Insurance Corporation of India (LIC), by entering into an agreement (MOU) wherein the State Government purchased pension for each pensioner by paying a price computed by LIC based on the age of the beneficiary. In turn LIC was to pay pension during the lifetime of the beneficiary. The second phase was implemented in September 2003 through the

Mapusa Urban Cooperative Bank (MUCB), as a disbursing bank for the pensions. The third phase was in February 2006, through the Goa State Co-op. Bank (GSCB). The Income Limit is of Rs. 24000/- per annum. The nature of support includes Rs.2,000/- per month for Senior Citizens, and Adult Person with Disability. For Single Woman & Widow below the 60 years of age, the amount is Rs.2500/- per month and for Children with Disability below 90% is Rs.2500/- per month. Further, financial assistance of Rs.3500/- per month is provided to persons even after they attain 21 years whose disability is 90 to 100 percent. With its popularity, awareness among people and quantum of assistance, the scheme has succeeded in creating a social security net for targeted beneficiaries.

a) Scheme for Senior Citizens

Under this category, we have selected two sub schemes, i) ‘Ummid’ - Day Care Center and Medical Assistance to Senior Citizen- a network of day care centers for senior citizens, initiated by the social welfare department and adopted by NGOs, providing companionship, activities, and medical assistance to enrich their lives and ii) Various Welfare Scheme for Senior Citizen (VWSSC)- that includes Indira Gandhi National Old Age Pension Scheme (IGNOAPS), the Integrated Programme for Senior Citizens (IPSrC), and the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY).

Figure 13.16: Scheme for Senior Citizens



Source: Author's calculations based on Finance Accounts, GoG, Various Years

The budget allocated for Ummid has ranged from Rs 24 lakhs in 2011-12 to Rs 110 lakhs in 2021-22, but declined to Rs 55 lakhs in the subsequent year. While the actual spending

has been between Rs. 4.98 lakh in 2011-12 to 54.67 lakhs in 2021-22 and decline to Rs 75,000 in 2022-23. In the case of VWSSC, the budget allocated has renages between Rs 1.5 lakhs to Rs 20 lakhs in the same period.

b) Financial assistance for the disabled persons

Under this category we have considered four different types of schemes viz: i) Welfare of Handicapped (WoH), ii) Awards for Marriages with Disabled Persons (AMDP)- to encourage normal persons to accept disabled person as a life partner and to assimilate the handicapped persons in the mainstream of society, iii) Financial Assistance to person with severe Disabled Persons (FASDP), and iv) Scheme for Rehabilitation for persons with Disability (SRPD).

Table 13.3: Financial assistance for the disabled persons

Years	General Allocation of Funds in Budget (WoH)	Actual Spending (WoH)	General Allocation of Funds in Budget(AMDP)	Actual Spending (AMDP)	General Allocation of Funds in Budget (FASDP)	Actual Spending (FASDP)	General Allocation of Funds in Budget (SRPD)	Actual Spending (SRPD)
2011-12	5	13.6	5	3.5	30	7	50	17.51
2012-13	10	15.2	5	3.5	30	22.74	50	1.43
2013-14	10	14.78	5	3.75	25	3.6	5	1.55
2014-15	20	19.9	10	9	25	15.16	5	1.41
2015-16	25	13.26	10	6	25	5.6	5	0.55
2016-17	25	12.84	10	4	25	2.6	5	2
2017-18	14.59	19.82	6.6	3.5	6.16	3.15	3.61	0.5
2018-19	25	9.86	10	4	10	0	5	0.96
2019-20	22	14.64	6	1.5	5	-0.21	2.5	0.93
2020-21	25	24.18	6	2.5	7	2.79	5	-0.08
2021-22	25	5.13	5	2.5	3.5	0	3.5	0.15
2022-23	28	30.6	3	3	3.5	0	1	0
Sparkline								

Source: Author's calculations based on Finance Accounts, GoG, Various Years

Note: a) WoH-Welfare of Handicapped b) AMDP- Awards for Marriages with Disabled Persons, c) FASDP-Financial Assistance to persons with severe Disabled Persons, and d) SRPD-Scheme for Rehabilitation for persons with Disability

In the above graph we notice that the general allocation of funds in budget on (WoH) ranged between Rs 5 lakhs to Rs 28 lakhs, while the actual spending ranged between Rs 5 lakhs to Rs 24 lakhs. In certain years the actual spending has been higher than the allocated. The Financial Assistance to person with severe Disabled Persons (FASDP) was highest among all the categories, ranging between Rs 3.5 lakhs to Rs 30 lakhs, however, the actual spending on this category has been nil in the recent years 2021-22 and 2022-23.

c) Freedom from Hunger project

As the objective of the DSSS is to provide Financial Assistance to the most vulnerable sections of society. The first phase of the scheme shall cover beneficiaries from communities of Toddy Tappers/Coconut Pluckers/ Rickshaw Drivers/Taxi Drivers /Motor Cycle Pilots/Fishermen (Traditional)/ agricultural Labourers/Hamal/Bus and, Truck Drivers/Bus Conductors and Bus/Truck Cleaners, Senior Citizens.

Table 13.4: Freedom from Hunger project

Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2011-12	11500	10295	0	0	0	0	11500	10295
2012-13	20000	24399	0	0	0	0	20000	24399
2013-14	243	243	3300	3240	540	540	4083	4023
2014-15	28546	25546	0	0	454	454	29000	26000
2015-16	26000	28398	3800	3800	624	624	30424	32822
2016-17	26000	25989	0	0	650	200	26650	26189
2017-18	27000	27000	0	0	686	686	27686	27686
2018-19	27000	26996	0	0	670	600	27670	27596
2019-20	29000	27677	0	0	600	600	29600	28277
2020-21	35000	33075	0	0	700	700	35700	33775
2021-22	30000	23721	0	0	800	500	30800	24221
2022-23	30000	35425	0	0	800	800	30800	36225
Sparkline								

Source: Author's calculations based on Finance Accounts, GoG, Various Years

Under the Freedom from hunger project, the total budget allocated ranged from Rs. 4083 lakhs to Rs 35700 lakhs, while the actual spending has been from Rs 4083 lakhs to Rs 36225 lakhs over the study period.

d) Financial Assistance to Tiny Enterprises, Padeli, Renndar, Khajekar, Fougeri, Chanekar, Poddars,etc.

Persons who belong to the above trades, occupations and business are provided financial assistance. Under this scheme, the spouse or the children, if the spouse is not living, will receive a lump sum amount of Rs. 30,000/, if the registered applicant dies an accidental, death. In the event of death of the member, the spouse, if she is a woman will be transferred to the category of Single Women for the purpose of this Scheme (GoG, 2004). The general allocation of funds in budget has been varying over the years from Rs 5lakhs to Rs 795 lakhs, while the actual spending has been between Rs 1 lakhs to maximum of Rs 38 lakhs. Under the ST sub plan the budget allocation has varied between Rs 1 lakhs to Rs 72 lakhs, while under the SC sub plan the budget allocation has been between Rs 1 lakh to Rs 70 lakhs, while the actual spending has been minimal between Rs 1 lakhs ot Rs 3 lakhs.

Table 13.5: Financial Assistance to Tiny Enterprises, Padeli, Renndar, Khajekar, Fougeri, Chanekar, Poddars

Financial Assistance to Tiny Enterprises, Padeli, Renndar, Khajekar, Fougeri, Chanekar, Poddars, etc.								
Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2013-14	5	13			70	0	75	13
2014-15	795	24			56	3	851	28
2015-16	516	37	72	3	12	1	600	40
2016-17	200	33	26	7	4	1	230	41
2017-18	100	68	12	12	1	1	113	80
2018-19	200	62	26	13	4	1	230	76
2019-20	90	1	15	-	1	-	106	1
2020-21	100	-	15	-	1	-	116	-
2021-22	101	-	1	-	1	-	102	-
2022-23	10	-	1	-	1	-	12	-
Sparkline								

Source: Author's calculations based on Finance Accounts, GoG, Various Years

The total budget allocated under this category has been between of Rs 12 lakhs to Rs 851 lakhs, while the actual total spending has been from Rs 1 lakh to Rs 80 lakhs.

2) Griha Aadhar Scheme (Dearness Allowance for Housewives)

This scheme tries to address the problem of spiraling prices and provides support to the housewives/homemakers from middle, lower middle and poor section of the society, to maintain a reasonable standard of living for their families.

Table 13.6: Griha Aadhar Scheme

Dearness Allowances to Housewives								
Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2012-13	15000	1003	0	0	0	0	15000	1003
2013-14	7786	7748	1106	1106	0	0	8892	8854
2014-15	12026	11547	2000	2000	0	0	14026	13547
2015-16	14046	17213	2000	2000	0	0	16046	19213
2016-17	16033	19053	1990	1990	0	0	18023	21043
2017-18	25023	24200	2000	2000	0	0	27023	26200
2018-19	26023	23429	2000	2000	0	0	28023	25429
2019-20	26023	20111	2000	2000	0	0	28023	22111
2020-21	24100	17807	2000	2000	0	0	26100	19807
2021-22	23560	26540	2000	0	0	0	25560	26540
2022-23	21055	26738	2000	2000	0	0	23055	28738
Sparkline								

Source: Author's calculations based on Finance Accounts, GoG, Various Years

Under this scheme a monthly disbursement of an amount of Rs. 1200/- (upto 31/08/2016) and Rs. 1500/- (w.e.f. 01/09/2016) is provided every month directly at the hands of the

housewives/homemakers to achieve the objective. Any married woman above the age of 18 years, who fulfills all of the criteria of the Scheme are eligible to apply.

The total budget allocation began at Rs 15000 lakh in 2012-13 while the actual spending was only RS 1002.59 lakh. For certain years though the actual spending has been much higher than the budget allocation. This was for the years 2015-16, 2016-17, and 2021-22 to 2022-23

3) **Financial Incentive to Mothers who deliver a Girl Child – MAMTA**

The Govt. of Goa had launched a scheme “Financial Incentives to mothers who delivers a girl child “MAMTA” from April 2011. The amended Scheme was made effective with effect from 1st April 2015. The scheme is aimed at improving the female Child Sex ratio in the State. Under this scheme, one time financial incentive of Rs. 10,000/- to provide to all mothers who deliver a live girl Child (maximum 02 deliveries) in a registered medical institution. This scheme is for all the mothers who deliver a live girl Child. Mothers with a maximum 02 deliveries in a registered medical institution can avail this scheme. The mother should be resident of Goa for at least three years or married to a resident of Goa.

Table 13.7: Financial Incentive to Mothers who deliver a Girl Child – MAMTA

Financial incentives to mother who deliver a girl child (MAMTA)								
Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2012-13	344	149	48	26	8	4	400	179
2013-14	111	111	48	38	8	3	167	152
2014-15	100	238	48	38	8	5	156	280
2015-16	258	258	36	36	6	6	300	300
2016-17	400	344	50	35	12	12	462	390
2017-18	284	283	40	40	7	7	330	329
2018-19	1501	519	288	193	48	14	1837	726
2019-20	1101	472	288	113	48	14	1437	599
2020-21	1220	517	198	87	60	9	1478	614
2021-22	651	134	120	26	26	4	797	164
2022-23	537	533	30	30	26	17	593	579
Sparkline								

Source: Author's calculations based on Finance Accounts, GoG, Various Years

The total budget allocation of funds was Rs 400 lakh in 2012-13 and increased to 1836 lakh in 2018-19 to 1478 lakh in 2020-21, In contrast the actual spending was lower than the allocated. For two years, 2014-15 to 2015-16, the actual spending was higher than the allocated budget.

4) **Laadli Laxmi Scheme**

This scheme is a flagship programme of the State Government with an intention to address the undesirable tendency of female foeticides and bring down the perception that the birth of a girl in the family is the burden on her parents/guardian during her marriage. The scheme proposes to financially empower the girl child to meet educational and other expenses on becoming a major of age and to improve the female sex ratio in the State. Under this scheme a financial assistance of Rs.1.00 lakh is given for every Goan girl on attaining 18 years or on the occasion of her marriage and is applicable to girls between 18 to 45 years of age or can also be encasher for her use in business/profession or for her further studies. Every eligible girl in the state gets benefit of the scheme irrespective of caste, creed, and religion, however her parental income should not exceed Rs. 3.00 lakhs per annum. Total allocation started at Rs.15,000 lakh in 2012-13, peaking at Rs.13,650.45 lakh in 2017-18. A significant reduction is observed post-2018-19, with allocations dropping to Rs.8,587.56 lakh in 2022-23.

Table 13.8: Laadli Laxmi Scheme

Laadli Laxmi Scheme								
Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2012-13	15000	4734	0	0	0	0	15000	4734
2013-14	8614	8520	1386	335	0	0	10000	8855
2014-15	10040	8530	1600	1600	0	0	11640	10130
2015-16	11060	8040	1600	1600	0	0	12660	9640
2016-17	11060	11540	1600	1600	0	0	12660	13140
2017-18	12050	7594	1600	1600	0	0	13650	9194
2018-19	10064	6564	1600	1600	0	0	11664	8164
2019-20	10064	3067	1600	600	0	0	11664	3667
2020-21	9080	2569	1600	0	0	0	10680	2569
2021-22	9085	7059	1000	0	0	0	10085	7059
2022-23	7588	3211	1000	0	0	0	8588	3211
Sparkline								

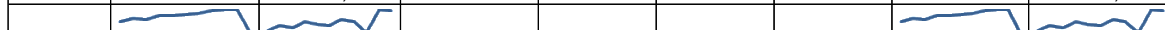
Source: Author's calculations based on Finance Accounts, GoG, Various Years

There is a consistent underutilization of funds, with actual spending often lagging behind budget allocations except for 2016-17, where the actual spending was Rs 13140 lakh as compared to 12660 lakh of the budget allocated.

5) Midday Meal for V-Xth Standard (Education Category)

Mid Day Meal Scheme which is a flagship scheme of the Govt. of India and is implemented in the state by providing hot cooked food to all Government & Government aided Primary and Upper primary school and AIE Centres in the state.

Table 13.9: Midday Meal for V-Xth Standard

Midday Meal for V - Xth Standard (Education Category)								
Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2012-13	900.00	902.15	0	0	0	0	900.00	902.15
2013-14	1,100.00	1,087.39	0	0	0	0	1,100.00	1,087.39
2014-15	1,000.00	981.78	0	0	0	0	1,000.00	981.78
2015-16	1,300.00	1,246.39	0	0	0	0	1,300.00	1,246.39
2016-17	1,300.00	1,156.31	0	0	0	0	1,300.00	1,156.31
2017-18	1,371.03	1,120.74	0	0	0	0	1,371.03	1,120.74
2018-19	1,500.00	1,378.45	0	0	0	0	1,500.00	1,378.45
2019-20	1,650.00	1,277.98	0	0	0	0	1,650.00	1,277.98
2020-21	1,800.00	787.55	0	0	0	0	1,800.00	787.55
2021-22	1,800.00	1,799.91	0	0	0	0	1,800.00	1,799.91
2022-23	-	1,722.29	0	0	0	0	-	1,722.29
								

Source: Author's calculations based on Finance Accounts, GoG, Various Years

For most of the years the actual expenditure has been close to the budgeted expenditure, except for the year 2020-21 where the budgeted expenditure was 1800 lakh as against the actual of 787 lakh, likely due to the COVID 19 pandemic period.

6) Manohar Parrikar Goa Scholar's Scheme

In order to encourage and empower the student population of Goa to take up Post Graduate/Doctoral courses in reputed institutions in India and abroad, the Manohar Parrikar Goa Scholars Scheme was introduced. Every year 30 outstanding Scholars are selected and awarded under Manohar Parrikar Goa Scholar Scheme. The Award consists of scholarship amounting to Rs 8,00,000/- lakh for pursuing studies in India or USD 25,000/- for studies in abroad and an appreciation certificate.

Table 13.10 Manohar Parrikar Goa Scholar's Scheme

Goa Scholars Scheme								
Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2012-13	200	137	0	0	0	0	200	137
2013-14	300	204	0	0	0	0	300	204
2014-15	260	210	0	0	0	0	260	210
2015-16	260	6	0	0	0	0	260	6
2016-17	300	257	0	0	0	0	300	257
2017-18	300	300	0	0	0	0	300	300
2018-19	400	400	0	0	0	0	400	400
2019-20	350	350	0	0	0	0	350	350
2020-21	380	380	0	0	0	0	380	380
2021-22	380	0	0	0	0	0	380	-
2022-23	0	380	0	0	0	0	0	380
Sparkline 								

Source: Author's calculations based on Finance Accounts, GoG, Various years.

7) Atal Asra Yojana

This scheme provides supplementary financial assistance for construction and repair and reconstruction of house.

Table 13.11: Atal Asra Yojana

Financial Assistance for construction of New House and Repairs- Atal Asra Yojana								
Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2012-13	-	-	-	-	-	-	-	-
2013-14	-	-	2500	1918	0	0	2500	1918
2014-15	-	-	2500	1924	0	0	2500	1924
2015-16	-	-	2000	1447	0	0	2000	1447
2016-17	-	-	1000	906	0	0	1000	906
2017-18	-	-	700	664	0	0	700	664
2018-19	-	-	1000	999	0	0	1000	999
2019-20	-	-	1000	804	0	0	1000	804
2020-21	-	-	1200	1200	0	0	1200	1200
2021-22	-	-	2000	1794	0	0	2000	1794
2022-23	-	-	2000	1590	0	0	2000	1590
Sparkline								

Source: Author's calculations based on Finance Accounts, GoG, Various Years

Under this scheme by the Department of Tribal Welfare, Government of Goa provides financial assistance of up to Rs. 3,00,000 to individuals from Scheduled Tribes communities for construction/ re-construction and repairs of the house. The actual budget spending was slightly lower than budget allocation for certain years. The budget allocated was Rs 2500 lakh in 2012-13 and actual spending was Rs 1917 lakh.

8) Shetkari Adhar Nidhi

Shetkari Adhar Nidhi is a State Sector Scheme implemented by the Government for providing compensation to farmer who suffers loss in Agriculture due to various factors like unseasonal rains, floods, landslides, siltation, drought, attack of pest and diseases, fire, Wild Animals etc.

Table 13.12: Shetkari Adhar Nidhi

Financial Assistance to Shetkar Aadhar Nidhi (Agriculture Category)								
Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2011-12	48,252.00	253.68	0	0	0	0	48,252.00	253.68
2012-13	200.00	43.99	0	0	0	0	200.00	43.99
2013-14	400.00	67.49	0	0	0	0	400.00	67.49
2014-15	300.00	77.34	0	0	0	0	300.00	77.34
2015-16	300.10	40.37	0	0	0	0	300.10	40.37
2016-17	200.00	23.81	0	0	0	0	200.00	23.81
2017-18	44.51	66.93	0	0	0	0	44.51	66.93
2018-19	100.10	100.38	0	0	0	0	100.10	100.38
2019-20	90.10	320.97	0	0	0	0	90.10	320.97
2020-21	500.10	240.36	0	0	0	0	500.10	240.36
2021-22	400.10	400.89	0	0	0	0	400.10	400.89
2022-23	300.10	165.66	0	0	0	0	300.10	165.66
Sparkline								

Source: Author's calculations based on Finance Accounts, GoG, Various Years

We notice there is underutilization of funds in certain years possibly due to less takers of the schemes in 2011-12.

9) Crop Production and input management

This scheme aims to boost crop production and reduce losses caused by pests and diseases. It encourages the use of Integrated Pest Management (IPM) techniques to protect the environment and minimize pollution of soil, water, and air.

Table 13.13: Crop Production and input management

Crop Production and input management (Agriculture Category)								
Years	General Allocation of Funds in Budget	Actual Spending	Additional Budget Allocation of Funds under ST sub Plan	Actual Spending under ST Sub Plan	Additional Budget Allocation of Funds under SC sub Plan	Actual Spending under SC Sub Plan	Total Budget Allocation of Funds	Actual Total Spending
2011-12	1,114.92	1,671.42	0	0	0	0	1,114.92	1,671.42
2012-13	1,461.80	1,158.31	0	0	0	0	1,461.80	1,158.31
2013-14	1,693.10	1,393.13	0	0	0	0	1,693.10	1,393.13
2014-15	1,716.50	1,348.97	0	0	0	0	1,716.50	1,348.97
2015-16	1,843.00	1,615.18	0	0	0	0	1,843.00	1,615.18
2016-17	1,949.80	1,629.58	0	0	0	0	1,949.80	1,629.58
2017-18	1,658.16	1,589.22	0	0	0	0	1,658.16	1,589.22
2018-19	1,630.28	1,570.54	0	0	0	0	1,630.28	1,570.54
2019-20	1,635.28	1,368.39	0	0	0	0	1,635.28	1,368.39
2020-21	1,708.53	1,491.96	0	0	0	0	1,708.53	1,491.96
2021-22	1,486.02	1,207.01	0	0	0	0	1,486.02	1,207.01
2022-23	1,732.50	614.95	0	0	0	0	1,732.50	614.95
								

Source: Author's calculations based on Finance Accounts, GoG, Various Years

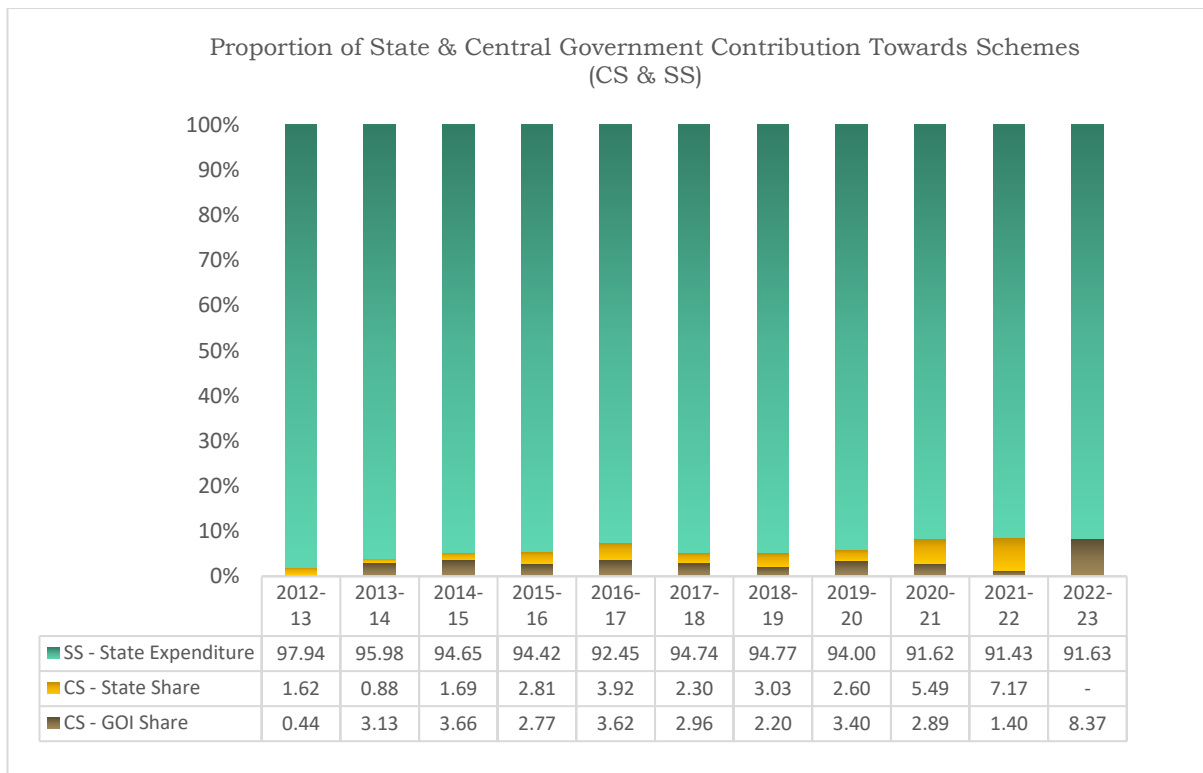
The scheme focuses on cost-effective weed control, preventing the spread of pests and diseases, and improving crop productivity. It also promotes 100% seed treatment to ensure better germination, uniform crop growth, and protection from early pest and disease attacks. Actual spending was relatively consistent between 2015-16 and 2019-20, with slight variations. Actual spending has generally been lower than the allocated budget, except in the initial year.

13.4 Comparison of fund allocation by the state and Centre towards the Schemes

Overall the state's expenditures towards the schemes has been much higher than the Centre's. In 2012-13, the state's expenditure towards state's schemes (SS) was 97.94 percent, towards central schemes (CS) was 1.62 percent, while the centre's expenditure towards central schemes was only 0.44 percent. Considering the fact that the states are expected to spend more on the central schemes we find that there has been a proportionate rise in the state's expenditure on central schemes and a proportionate decline of the state expenditures on the state schemes.

Overall, the state has been allocating a large proportion of its funds on the variety of schemes across multiple sectors with an objective of promoting socio economic and development goals for the betterment of the state.

Figure 13.17: Fund allocation by the state and Centre towards the Schemes



Source: Author's calculations based on Finance Accounts, GoG, Various Years

13.5 Resources of States channeled towards these schemes

Under the health sector, The Dindayal Swasthya Seva Yojana, a Government of Goa scheme, has provided affordable health care facilities to the poor and vulnerable in the state. Goa is the first state to have a health insurance scheme. As on 2021, Rs 2.32 lakh were

enrolled under the scheme. Ayushman Bharat and Pradhan Mantri Jan Aarogya Yojana were been successfully launched in the State. There were 11 public hospitals and 13 private hospitals empaneled under the scheme (Budget Speech, 2021). The commissioning of the Super Speciality Block at Goa Medical College has made available an infrastructure facility of 540 beds with piped oxygen port to each bed including 86 ICU beds (Budget Speech, 2022a). IPHB is expanding its existing 190 bedded hospital by another 100 beds under Centrally Sponsored Scheme "Center of Excellence" at a cost of Rs. 53.82 crores which will include special geriatric, pediatric and also wards for mentally ill prisoners. A full-fledged 50 bedded state of art hospital for Ayurvedic, Homeopathy, Unani, Siddha and Yoga treatment with the support of Ayush ministry, Government of India is set up Hospital at Pernem, Goa (Budget Speech, 2021).

Under the education sector, in 2013-14, Cyberage Student Scheme and Interest Free Loan Scheme for Higher Education was introduced under which, desktops, laptops were provided to the students of Std. XIth, while, tablets to the students of Std. Vth and VIth under Cyberage Student scheme, however, this scheme was on hold in the later years. Under the Interest Free Loan Scheme to suit the financial requirement of the students, 2000 students were sanctioned assistance of Rs 20 crores in 2013-14 (Budget Speech, 2014). With the Manohar Parrikar Goa Scholars Scheme, financial assistance is provided to take up Post Graduate/Doctoral courses in reputed institutions in India and abroad. The intention behind the scheme is, the qualification, skill and experience gained would contribute towards the building up human capital required by the state¹. In addition to this, the Scheme for financial Assistance to the students seeking admissions in institutions of Excellence like IITs, and IIMs, has also been implemented. "Bursary scheme" to assists needy and meritorious students, who are otherwise not fulfilling requirements of other scholarship or loan schemes; in meeting the cost of higher education was provided (Budget Speech, 2015). There was an increase of 23.96 crores in the overall outlay for higher education from Rs. 187.98 crores in 2014-15 to Rs. 211.94 crores in 2015-16. Government colleges were set up in remote areas of Goa, and additional buildings for existing Government colleges was provided. Rs 15 crores was provided for National Institute of Technology for acquisition of land, Rs 12 crores to Goa College of Engineering for additional infrastructure and purchase of equipment and Rs 2.00 crores for expansion of Goa College of Architecture. Setting up NIT-

¹ <https://www.dhe.goa.gov.in/resource/getSchemesDetail/206/>

Goa and IIT-Goa to add to the scientific and engineering prowess of the State was undertaken. NIT Goa is functioning from its new campus from May 2022 (Budget Speech, 2022a). To boost the education at all level and for all types of children Rs 8 crores budget provision for Goa Sarva Shiksha Abhiyan, Rs 2 crores for Rashtriya Madhyamik Shiksha Abhiyan, Rs 3.60 crores for Bal-Bhavan, Rs 6 crores for Sanjay Centre for special education and Rs 4.5 crores for educational needs of special children was made in 2014-15. Under Technical Education an additional Building at a cost of Rs 10 crores at Government Polytechnic Curchorem in 2021-22 (Budget Speech, 2022a).

Plan outlay of Rs. 910.59 crores for spending on the social sector schemes under the social welfare, women & child development and tribal welfare departments was provided. Number of schemes were implemented for persons with disabilities is like scheme for purchase of aids and appliances, stipends and scholarships are provided to Persons with Disabilities to pursue their education. Government had released grants to institutions for projects concerning detection, intervention and prevention of disabilities and rehabilitation of Differently Abled Persons. Further, Braille Libraries were being set up for visually impaired Persons.

Under Infrastructure, Public Works and Water Supply, there were major specialized projects taken up by GSIDC like new Mandovi Bridge in Panaji, the Amona Virdi Bridge, Tambudki Bridge at Arpora-Baga and the Grade Separator at Dabolim, Phase-II of Goa Dental College etc (Budget Speech, 2017). Besides the construction of national highways as sanctioned under the projects for the National Highway in the State of Goa, construction of district roads as well as internal roads was undertaken. Rs 500 lakhs under Pradhan Mantri Awas Yojana, Rs 3000 lakhs for major infrastructure development works and Rs 500 lakhs under Swaachh Bharat Abhiyan under municipal Administration was made available by Government of Goa. A budget allocation of Rs 19220 lakhs for Department of Panchayat with a provision of Rs 1000 lakhs under MGNREGA, Rs 1000 lakhs under Indira Awas Yojana and Rs 600 lakhs under Goa Gram Samrudhi Scheme, and Rs 2000 lakhs under Deen Dayal Infrastructure development scheme was made by the Government (Budget Speech, 2017). For implementing the Smart City project with Central assistance, a provision of Rs. 140 crores was made by the Government (Budget Speech, 2022a).

Pertaining to Sports infrastructure, eleven sports complexes/stadiums constructed for the purpose of National Games, and a budget provision of Rs. 150 crore was made by Government of Goa.(Budget Speech, 2021). Besides, under the Goa Grameen Urja Yojana,

all the BPL families with LPG connections in order to minimize the use of firewood. Under Deendayal Antyodaya Yojana, 1572 individuals underwent training for pursuing skill development courses and under PM SVANidhi scheme, Interest free loan of Rs. 10000 each has been disbursed to 676 beneficiaries. Similarly, in many other sectors the Government of Goa has channeled its resources.

13.6 Conclusion

Based on the analysis carried out in the chapter we can conclude that there has been enhanced tax devolution and the restructuring of flow of grants to the states. Because of the higher share of the states in the tax devolution formula, the central ministries have cut-down on their allocations on various schemes. The sharing pattern between States and Union for core schemes is in the ratio of 60:40 and for optional schemes it is 50:50, and it is reflected in the data by a decline in the grants-in-aid for the centrally plan schemes by the Centre. For the Centrally Sponsored Plan Schemes that were implemented under different sectors, the data reveals that grants received for Infrastructure has gone up significantly, followed by Health, Women & Child development, though this sector has experienced variability in fund allocation.

The state has been allocating a large proportion of its funds on the variety of schemes across multiple sectors in comparison to the Centre as reflected in the data above.

With regard to the budget provision and actual expenditures made on the central schemes (CSS and CS) by both the Central and the State Government from 2012-13 to 2022-23, we notice that there has been underutilization of the funds. Although this contributes to the revenue surplus, there could be other reasons behind the underutilization like a) frequent imposition of model code of conduct for various elections, b) Occurrence of COVID 19 pandemic, c) non eligibility of larger population of Goa for central schemes especially due to income limit. There could also be other reasons like ineffective and inefficient implementation of the schemes and bureaucratic hurdles along with lack of awareness among the eligible takers of the schemes.

There is a lot of heterogeneity among the states in India, with diverse geographical, socio cultural and economic conditions, therefore, for the CSS and CS, there should be state specific eligibility criteria. In absence of the same, a State like Goa, whose performance on most of the socio economic parameters has been remarkable, will continue to lose on CSS

and CS as it has happened in the past. Further, the specific needs of the states differs substantially from each other, hence one omnibus policy or programme will not be able to cater the needs of each states, leading to the loss of the uniqueness and identity of each state.

Centre-state relations are governed by central ministries, and the state-district relations are governed by the concerned State office. Overload of programmes that are pushed down the lines without consultative process may hinder the proper implementation of the schemes. There is a mismatch between what the states require and what comes to them as tied grants. CSS and CS cofinanced by the Central government, should be flexible enough to allow states to adapt and innovate. CSS should grant states to tailor implementation modalities to local realities.

Chapter 14 The Roadmap of the Fiscal Scenario

In this chapter we would like to envisage the roadmap of the state of fiscal affairs of the State of Goa. We have observed in Chapter 6 and Chapter 7 that the fiscal deficit (FD) of the state mostly remained in the range of 2 to 4 percent of GSDP. The FD exceeded the FRBM target of 3 percent in 2012-13 and 2023-14 with FD at 3.01 percent and 3.77 percent of GDP respectively. During the Pandemic the FD rose to 4.92 percent of GSDP. The debt to GSDP ratio however witnessed a steady rise from around 20 percent to 30 percent by the end of 2022-23. In the last year 2022-23 of our study period, the State had a huge revenue surplus which was mainly attributable to the GST compensation grants that the state received as recorded under the Grants-in-aid. The state used this inflow of resources to bring down the fiscal deficit and raise the allocation for capital outlay (CO). From the fiscal scenario, we observe that if the state had a revenue deficit, fiscal deficit went up to ensure that the capital outlay was not compromised with which was maintained at a steady level in terms of GSDP.

From the Medium Term Fiscal Policy as brought out by the State of Goa in 2024 (MTFP2024) we see that a growth rate of 13.85 percent has been assumed on GST collections. Excise duty is expected to grow at 15.81 percent per annum; registration and stamps to grow at 9.84 percent for 2024-25. Own tax revenue is expected to witness a good growth rate riding on collection from GST and Excise. Mining will add to the revenue (under restrictions as mandated by the Supreme Court). Special assistance for states was received for capital outlay (CO) for a 50 year interest free loan Rs 450 crore for the FY 2024-25.

Regarding borrowing, the State has closely worked with the NABARD, the SIDBI and the EDC to borrow at a lower rate of interest. Because of the NPS, it is expected that the borrowing from PF will get saturated over time. The debt to GSDP ratio would be brought down over the years. Salaries are expected to rise due to the rising disbursement of DA and new recruitments. Pension expenses is similarly expected to rise. Expenditure rationalisation has been undertaken by the state government. The CO is Rs 5317.81 crore for 2024-25 (revised estimate), a huge jump from Rs 3566.20 crore in the previous year. The estimate of GSDP is Rs 1.21 lakh crore in 2024-25. For 2024-25, the RE, RR are Rs 17970.32 crore and Rs 21281.45 crore respectively.

We would like to look into the future of the state's fiscal situation under certain assumptions.

In Chapter 5, we used the fiscal identity to derive the fiscal deficit, its uses and its financing. We will assume that for our projections, there will be no transactions with respect to contingency fund, transfer to contingency fund, and public accounts, and cash balances are all assumed to be zero.

Revenue Deficit (RE-RR) + Capital outlay (CO) + Advances of loans (DLo – RLo) + (DTCF – RTCF) = net borrowing under Internal debt (RID – DID) + net borrowing from Centre (RLoc – DLoC) + net borrowing from savings/PF (RPF – DPF) + net inflow from public account (RPub – DPub) + uses of cash balances (OB – CB).

Therefore the above identity can be written as,

Revenue Deficit (RE-RR) + Capital outlay (CO) = net borrowing under Internal debt (RID – DID) + net borrowing from Centre (RLoc – DLoC) + net borrowing from savings/PF (RPF – DPF)

We should not get involved in making projections regarding the mode of financing.

Hence, Fiscal deficit = net borrowing under Internal debt (RID – DID) + net borrowing from Centre (RLoc – DLoC) + net borrowing from savings/PF (RPF – DPF)

Revenue Expenditure – Revenue Receipts (Revenue Deficit (RE-RR)) + Capital outlay (CO) = Fiscal Deficit.

Based on our projection for revenue receipts consisting of tax and non-tax revenue and revenue expenditure excluding interest payments, how much borrowing should the state need to resort to gets determined. Regarding the sources of borrowing, we do not make a distinction among the internal debt, loans from the Centre and the savings and provident fund.

Assumptions underlying the projections

Tax revenue:

Though we make a distinction between taxes not subsumed under the GST and the remaining taxes under the head taxes on income. For GST, the CAGR was calculated was 16 percent for the period 2017-18, the annual rate of growth was erratic. It has also been pointed out by (Mukherjee 2023) that Goa was one of the states where the post GST period witnessed a lower rate of growth GST calculation. Goa deserved compensation to the tune of 40 percent or more by way of compensation for GST. The GST calculation is linked to

consumption base and Goa's economy is one of the consumption based states compared to a few manufacturing states like Gujarat and Maharashtra. Goa gets taxes collected under IGST. We decided that 14 percent as a reasonable rate of growth of the GST for our projection period which is also similar to the MTFP2024. For the remaining taxes, the growth rate was found to be 11 percent.

For taxes on property and capital transactions, we assumed based on estimated CAGR of 13 percent, only 3.1 percent for taxes on commodities and services and taxes not subsumed under GST to grow at 12 percent per annum. So the total tax revenue was calculated to be the sum of GST, taxes not subsumed under GST, taxes on property and taxes on commodities and services.

For non-tax revenue we applied a negative growth of 7 percent for the item interest receipts, dividends and profits and 10 percent for other non-tax revenue.

It is difficult to predict the future rate of growth in Grants-in-Aid. The state had a 6 percent growth rate in the post GST period which was lower than the taxes subsumed during the entire period. We have assumed a 6 percent rate of growth in Grants-in-Aid. It is not certain whether Goa will continue to get compensation due to the GST shortfall. The projects recommended by the 15th FC were not ultimately funded by the GoI.

For revenue expenditure, we projected general services excluding interest payments at the rate of 13 percent, social services at the rate of 8 percent, economic services at the rate of 10 percent. Interest payment at the period t is determined by the outstanding debt accumulated at the end of the financial year, D_{t-1} assuming 7 percent as the effective rate of interest (r_e).

$$I_t = r_e \cdot D_{t-1}$$

So the revenue expenditure is obtained as the sum of general (excluding interest payment), social, economic and interest payments.

Capital outlay is projected to grow at the rate of 10 percent as estimated for the period 2017-18 to 2022-23. Fiscal deficit is residually determined as the following, which is the sum of Revenue Deficit and Capital outlay (CO)

$$FD_t = RE_t - RR_t + CO_t$$

The outstanding debt is projected as $D_t = FD_t + D_{t-1}$.

To study fiscal scenario to assess and understand fiscal sustainability of the state, we express the major macro variables in terms of GSDP. The nominal growth of GSDP is assumed to be 10 percent though it was estimated to be 7 percent for the period under consideration as the Goa's economy grew at around 9.5 percent during 2021-22 and 2022-23.

Table 14.1 Roadmap of Fiscal Sustainability

Roadmap of Fiscal Sustainability (2025-26 to 2030-31) (% of GSDP)								
	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Tax Revenue	16.0	16.1	16.3	16.4	16.6	16.8	17.1	17.4
Non Tax Revenue	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Grants in Aid	1.2	1.1	1.1	1.1	1.0	1.0	0.9	0.9
Revenue Receipts	23.9	24.0	24.1	24.2	24.3	24.5	24.7	25.0
Revenue								
Expenditure	22.5	22.2	22.3	22.4	22.5	22.6	22.7	22.8
Interest payment	2.4	2.0	2.1	2.2	2.2	2.3	2.3	2.4
Capital Outlay	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Total Expenditure	28.5	28.2	28.3	28.4	28.5	28.6	28.6	28.7
Fiscal Deficit	4.6	4.2	4.2	4.2	4.1	4.0	3.9	3.7
Revenue Deficit	-1.4	-1.8	-1.7	-1.8	-1.8	-1.9	-2.1	-2.2
Primary Deficit	2.2	2.2	2.1	2.0	1.9	1.7	1.6	1.4
Debt Outstanding	30.5	31.9	32.8	33.7	34.4	35.0	35.5	35.8
Note: GSDP growth has been assumed to grow at 10% p.a.								

Revenue receipts in terms of GSDP rises by 1.1 percentage points, and tax revenue rises by 1.4 percentage points. Revenue expenditure is maintained at an almost stable ratio and also the capital outlay by assumption. But mainly because of the buoyancy in tax revenue, the fiscal deficit keeps on declining. Throughout the period, we have a revenue surplus which is used for repayment of loans rather than raising the capital outlay which is assumed to grow at 10 percent lower than what was observed for the period under study. Primary deficit declines from 2.2 to 1.4 percent of GSDP. Because lower borrowing and surplus in revenue account, the debt to GSDP ratio falls from around 30.5 percent to 35.8 percent at the end of 2030-31. To comply with the FRBM, CO and RE may be allowed to grow at a lower rate. An increase in grants in aid may help too in reducing to FD to 3 percent.

Debt sustainability

As per the Domar Debt sustainability condition,

$$D_t = (1+\alpha) D_{t-1} - P_t$$

Where P_t is primary surplus and it is in deficit if $P_t < 0$.

α is the Domar condition to assess Debt sustainability which is equal to $(r-g)/(1+g)$ where r is the real effective interest rate indicative of cost of borrowing, g is the real growth rate. The real growth rate of Goa has been around 4 percent per annum. With r at 7 to 8 percent, the debt sustainability condition is not in favour of the state of Goa. The debt to GSDP ratio rises as primary deficit remains positive throughout the period.

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