

Evaluation of State Finances of Goa

2002-3 to 2011-12

Submitted to the

Fourteenth Finance Commission
Government of India

By

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Study Report

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1. Introduction

This report was initiated for the 14th Finance Commission, Government of India, as a background study of state finances of Goa for the period 2002-3 to 2011-12. In this period Goa has seen rapid economic growth and improvements in other development indicators.

1.1 Motivation of the study

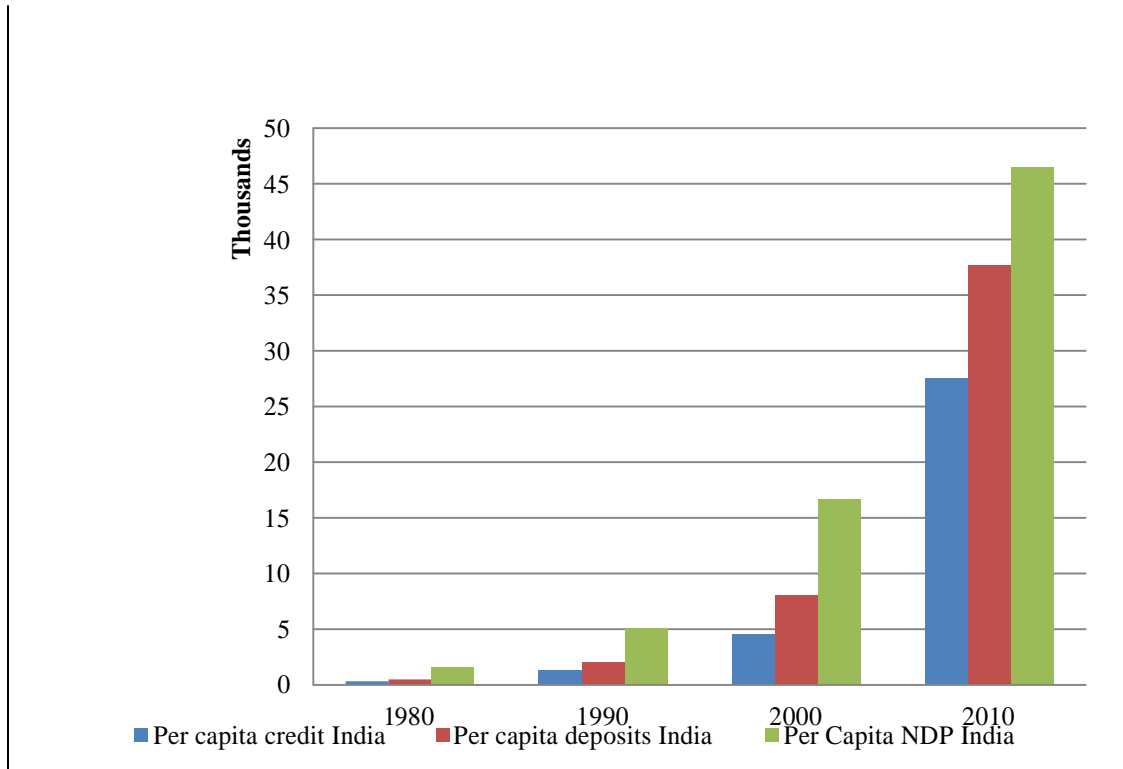
As we are aware, the Finance Commission has Constitutional mandate to devolve resources between the centre and the states. It is supposed to address two kinds of imbalances:

- a) Vertical,
- b) Horizontal.

Vertical Imbalance: There is an unequal distribution of power (to impose taxes) and responsibility (for delivery of public service) between the centre and states. Centre's ability to raise revenues through taxes is high but the onus of public delivery lies largely with the states. This creates a disbalance between two tiers of government and the Finance Commission is tasked with addressing this issue. All taxes that are considered to be "elastic" and have a "buoyant" tax bases like Personal Income Tax, Corporation Tax, Excise duty on manufacture (other than alcoholic beverages) and Customs Duty lie with the Centre. Taxes that are relatively "inelastic" like taxes on purchase and sale of commodities are with the state.

Horizontal imbalance: There is unequal capacity for resource mobilisation among different States. This is because of historical and geographical reasons. Since this at the same level or tier of government, it is termed as horizontal imbalance. This is to enable States with lower per capita income (per capita GSDP) to provide a basic minimum level of services as the richer States do.

Figure 1: Per capita credit, deposits & NDP for India



Goa's per capita NSDP started little higher at Rs 434 (less than 1.5 times) at current prices in 1960-1 than India's Rs 306 (in 1961). But by the end of the first of the 21st century Goa's per capita income was higher than the all India average by about 2.5 times. Per capita income growth was double digit in all the decades after the '60s in Goa.

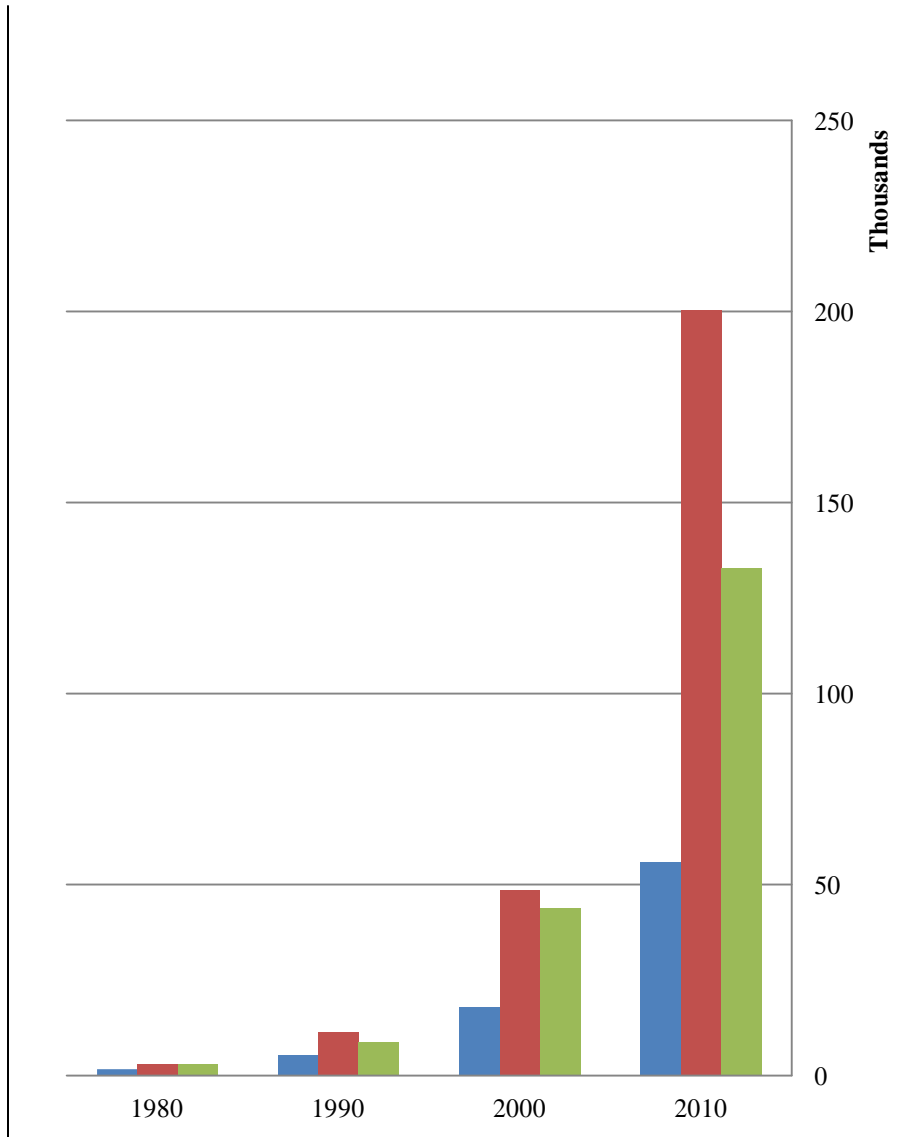
The Accounts of the State Government is kept in the following three parts:-

Part I Consolidated Fund

Part II Contingency Fund

Part III Public Account

Figure 2: Per capita credit, deposits & NSDP for Goa



Source: Central Statistical office data available at indiastat.com, Goa Credit Deposit Ratio various issues and RBI BSR various issues.

2. **Consolidated Fund**:- Under this Fund, we have three main divisions, namely:-

- i. Revenue
- ii. Capital and
- iii. Debt (comprising Public Debt, Loans and Advances and Inter-State Settlement)

Contingency Fund:- This fund is of the nature of an imprest and enables the Executive Government to meet unforeseen and emergent expenditure pending its authorization by the Legislature by law. The amounts drawn from the fund are recouped by taking a supplementary grant from the Legislature.

Public Account:- In Part III of the Accounts (Public Account, the scope of which has been defined in Article 266 (2) of the Constitution) there are two main divisions, namely:-

- (1) Debt transactions, other than those included in Part I, relating to Provident Fund, Reserve Fund and Deposits and Advances and
- (2) Remittances

1.2 Plan of Study

This study has mainly used the following data sources published by the Government of Goa for the analysis.

- a) Annual Financial Statement
- b) Appropriation Accounts
- c) Budget at a Glance
- d) Budget Speeches
- e) Economic Survey
- f) Demand for Grants, Volume 1-3
- g) Estimates of Receipts
- h) Finance Accounts
- i) Medium Term Fiscal Policy for Goa (February, 2009).
- j) Statistical Handbook of Goa

In addition, supplementary information has been obtained and source mentioned in the relevant places.

1.3 GSDP data

For the period of the analysis, there is no country-wide continuous series for the Gross State Domestic Product either at constant or market prices. For the state of Goa, GSDP data is available for four different base year prices – 1980-81, 1990-91, 1999-200- and 2004-5.

There is also an alternate set of estimates that can be constructed from the Finance Accounts of Government of Goa based on 1999-2000 prices. We produce below the two series – one with 1999-2000 prices upto 2003-4 whereafter 2004-5 prices have been used and the other which can be found in the Finance Accounts based on 1999-2000 prices.

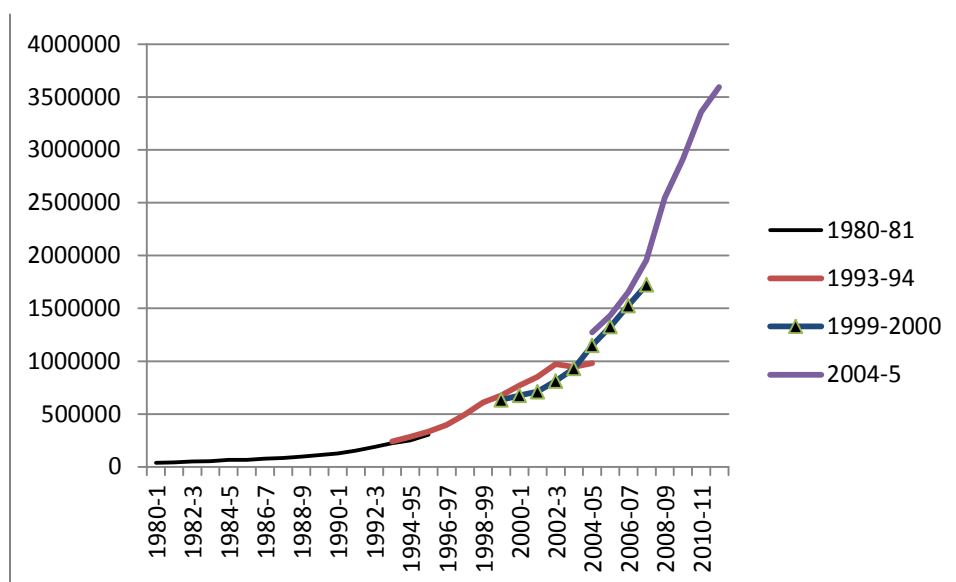
Figure 3: Gross State Domestic Product Factor Cost at Current prices from 1980-81 onwards

	Base Year			
	1980-81	1993-94	1999-2000	2004-5
1980-1	39751			
1981-2	43599			
1982-3	51882			
1983-4	54850			
1984-5	66607			
1985-6	65493			
1986-7	77139			
1987-8	85615			
1988-9	97790			
1989-90	112779			
1990-1	125736			
1991-2	155128			
1992-3	187246			
1993-94	224506	239668		
1994-95	250346	283793		
1995-96	305589	331919		
1996-97		396493		
1997-98		492149		
1998-99		607506		
1999-2000		676168	632975	

2000-1		769805	675714	
2001-2		850323	709726	
2002-3		971818	809961	
2003-4		945463	930135	
2004-05		980432	1148151	1271331
2005-06			1326237	1432659
2006-07			1524836	1652283
2007-08			1721459	1956496
2008-09				2541383
2009-10				2912554
2010-11				3356221
2011-12				3593218

Source: Economic Survey (Various years) and CSO

Figure 4: Goa's Gross State Domestic Product (Factor Cost) at Current prices (in lakhs)



For most part of the study we have used estimates of GSDP placed in column 2. In the deficit and debt chapters we show ratios using both GSDP series.

Table 1: Alternative measures of Goa's GSDP

Year	GSDP 1999-2000 prices till 2003-4 and after that 2004-5 prices	GSDP_A 1999-2000 prices
(1)	(2)	(3)
2002-03	810000	809900
2003-04	930100	930100
2004-05	1271331	1148150
2005-06	1432659	1335408

2006-07	1652283	1504172
2007-08	1956496	1587538
2008-09	2541383	1746600
2009-10	2912554	1924800
2010-11	3356221	2120200
2011-12	3593218	2309700

1.4 Scope of Study

The study analyses the Tax and Non-tax revenue of the government of Goa, followed by an analysis of the expenditure patterns. The deficit, debt trends and the FRBM act are discussed after that. The discussion on the impact of the Rural and Urban local bodies and the state public sector enterprises follows. This is followed by a short discussion on power sector reforms, contingent liability of the state, and an analysis of the subsidies. We conclude with a short note on the allocations made by the different Finance Commission allocations for Goa.

2. Analysis of Taxation in Goa

This chapter looks at issue of taxation in Goa over the period 2002-3 to 2011-12.

2.1 Introduction

Taxes are a major source of revenue for any country, especially developing countries like India. Increasing tax revenues in India remains a challenge due to low compliance. There have been attempts to identify whether the low compliance is due to lack of effort in tax mobilization or due to citizens not being forthcoming in their tax commitment (sometimes referred to as “tax morale” Frey 1997), though the two are not independent (see for example Das-Gupta, Lahiri, and Mookherjee 1995; Das-Gupta, Ghosh, and Mookherjee 2004; Bhalla 2010). It is well recognized that the tax structure of a country reflects its political institutions (Kaldor 2008). International and national comparisons of tax collections are therefore useful to indicate the potential for tax reform (Bird 2013).

Chelliah and Sinha (1982) provide an early study at measuring tax effort of Indian states in the 1970s. There have been numerous assessments since then (eg, Jothi Sivagnanam K. and Naganathan M 2000; Majumdar et al. 2001; Sen 1997). This chapter deals with the estimation and analysis of tax capacity and tax effort in Goa for the period 2002-3 to 2011-12.

2.2 Definitions

It is useful to start with a few definitions that are frequently used in the literature.

- **Tax capacity** measures the maximum amount of tax that can be feasibly collected given the economic, social, institutional and demographic characteristics.
- **Tax Effort** measures the ratio between actual tax collection and potential tax collection (or its taxable capacity). It serves as an effective indicator whether the country needs tax reforms to raise funds for pursuing government activity and fulfilling developmental goals.
- **Effective tax rate** is measured by dividing the actual tax revenue by the potential base.

- **Tax Buoyancy** is the elasticity of a particular tax with respect to a measure of aggregate income.

Traditionally, the tax performance has been assessed on the basis of actual tax collection relative to a broad notion of tax capacity. The most commonly used number was the tax-income ratio (GDP or GSDP as the case may be) and is based on the assumption that income (GDP or GSDP) is the indicator tax capacity. However, two assumptions are implicit in this (in what is now considered 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. In order to overcome these criticisms there has been attempts at devising better proxies for the tax base as well more refined empirical estimates of the tax effort. Use of disaggregated measures of tax effort using the representative tax system have become popular in the literature (Sen 1997). Each tax is regressed against its tax base and the estimated value of tax 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 especially in India, researchers have adopted a more pragmatic approach relying on data availability.

However, before we begin our estimation process, we present the scenario in Goa with respect to the different tax heads and tax receipts in the period under study.

2.3 Classification of Taxes in Goa

The table below provides the classification of sharable and own taxes in Goa.

Table 2: Sources of Tax Revenue with Budget Heads in State Government Accounts of Goa

Sl. No.	Description	Budget Head
(a) Taxes on Income and Expenditure (State's Own tax sources are in italics)		
1	Corporation Tax	0020
2	Taxes on Income other than Corporation Tax	0021
3	<i>Other Taxes on Income and Expenditure</i>	0028
(b) Taxes on property and capital transactions		
4	<i>Land Revenue</i>	0029
5	<i>Stamps and registration Fees</i>	0030
6	<i>Taxes on wealth</i>	0032
(c) Total on commodities and services		
7	Customs	0037

8	Union Excise Duties	0038
9	State Excise	0039
10	Sales Tax	0040
11	Taxes on Vehicles	0041
12	Taxes on Goods and Passengers	0042
13	Taxes on Duties on Electricity	0043
14	Service Tax	0044
15	Other Taxes and Duties on Commodities and services	0045

2.4 Tax performance of Goa: 2002-3 to 2011-2

There seems to be a marginally declining trend in the tax revenue as a proportion of Gross State Domestic Product. In 2002-3 total tax revenue was 8.85% of the GSDP but in 2011-2 it had increased to 8.99%. However, there have been fluctuations in this ratio with a dip in 2004-5. This could partially be explained by the change in the base year from 1999-2000 to 2004-5 prices (discussed in detail in Introduction chapter earlier) whereby the computed GSDP (the denominator) increased when computed to GSDP if the 1999-2000 prices were used. There was steady increase in tax ratio till 2006-7 whereafter we see a steady decline till 2009-10. There has been a recovery from then on but is still below the peak figure of 9.7% achieved in 2006-7 (see Table 3 and Figure 5).

The share in total taxes of the three major components of the tax revenues has changed over the decade. While the contribution of Taxes on property has increased a little bit, Taxes from Income and Expenditure has increased from 6% to 12%. But most significantly Taxes on Commodity and Services has declined from 90% to 82%. Evidently it still constitutes the major contributor to tax revenues.

If we look at the internal composition of taxes in a further disaggregated manner, there have been numerous changes. “Taxes on Income and Expenditure” rose from 0.53% (in 2002-3) to 1.12% (in 2011-12). The two components of this – Corporation Tax and Taxes on Income (other than Corporation tax) both increased.

Figure 5: Total Tax Revenue as a proportion of GSDP (factor cost) Current prices

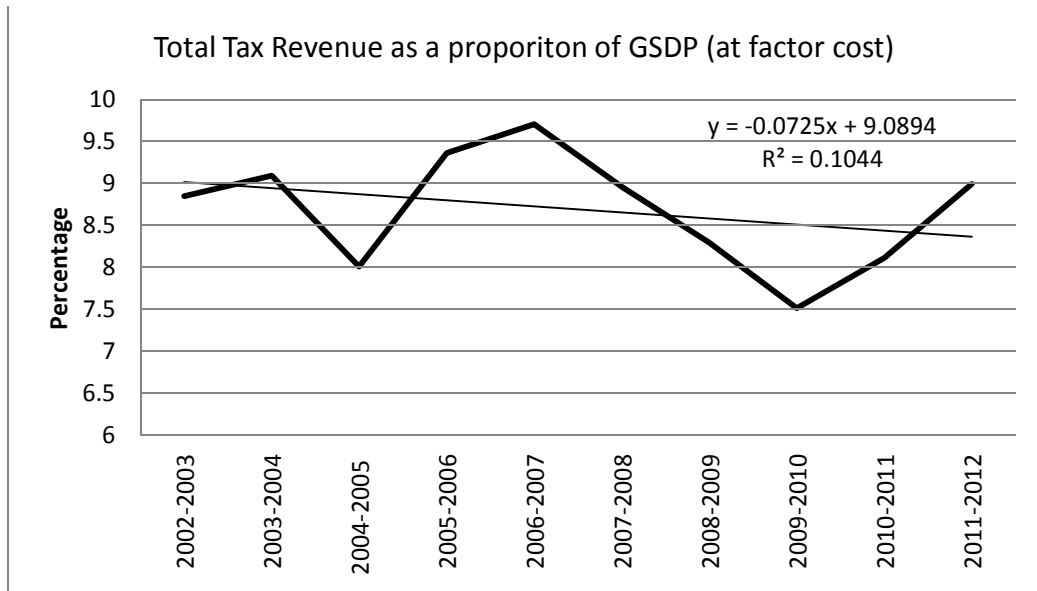
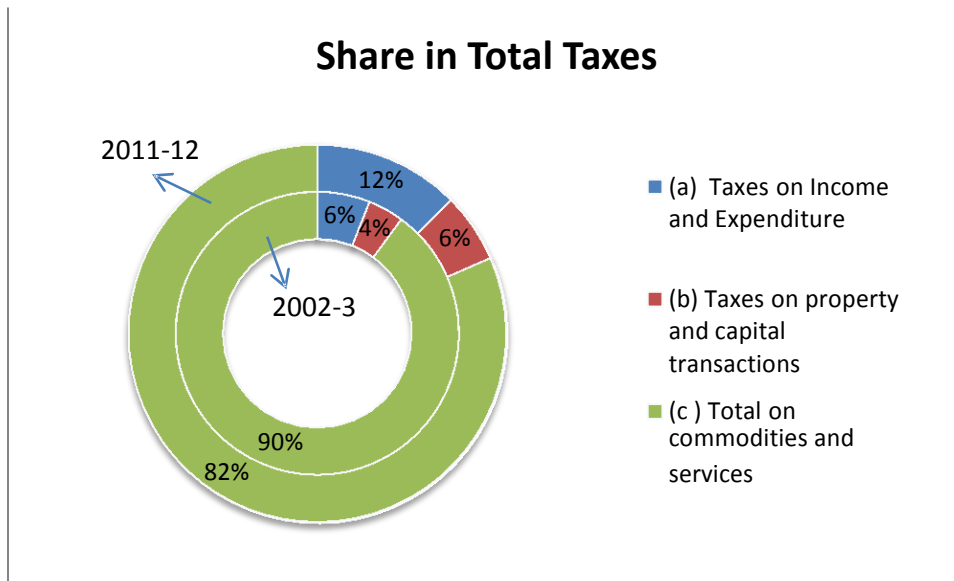


Figure 6: Share in Total Tax Revenue



“Taxes on Property and Capital transactions” have increased from 0.36% to 0.54%. of which the major component, “Stamps and registration fees” increased marginally from 0.33% to 0.51% over the decade.

However, “Taxes on Commodities and Services” declined from 7.96% (2002-3) to 7.33% (in 2011-12). Within this segment, Customs collections have remained stable, but Union excise duties have declined from 0.51% (in 2002-3) to 0.21% (in 2011-12). Similarly, State excise duties have also declined from 0.65% to 0.51%. Sales tax also declined from 5.42% to 4.6%. Taxes on vehicles also declined from 0.45% to 0.39%. Taxes on Goods and Passengers increased marginally from 0.38% to 0.58%. However, Service Tax (0044) increased from 0.04% to 0.23%. Also, “Other taxes & Duties on Commodities & Services” (0045) also increased from 0.25% to 0.48%.

Table 3: Goa’s Tax receipts as a proportion of GSDP factor cost at current prices

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
(a) Taxes on Income and Expenditure	0.53	0.63	0.60	0.80	0.95	1.07	0.87	0.94	1.04	1.12
0020 - Corporation Tax	0.31	0.40	0.36	0.47	0.59	0.64	0.54	0.60	0.68	0.75
0021 - Taxes on Income other than Corporation Tax	0.22	0.24	0.23	0.33	0.36	0.43	0.34	0.34	0.36	0.38
0028 - Other Taxes on Income and Expenditure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (a)										
(b) Taxes on property and capital transactions	0.36	0.37	0.32	0.46	0.74	0.64	0.49	0.42	0.48	0.54
0029 - Land Revenue	0.03	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02
0030 - Stamps and registration Fees	0.33	0.31	0.28	0.42	0.70	0.60	0.45	0.38	0.45	0.51
0032 - Taxes on wealth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (b)										
(c) Total on commodities and services	7.96	8.09	7.09	8.10	8.02	7.25	6.93	6.16	6.60	7.33
0037 - Customs	0.33	0.31	0.26	0.33	0.37	0.38	0.31	0.21	0.30	0.33

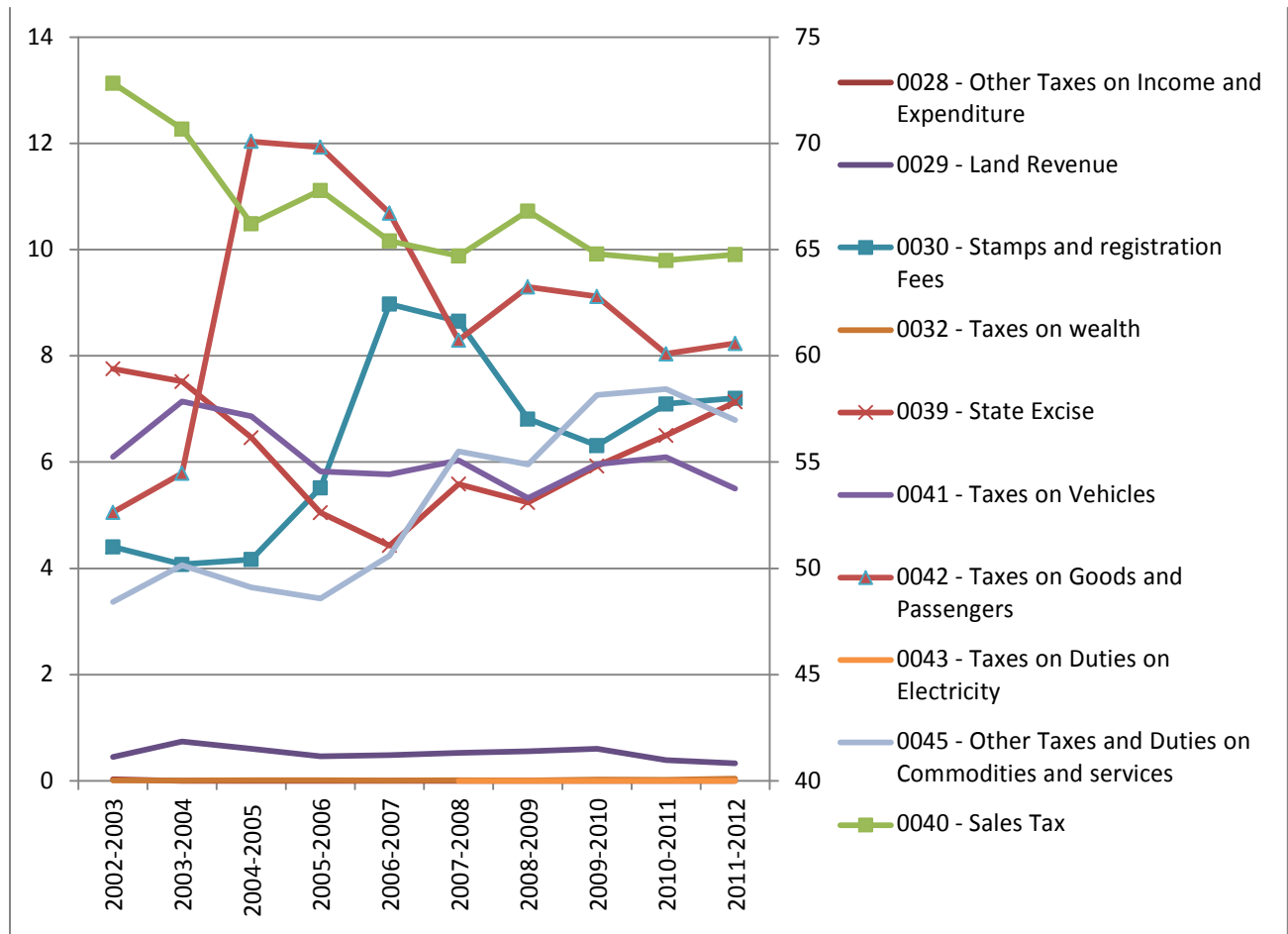
0038 - Union Excise Duties	0.51	0.45	0.35	0.44	0.39	0.36	0.27	0.17	0.22	0.21
0039 - State Excise	0.58	0.57	0.44	0.39	0.35	0.39	0.35	0.36	0.41	0.51
0040 - Sales Tax	5.42	5.40	4.46	5.19	5.11	4.49	4.45	3.92	4.11	4.60
0041 - Taxes on Vehicles	0.45	0.55	0.46	0.45	0.45	0.42	0.35	0.36	0.39	0.39
0042 - Taxes on Goods and Passengers	0.38	0.44	0.81	0.91	0.84	0.58	0.62	0.55	0.51	0.58
0043 - Taxes on Duties on Electricity						0.00	0.00	0.00	0.00	0.00
0044 - Service Tax	0.04	0.06	0.07	0.13	0.18	0.20	0.18	0.15	0.17	0.23
0045 - Other Taxes & Duties on Commodities & services	0.25	0.31	0.25	0.26	0.33	0.43	0.40	0.44	0.47	0.48
Total (c)										
Total, A - Tax Revenue	8.85	9.09	8.01	9.36	9.71	8.96	8.30	7.52	8.12	8.99

2.5 Own Tax Revenue: Its composition and trend

Sales tax is the major source of revenue of the state. However, there has been a decline in its importance from 72.8% in 2002-3 to 64.7% in 2011-12. In the Figure 7 Sales tax is represented on the secondary axis (RHS) while all the others are represented on the primary Axis (LHS).

Taxes on Goods and Passengers currently constitutes the second most important source of own tax revenue. While there has been a point-to-point increase in this tax head from 5.05% (2002-3) to 8.2% (2011-12) there has been some variation. This ratio peaked in 2004-5 at about 12% where after it declined. Stamps and registration fees constitute the second most important source at about 7.2% followed closely by State Excise at 7.1% in (2011-12).The next important source of tax revenue is “Other Taxes and Commodities on Commodities and Services.” This segment has increased from 3.36% (2002-3) to 6.79% (2011-12). As a share of contribution “Land revenue” has remained low and was 0.32% in 2011-12.

Figure 7: Ratio of State's taxes as a proportion of Total Own Tax in Percentage (Sales tax represented on Secondary axis, RHS)



2.6 Tax Buoyancy

We estimated the tax buoyancy of the important sources of own tax revenue for the state. Tax Buoyancy is defined as the elasticity of a tax with respect to aggregate income (GoG 2009). In the period under consideration (2002-2 to 2011-12), Total Own tax revenue (sum of revenue Items 28, 29, 30, 32, 39, 40, 41, 42, 43 and 45) has a co-efficient of 0.89 (significant at 99%) indicating a low buoyancy in overall own tax revenue (see Table 3). In fact, the most important source of own tax revenue, Sales Tax, had a coefficient value of 0.82 during this period. State Excise Duties and Motor vehicles Tax also showed co-efficient values of 0.81 and 0.79 during this period (respectively). Three components of Own tax revenue had coefficients greater than 1

– these being Taxes on Goods and Passengers (1.07), Stamp Duty & Registration fees (1.27) and Other Taxes (1.4). In all the cases, the coefficient value is significant.

Table 4: Estimated Buoyancy Co-efficients of State Taxes (2002-3 to 2011-12)

	Constant	t	Co-efficient (Buoyancy)	t	R-square
Own Tax revenue	-1.14457	-1.8	0.8951192	20.34	0.981
Sales	-0.58587	-0.88	0.8283607	17.91	0.9757
State Excise Duty	-2.75517	-1.68	0.8124627	7.14	0.8643
Motor vehicles Tax	-2.44239	-3.53	0.7904184	16.46	0.9713
Taxes on Goods and Passengers	-6.25857	-2.3	1.079301	5.71	0.8031
Stamp Duty & Registration Fees	-9.42285	-3.84	1.275314	7.5	0.8754
Other Taxes	-12.152	-10.18	1.45092	17.54	0.9746
N=10					
Period: 2002-3 to 2011-12					
Buoyancy Equation: $\ln(\text{tax}) = a + b \cdot \ln(\text{GSDP})$					

Source: Own calculation based on data from GoG Finance Accounts (various Years)

2.8 Tax Base and Tax Effort

There have been various attempts to define the tax base for different groups of taxes in India (Sen 1997; M. C. Purohit 2006; Majumdar et al. 2001). However, since conceptualisation of tax bases and therefore tax effort based on that may need to be a countrywide effort, we limit ourselves to noting that Goa has special characteristics where in many of the tax bases would depend crucially on tourism inflows even though part of its impact would be captured by GSDP. We, therefore, define tax effort as the ratio between the tax/GSDP ratio of two five year periods in the time frame of this study – Tax/GSDP (2007-8 to 2011-12) and Tax/GSDP (2002-3 to 2006-7). While we realize that this is not the commonly accepted definition of tax effort, this ratio may capture the difference in the efforts in the two periods. The Table 5 below exhibits the average Tax/GSDP for each component of tax over two five year periods (2002-3 to 2006-7 and 2007-8 to 2011-12). The ratio takes only non-negative values (unless there are refunds in a year that exceed collections). If it takes a value less than one it implies that the Tax/GSDP ratio in the

second of the decade has fallen and if it is greater than one then it means that the collections in the second period were greater.

Table 5: Comparing Tax/GSDP over two five year periods

A - TAX REVENUE	Average Tax_i/GSDP (2002-3 to 2006-7)	Average Tax_i/GSDP (2007-8 to 2011-12)	Ratio of Col(3)/Col(2)
Col (1)	Col (2)	Col (3)	Col (4)
(a) Taxes on Income and Expenditure			
0020 - Corporation Tax	0.426388943	0.64100698	1.503339
0021 - Taxes on Income other than Corporation Tax	0.275598077	0.368028037	1.33538
<i>0028 - Other Taxes on Income and Expenditure</i>	0.000390565	-1.0222E-05	-0.02617
Total (a)	0.702377585	1.009024794	1.436585
(b) Taxes on property and capital transactions			
<i>0029 - Land Revenue</i>	0.040801945	0.031646528	0.775613
<i>0030 - Stamps and registration Fees</i>	0.408760724	0.480144985	1.174636
<i>0032 - Taxes on wealth</i>	0.000647327	0.001381341	2.133917
Total (b)	0.450209996	0.513172854	1.139852
(c) Total on commodities and services			
0037 - Customs	0.319624117	0.306231163	0.958098
0038 - Union Excise Duties	0.430328088	0.247024899	0.574039
<i>0039 - State Excise</i>	0.464014508	0.403417677	0.869407
<i>0040 - Sales Tax</i>	5.11722027	4.316083119	0.843443
<i>0041 - Taxes on Vehicles</i>	0.471833996	0.382798777	0.8113
<i>0042 - Taxes on Goods and Passengers</i>	0.675554174	0.568927928	0.842165
<i>0043 - Taxes on Duties on Electricity</i>		1.02224E-06	
0044 - Service Tax	0.093523419	0.186222082	1.991181
<i>0045 - Other Taxes and Duties on Commodities and services</i>	0.279935708	0.443945618	1.585884
Total (c)	7.85203428	6.854652285	0.872978
Total, A - Tax Revenue	9.004621861	8.376849933	0.930283

Source: GoG Finance Accounts (various years) and Author's calculations

Tax heads in Italics represent Own Tax Sources for the state and the rest represent sharable taxes with the Centre. Among the Own tax sources we find that the ratio is greater than one for “Stamps and registration Fees”, “Taxes on wealth”, “Other Taxes and Duties on Commodities and services”. For all the other components of own tax revenue (including the most important source “Sales Tax” the ratio has been lower than one. This suggests that there might have been a

slackening of the of the tax effort in the second half. There is scope for improvement of tax revenues in the state.

2.9 Suggestions for Enhancing Revenue Productivity

In the absence of detailed research study on tax patterns in Goa, one may infer from Table 3, Table 4 and Table 5 above, the following:

Given the boom in real estate and construction in the Goa, land revenue and Stamp Duties could bring in greater tax revenues. The slackening of Land Revenue collections in the second part of the study period is an indicator that tax effort has been lower in this segment and could improve. The decline in the Tax/GSDP ratio in Taxes on Commodities and Services is of concern. Keeping in mind (a) the structure of the Goan economy where less than 10% contribution in GSDP comes from agriculture, and the remaining (over 90%) contribution being shared by the Tertiary and Secondary sector, and (b) with robust growth in the Goan economy, one could expect a higher tax revenue collection from tax heads like State Excise Tax, Sales Tax, Taxes on vehicles, and Taxes on Goods and Passengers.

Since Tax Buoyancy in three sub-heads - Taxes on Goods and Passengers (1.07), Stamp Duty & Registration fees (1.27) and Other Taxes (1.4) displays more than unit elasticity, the growth in the GSDP suggests scope for greater revenue opportunities in the state.

2.10 Conclusion

The literature on public finance has argued that tax revenue goals have to be matched with well-defined development goals. Taxes are a mechanism for ensuring adequacy of finance for such activities. Sometimes when such goals have been achieved, the government may relax its taxation plans allowing citizens greater disposable incomes. Even though Goa has the highest per capita income in the country, it is unlikely that all developmental goals in the state have been

met. The marginally declining trend of Tax/GSDP ratios suggests there is scope for improvement in fiscal collections.

In the next chapter we look at another important source of revenue for the state – its non-tax revenue.

Chapter 2 Appendix

BUOYANCY

$\text{Ln}(\text{Stamp_Registration_Fees}) = f(\text{ln_GSDP})$

Source	SS	df	MS			
Model	5.08104165	1	5.08104165	Number of obs =	11	
Residual	.582987242	9	.06477636	F(1, 9) =	78.44	
Total	5.66402889	10	.566402889	Prob > F =	0.0000	
				R-squared =	0.8971	
				Adj R-squared =	0.8856	
				Root MSE =	.25451	

ln_Stamp_R~s	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ln_GSDP	1.244369	.1405015	8.86	0.000	.9265323	1.562205
_cons	-8.968673	2.014581	-4.45	0.002	-13.52597	-4.411374

$\text{Ln}(\text{Sales_Tax}) = f(\text{ln_GSDP})$

Source	SS	df	MS			
Model	2.21494199	1	2.21494199	Number of obs =	11	
Residual	.042864172	9	.004762686	F(1, 9) =	465.06	
Total	2.25780616	10	.225780616	Prob > F =	0.0000	
				R-squared =	0.9810	
				Adj R-squared =	0.9789	
				Root MSE =	.06901	

ln_Sales_Tax	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ln_GSDP	.8215877	.0380977	21.57	0.000	.7354047	.9077707
_cons	-.4864651	.5462639	-0.89	0.396	-1.7222	.7492697

$\text{Ln}(\text{Tax_vehicles}) = f(\text{ln_vehicle_number})$

Source	SS	df	MS			
Model	2.07227079	1	2.07227079	Number of obs =	11	
Residual	.183202059	9	.020355784	F(1, 9) =	101.80	
Total	2.25547285	10	.225547285	Prob > F =	0.0000	
				R-squared =	0.9188	
				Adj R-squared =	0.9097	
				Root MSE =	.14267	

ln_Tax_veh~s	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ln_vehicle~r	1.626693	.1612227	10.09	0.000	1.261982	1.991404
_cons	-8.610289	1.733296	-4.97	0.001	-12.53128	-4.689301

Ln(Sales_Tax) = f(ln_GSDP)

Source	SS	df	MS	Number of obs = 10		
Model	1.69923798	1	1.69923798	F(1, 8)	=	320.60
Residual	.042401111	8	.005300139	Prob > F	=	0.0000
				R-squared	=	0.9757
				Adj R-squared	=	0.9726
Total	1.74163909	9	.193515454	Root MSE	=	.0728

ln_Sales_Tax	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ln_GSDP	.8283607	.0462632	17.91	0.000	.7216775	.9350439
_cons	-.5858711	.667219	-0.88	0.405	-2.124481	.9527388

Ln(STexcise) = f(ln_GSDP)

Source	SS	df	MS	Number of obs = 10		
Model	1.63464004	1	1.63464004	F(1, 8)	=	50.96
Residual	.25661938	8	.032077423	Prob > F	=	0.0001
				R-squared	=	0.8643
				Adj R-squared	=	0.8474
Total	1.89125942	9	.210139936	Root MSE	=	.1791

ln_STexcise	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ln_GSDP	.8124627	.1138131	7.14	0.000	.5500093	1.074916
_cons	-2.755168	1.641438	-1.68	0.132	-6.540332	1.029995

Ln(Tax_vehicles) = f(ln_GSDP)

Source	SS	df	MS	Number of obs = 10		
Model	1.54713913	1	1.54713913	F(1, 8)	=	270.92
Residual	.045685039	8	.00571063	Prob > F	=	0.0000
				R-squared	=	0.9713
				Adj R-squared	=	0.9677
Total	1.59282417	9	.176980463	Root MSE	=	.07557

ln_Tax_veh~s	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ln_GSDP	.7904184	.0480214	16.46	0.000	.679681	.9011559
_cons	-2.442391	.692575	-3.53	0.008	-4.039472	-.8453106

Ln(Tax_goods_passengers) = f(ln_GSDP)

Source	SS	df	MS	Number of obs = 10		
Model	2.88469629	1	2.88469629	F(1, 8)	=	32.64
				Prob > F	=	0.0004

Residual		.707046362	8	.088380795	R-squared	=	0.8031
Total		3.59174265	9	.399082517	Adj R-squared	=	0.7785
					Root MSE	=	.29729

ln_Tax_goods	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]		
ln_GSDP		1.079301	.1889171	5.71	0.000	.6436569	1.514944
_cons		-6.258566	2.724606	-2.30	0.051	-12.54152	.0243874

Ln(Stamp_Registration_Fees) = f(ln_GSDP)

Source	SS	df	MS	Number of obs	=	10
Model		4.0276306	1	4.0276306	F(1, 8)	= 56.20
Residual		.573320788	8	.071665098	Prob > F	= 0.0001
Total		4.60095139	9	.511216821	R-squared	= 0.8754
					Adj R-squared	= 0.8598
					Root MSE	= .2677

ln_Stamp_R	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]		
ln_GSDP		1.275314	.1701164	7.50	0.000	.883025	1.667603
_cons		-9.422852	2.453458	-3.84	0.005	-15.08054	-3.765168

Ln(Other_Tax_Commodity_Services) = f(ln_GSDP)

Source	SS	df	MS	Number of obs	=	10
Model		5.21317635	1	5.21317635	F(1, 8)	= 307.55
Residual		.135606266	8	.016950783	Prob > F	= 0.0000
Total		5.34878261	9	.594309179	R-squared	= 0.9746
					Adj R-squared	= 0.9715
					Root MSE	= .1302

ln_Other_T	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]		
ln_GSDP		1.45092	.0827346	17.54	0.000	1.260134	1.641707
_cons		-12.15204	1.193218	-10.18	0.000	-14.90361	-9.400478

Ln(Own_Tax) = f(ln_GSDP)

Source	SS	df	MS	Number of obs	=	10
Model		1.98416116	1	1.98416116	F(1, 8)	= 413.73
Residual		.038366165	8	.004795771	Prob > F	= 0.0000
Total		2.02252733	9	.224725259	R-squared	= 0.9810
					Adj R-squared	= 0.9787
					Root MSE	= .06925

ln_Own_Tax	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]		
ln_GSDP		.8951192	.044007	20.34	0.000	.7936389	.9965994
_cons		-1.144565	.6346788	-1.80	0.109	-2.608137	.3190067

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

Fiscal policy deals with the taxation and expenditure decisions of the government. Fiscal policy is an important constituent of the overall economic framework of a country and is therefore intimately linked with its general economic policy strategy.

3.1 Introduction

Given the growing importance of non-tax revenue in the fiscal structure and the increasing emphasis on the cost recovery through the imposition of 'user charges', this study at the outset proposes to examine the fiscal significance of the States own non-tax sources, we also examine the trend rate and estimate buoyancy of all the major non-tax sources.

3.2 Definitions

Buoyancy coefficient is defined as a measure of the degree of responsiveness of non tax revenue to changes in income. A tax which is buoyant is one whose revenues increase by more than one percent for a one percent increase in national income or output. (Leuthold and Tchetchev 1986). Non-tax sources are defined unlike taxes as payment made to the Government for which there is a quid pro quo.

3.3 Composition of Revenue Receipts:

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

- Tax revenue are composed of States own tax revenues and share in Central taxes.
- Non-tax revenues comprised States own non-tax revenues and grants from the Centre. These non-tax sources do not have similar features and are classified into three categories:
 - 1) *Compulsory and unrequited payments*, these include penalties (other than penalties on non-compliance of taxes) and fines.

- 2) *Voluntary and unrequited receipts*, these include donations and contributions made to the Government or any unclaimed funds lying with the Government.
- 3) *Voluntary and requited payments*, these include revenue earned from the resources owned by the Government such as forest and marine. This category also has revenue earned by Sale of usage rights, admission fee, as well as the royalties and rental payments received by the Government. Income earned in the form of dividends and the interest receipts from investments made by the Government also fall into this category.

The total non-tax revenues of the States consist

- 1) Own non-tax revenues and
- 2) Grants from the Centre.

The principal components of States own non-tax revenues are

- a) Interest receipts
- b) Dividends and profits,
- c) Administrative non-tax receipts which is classified into
 - Receipts from General Services
 - Receipts from Social Services
 - Receipts from Economic Services

The second component of the non tax revenue is the Grants from the Centre. These grants comprise of

- a) Non Plan Grants
- b) Grants for State Plan Schemes
- c) Grants for Central Plan Schemes
- d) Grants for Centrally Sponsored Schemes

Revenue from interests, dividends and profits, general services, economic services and social services, forms key constituents of the state's Own Non Tax revenue.

Though the term ‘non-tax revenue’ encompasses all the above components, the second component of the non-tax sources that is grants from the Centre are not included in this study. As such this chapter provides an analysis of the growth and composition of own non-tax receipts of the Government of Goa during the ten years from 2002-03 to 2011-12 based on the information contained in the Finance Accounts, Budget documents and the Statistical Handbooks of the Government of Goa. The non-tax sources covered in the study include the following:

- Interest Receipts
- Profits and Dividends
- Administrative Non-tax Receipts

Administrative non tax receipts accounts for about three-fourths of the States’ own non-tax revenue.

3.4 Data sources and Methods:

This study makes use of all available sources of data from the sources like the Finance Accounts, Budget documents, Economic Surveys and the Statistical Handbooks of the Government of Goa. The data on Per Capita Gross State Domestic Product data is drawn from the RBI database.. For the purpose of disaggregated analysis of each of the minor heads of non-tax sources, the finance accounts of the state are used. From these documents, we have collected details of the revenue and expenditure on non-tax sources for the select services has been collected.

Because of the growing importance of non-tax revenue in the fiscal structure and the increasing emphasis on the cost recovery through the imposition of user charges this study proposes to examine the fiscal significance of the Goa’s own non-tax sources over a period of time from 2002-03 to 2011-12 . Following the methodology adopted by Purohit and Purohit (2009), the present study examines the trend rate and also estimates buoyancy of all the major non-tax sources. To analyze the efforts of the States in collecting appropriate user charges for the services provided, the study presents an estimate of the revenue realized (RR) from services as percent of revenue expenditure (RE) incurred on providing these services.

Table 6: Classification of Non-tax Revenues in the Budget of Goa

Sources of Non-tax Revenue with Budget Heads in Finance Accounts of Goa		
Sl. No.	Description	Budget Head
Revenue from Assets		
1	Interest receipts	0049
2	Dividends and Profits	0050
Revenue from Regulated Activity and Sale of Permits, Goods and Services		
General Services		
3	Public Service Commission	0051
4	Police	0055
5	Jails	0056
6	Supplies and Disposals	0057
7	Stationery and printing	0058
8	Public Works	0059
9	Other Administrative Services	0070
10	Contribution and recoveries towards Pensions and other Retirement Benefits	0071
11	Miscellaneous General Services	0075
Social Services		
12	Education, Sports, Art and Culture	0202
13	Medical and Public Health	0210
14	Family Welfare	0211
15	Water Supply and Sanitation	0215
16	Housing	0216
17	Urban Development	0217
18	Information and Publicity	0220
19	Labour and Employment	0230
20	Social Security and Welfare	0235
Economic Services		
21	Crop Husbandry	0401
22	Animal Husbandry	0403
23	Dairy Development	0404
24	Fisheries	0405
25	Forestry and Wild Life	0406
26	Cooperation	0425
27	Other Agricultural Programmes	0435
28	Other Rural Development Programme	0515
29	Major and Medium Irrigation	0701
30	Minor Irrigation	0702
31	Power	0801
32	Village and Small Scale Industries	0851
33	Industries	0852
34	Non Ferrous Mining and Metallurgical Industries	0853
35	Ports and Lighthouses	1051
36	Roads and Bridges	1054
37	Inland Water Transport	1056
38	Tourism	1452
39	Civil Supplies	1456
40	Other General Services	1475

Source: "Estimates of Receipts" GoG, various years.

We discuss below the components of the Administrative Non-tax receipts

3.5 Receipts from General Services:

These comprise receipts from a) Public Service Commission, b) Police, c) Jails, d) Stationery and printing, e) Public works, f) other administrative services and g) Contribution and recoveries towards pension and other retirement benefits, and h) other miscellaneous general services.

Details regarding revenue from General Services are listed below:

(a) Revenue accrues from fees charged from candidates appearing for various competitive examinations and interviews conducted by the Public Service Commission (PSC). The volume of the receipts under this head directly depends upon the nature and the number of examinations held by the Commission during a year and the number of candidates appearing for the examination.

(b) Police comprises reimbursement receipts from the Government of India and other States towards the cost of police supplied (forming the bulk of the revenue under the major head), cost of police supplied to autonomous bodies, private companies and persons, receipts under the Arms Act, as well as sale proceeds of unserviceable articles, collection of payments for services rendered, recovery of overpayments and miscellaneous receipts and so on.

(c) Jails comprise receipts from sale of articles manufactured in jail factories and farm produce of the jails.

(d) Stationery and Printing department comprise sale proceeds of stationery supply to Government departments run on commercial lines, sale proceeds of State Gazette, printing charges for Government departments and other miscellaneous receipts.

e) The Public Works Department (PWD) has rental income from Government buildings, hire charges of machinery supplied to the contractors as well as the percentage charges.

(f) Revenue from other administrative sources consists of receipts pertaining to administration of justice, elections, civil defence, fire protection etc.

(g) Pension contributions from other Governments, autonomous bodies, local bodies etc. in respect of Government servants placed on deputation fall in this category. It also includes Government share in Contributory Provident Fund (CPF) and interest thereon.

(h) Other miscellaneous general services include numerous small receipts from sources such as unclaimed deposits, allotment and sale of land, receipts relating to guarantees given by Government, sale of old stores, shares and materials, urban assessments etc.

3.6 Receipts from Social Services

The major items that come under this category are (a) Education, Sports, Art and Culture, (b) Medical and public health, (c) Family welfare, (d) Water supply and sanitation, (e) Housing, (f) Urban development (g) Information and publicity, (h) Labour and employment, (i) Social security and welfare, and (j) Other social services.

The main receipts from these social services are given below:

a) Receipts from tuition and other fees realized from students in Government educational institutions, public contributions to the educational institutions, receipts of museums, archaeological monuments and rent receipts of auditoriums, other Administrative receipts like Right to Information Act.

(b) Receipts from Employees State Insurance Corporation (ESIC), medical receipts including contributions from patients, and tuition fees from the medical colleges, wherever located.

(c) Family welfare receipts are contribution of the users, and receipts on account of strengthening of family welfare.

(d) The water supply and sanitation receipts comprise service fees, percentage charges from other Government departments, and receipts from water schemes.

(e) Housing receipts are the rental receipts for the quarters constructed under the industrial housing scheme under the charge of PWD. A major portion of the receipts from social services is

due to water supply and sanitation charges. Another substantial part is derived from medical and public health services and education, sports, art and culture and urban Development.

3.7 Receipts from Economic Services

Major items under this class are (a) Crop husbandry, (b) Animal husbandry, (c) Dairy development, (d) Fisheries, (e) Forestry and wild life, (f) Co-operation, (g) Other agricultural Programmes, (h) other rural Development Programmes (i) Major and medium irrigation, (j) Minor irrigation, (k) Power, (l) Village and small scale industries, (m) Industries, (n) Non-ferrous mining and metallurgical industries, (o) Ports and Light houses (p) Roads and bridges, (q) Inland Water Transport (r) Tourism, (s) Civil Supplies and (t) Other General Economic Services.

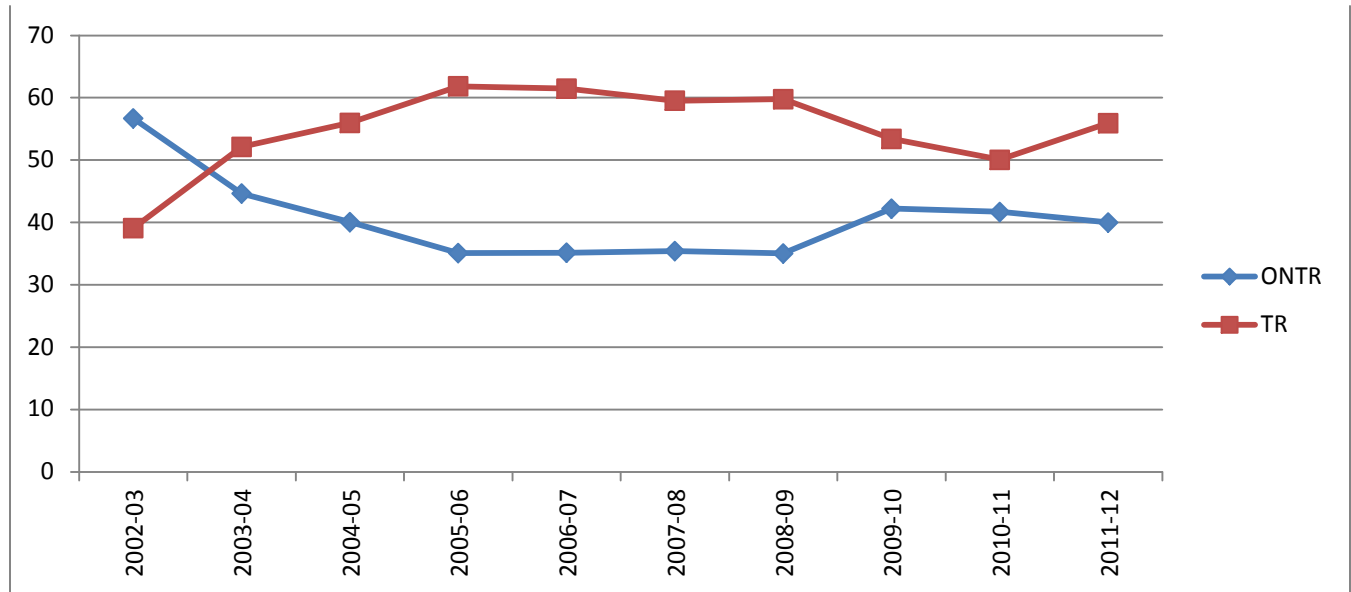
3.8 Composition and Trends In States' Own Non-Tax Revenues

Non-tax revenue is one of the constituents of the revenue receipts of the state of Goa. Trends in own non-tax revenue (ONTR) indicate that from 2006 onwards, as percent to aggregate receipts, it has gradually declined. primarily due to a major increase in capital receipts.

In the year 2002-03, State's own non-tax revenue constituted 56.69 percent of the total revenue receipts (RR) whereas the tax revenue (TR) was 36.16 percent of the total revenue receipts of the State. These proportions have since then changed considerably (see Figure 8). States own non-tax revenue as percent of the total revenue receipts is reported to have declined to 40 percent and the contribution made by the tax receipts has increased to 55.91 percent in 2011-12.

Non-tax revenue as a percentage of GSDP is an indicator of the efficiency in mobilization of these revenues in the total revenue receipts. In absolute terms, there has been a decline in the state's ONTR in the initial years of the period of study that is from 103916.5 lakhs in 2002-03 to 72473 lakhs in 2003-04. However since 2004-05 there has been a steady rise in the State's ONTR, which reached to 231212 lakhs in 2011-12.

Figure 8: Tax revenue and Own Non Tax Rev as a percentage of Revenue Receipts



Source: Author’s calculations based on “Estimates of Receipts” Various Issues, GoG.

Table 7: Revenue Receipts and its components as a percentage of GSDP at factor cost at current prices

YEAR	ONTR (in lakhs)	NTR as % of GSDP	Grants as % of GSDP	ONTR as % of GSDP	TR as % of GSDP	RR as % of GSDP
2002-03	103916.5	13.8	1.0	12.83	8.85	22.63
2003-04	72473.4	8.4	0.6	7.79	9.09	17.45
2004-05	72925.53	6.3	0.6	5.74	8.01	14.32
2005-06	76116.02	5.8	0.5	5.31	9.36	15.14
2006-07	91762.33	6.1	0.5	5.55	9.71	15.79
2007-08	104281.62	6.1	0.8	5.33	8.96	15.05
2008-09	123615.6	5.6	0.7	4.86	8.30	13.88
2009-10	173119.9	6.6	0.6	5.94	7.52	14.08
2010-11	226859.7	8.1	1.3	6.76	8.12	16.21
2011-12	231212.14	7.1	0.7	6.43	8.99	16.08

Source: Author’s calculations based on “Estimates of Receipts” GoG, various years.

In order to measure efficiency and responsiveness of revenue mobilization in response to growth in the Net State domestic product, buoyancy coefficient is calculated. Buoyancy is an indicator of the responsiveness of tax receipts to economic growth (Leuthold and Guessan 1986). It is expressed as: $\delta = (dY/dX)*X/Y$ and estimated by following relationship: $\ln Y = \alpha + \beta \ln X$

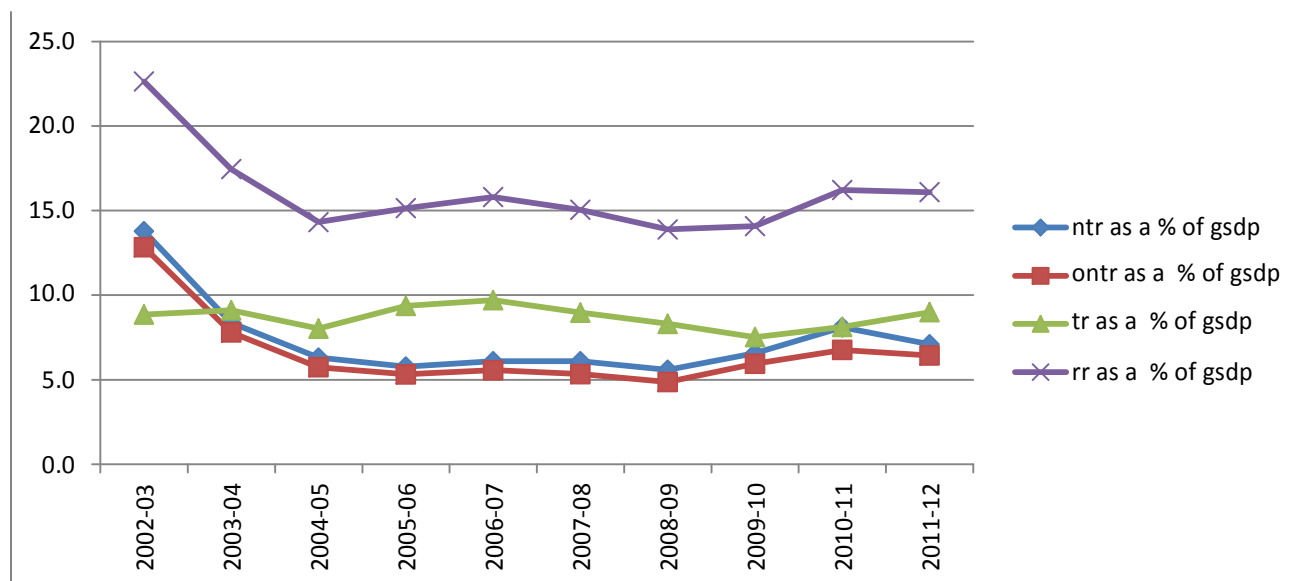
where X is independent variable (GSDP) and the dependent variable is Y; non-tax revenue (Haughton 1998). We present the beta coefficients in the table below.

Table 8: Buoyancy coefficient (B*) and components of revenue receipts

Item	Buoyancy B*
General Services	0.3
Social Services	0.6
Economic Services	1.2
Interest Receipts	2.4
Profits and Dividends	1.6
ONTR	0.7
TR	1.4

The fall in the percentage share to GSDP can be attributed to a fall in the growth rate of Goa's ONTR. The Non- tax revenues includes state's ONTR and the grants received from the Centre. The proportion of Goa's ONTR to GSDP was of 12.83percent of GSDP in 2002-03, which declined to 5.31 percent by the year 2005-06. However, it recorded an increase thereafter and rested at the level of 6.43 percent in 2011-12. It has recorded a growth rate of only 9.19 percent per year while exhibiting buoyancy of less than 1 over the period. In contrast, the proportion of TR to GSDP has been increasing from 8.85% in 2002-03 to 8.99% in 2011-12. The growth rate has also been high at 17.2 percent per year, resulting in the buoyancy value of 1.4 for the whole period.

Figure 9: Pattern of Revenue Receipts (as percent of GSDP at factor cost at current prices)



Source: Author's calculations based on "Estimates of Receipts" Various Issues, GoG.

3.10 State's Own Non-tax Revenue (ONTR) and its components

Revenue from interests, dividends and profits, general services, economic services and social services forms key constituents of the ONTR for Goa. While the State's ONTR as percent to total non-tax revenue has increased only marginally over the years; its share has declined as a percent of total revenue receipts as well as percent of GSDP (see Table 7). However, this decline can be attributed to the slowdown in the rate of growth of components of ONTR, particularly, revenue earned from interest receipts and social services. For an overall analysis of States' ONTR, these sources are analysed below in detail in respect of their contribution to revenue of the State.

The *interest receipts* component of States' ONTR merely denotes book transfers and that too internal transfer from other States Government departments. Its share as percentage to ONTR has always remained less than 2%.

Table 9: Components of State's Own Non Tax Revenue (in Rs lakhs)

Year	General Services	Social Services	Economic Services	Interest Receipts	Profits and Dividends
2002-03	37361.91	6805.51	59516.55	213	19.0
2003-04	905.56	7591.27	63753.11	221	3.0
2004-05	1550.87	7196.76	63804.64	347	27.0
2005-06	942.6	7708.66	66170.01	1277	18.0
2006-07	6708.08	8021.97	75471.93	1520	40.0
2007-08	6968.01	8161.83	87448.36	1670	33.0
2008-09	4324.82	8622.64	108534.45	2045	89.0
2009-10	30725.28	11280.58	129635.51	1364	115.0
2010-11	7013.16	13283.14	204756.22	1788	19.0
2011-12	7632.66	15634.53	205161.36	2636	148.1

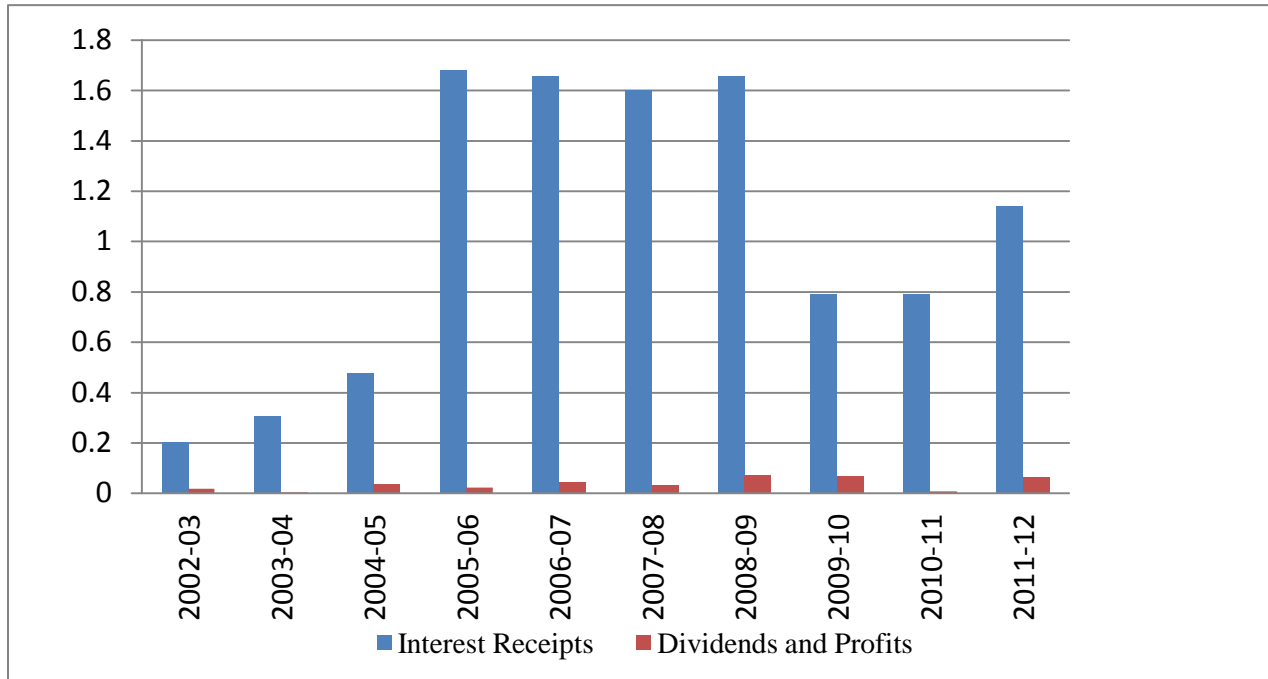
Source: (GoG (ReceiptEst) Various Years)

Revenue from dividends and profits arise from the State Government's investment in

- 1) *The shares of co-operative institutions* like Credit Cooperatives, Warehousing and Marketing Cooperatives, Consumer Cooperatives, Housing Cooperatives, Dairy Cooperatives, Other Cooperatives and Comunidades
- 2) *Statutory corporations* like Goa, Daman & Diu Industrial Development Corporation, Maharashtra State Development Corporation
- 3) *Government Companies* like Goa, Daman & Diu Economic Development Corporation, Goa, Daman & Diu Tourism Development Corporation, Goa Handicraft Rural and Small Scale Industries development Corporation, Kadamba Transport Corporation, Goa State Infrastructure Development corporation limited and 4) *Other Joint Stock Companies*.

The following figure exhibits the share of interest receipts and dividends and profits in percent to the State's ONTR.

Figure 10: Interest receipts & dividends and profits as a percentage of ONTR

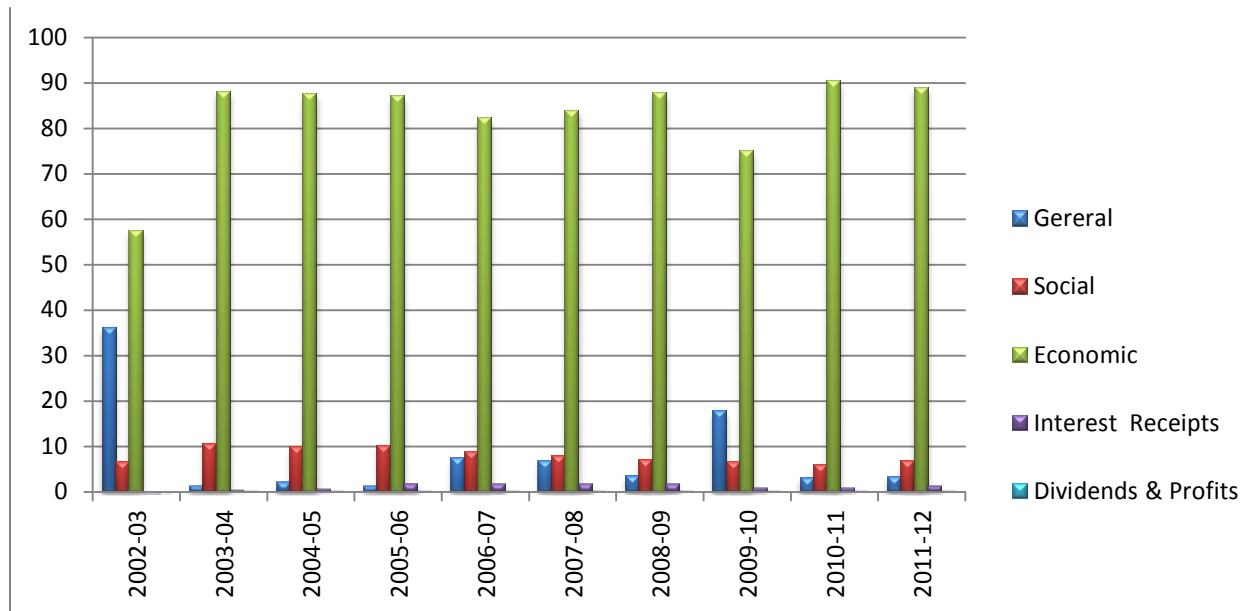


Source: Author's calculations based on (GoG (ReceiptEst) Various Years)

In majority of cases no dividend is received due to non availability of surpluses or due to losses. The share of this source to the ONTR is quite negligible (less than 1%). The above two sources of non-tax revenues, *i.e. interest receipts, profits and dividends* can hardly be relied upon for the growth of non-tax revenue sources.

As interest receipts, and dividends and profits can hardly be relied on for the growth in non-tax revenue receipts, it is the recoveries from services rendered by the Government which make a significant contribution to non-tax revenues.

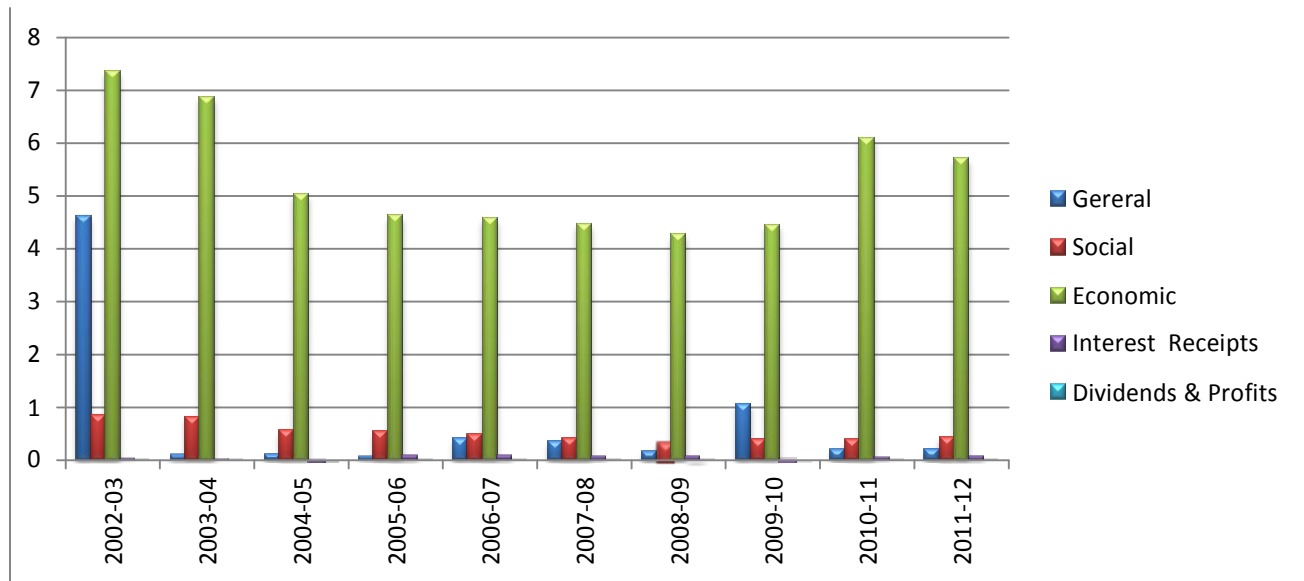
Figure 11: Own Non-Tax Revenue and its Composition (Components as a % of ONTR)



Source: Author's calculations based on (GoG (ReceiptEst) Various Years)

Other components of States' ONTR are recoveries from services rendered by the Government, which broadly may be grouped as (1) general services, (2) social services, and (3) economic services. About two-third of the States' ONTR accrues from these services. The share of these services to ONTR has been very high (see Figure 11). Among these three services, the share of economic services has remained highest, the general services have shown considerable fluctuations, and the social services have contributed consistently less at around 10 percent and below in the years under consideration. Economic services, which were contributing about 57.27 percent to States' ONTR in 2002-03, showed a tremendous rise and reached to around 87% in 2003-04 and have been consistently high thereafter. In contrast, general services, which were contributing about 35.95 percent to States' ONTR in 2002-03, had fallen considerably in 2003-04 to 1.25 percent. It was only in 2009-10 that the share of the general services rose to 17.75%, but has been quite low for the other years.

Figure 12: Components of ONTR as a percentage of GSDP at factor cost at current prices



Source: Author's calculations based on (GoG (ReceiptEst) Various Years)

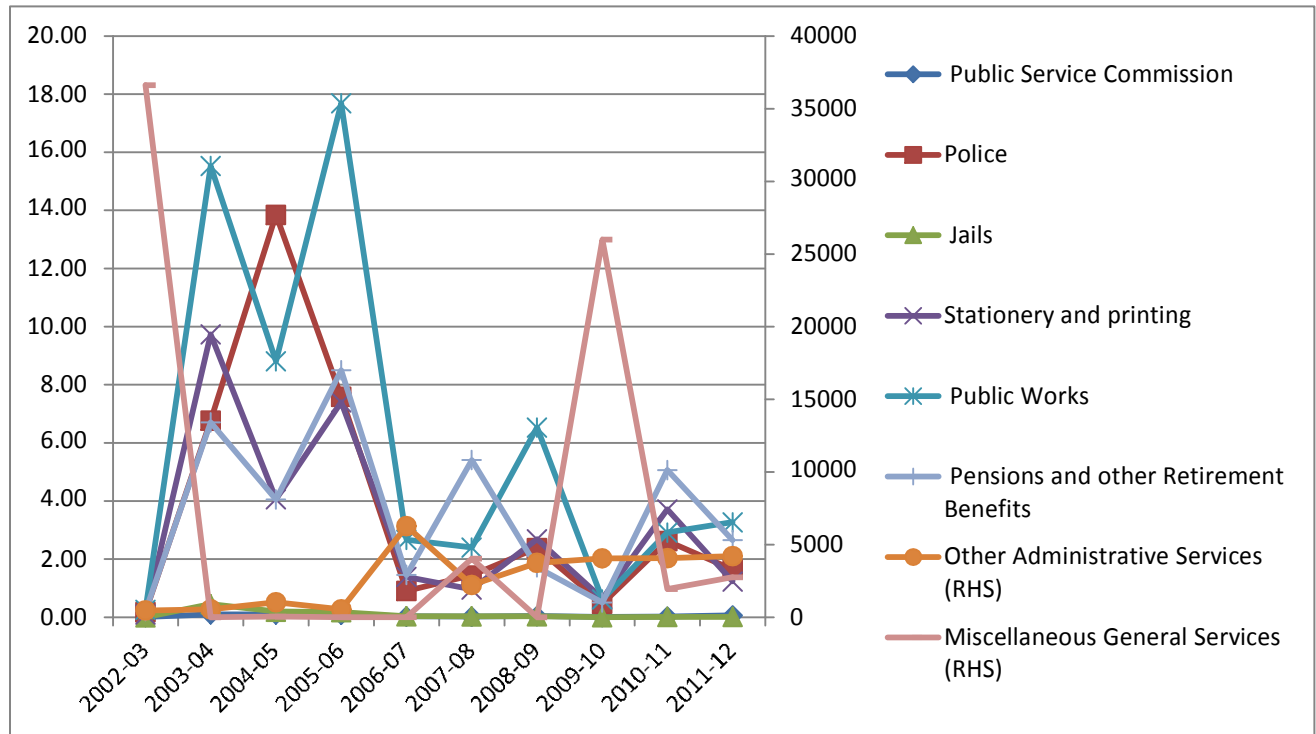
As percent to GSDP, the general services was the highest contributor in 2002-03, but showed a continuous decline thereafter. On the other hand, a rise in the share towards GSDP has been noticed for economic services. The economic services exhibited an upward trend from 2005-06 onwards, with its share rising from 5.52% to 10.75% in 2011-12.

3.11 Components of General Services

For the relative importance of the different components of the services and changes in their relative share (see Figure 13). Amongst the major constituents of General Services, initially the share of revenue from Miscellaneous General Services as percent to revenue from General Services was the highest. In absolute terms, from 36615.41 in 2002-03, it declined to 0.18 in 2003-04. However, since 2003-04, the Other Administrative Services became the chief contributor. The reason behind the massive fall in the Miscellaneous General Services is the removal of state lotteries in the corresponding period. However the reintroduction of state lotteries led to a spurt in the contribution made by the Miscellaneous General Services. Among

the remaining components only the revenue from Public Works was higher and ranged between 15 to 17 percent in 2003-04 and 2005-06.

Figure 13: Share of the components of General Services (%)



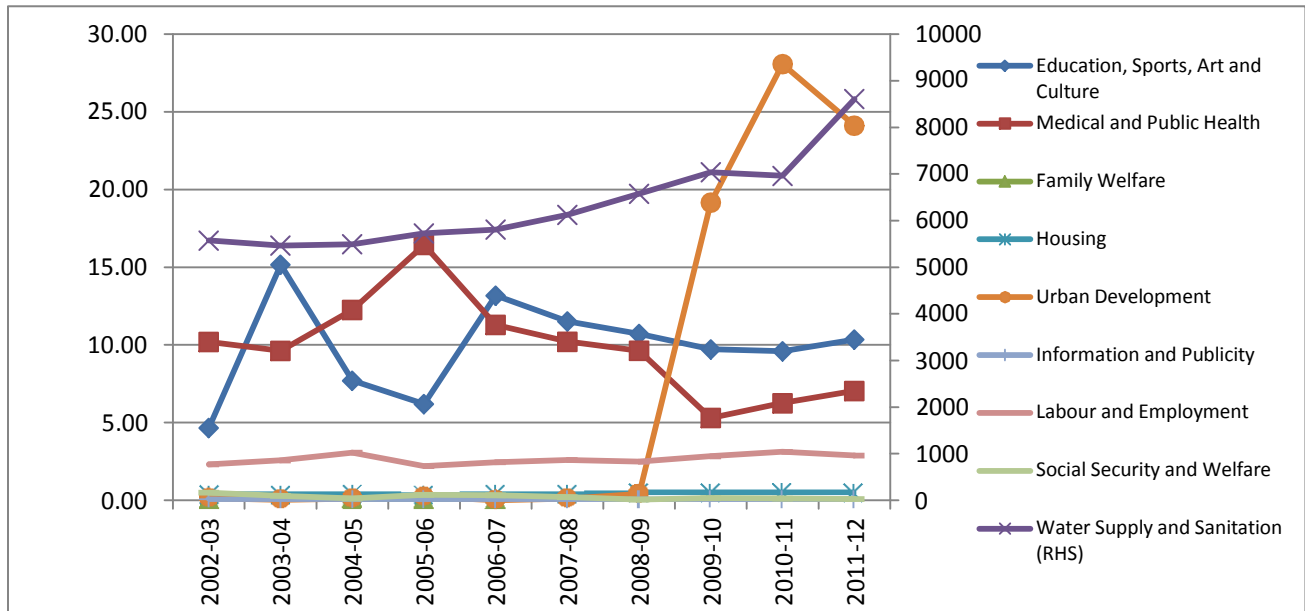
Source: Author's calculations based on (GoG (ReceiptEst) Various Years)

Note: Miscellaneous General Services and Other Administrative Services shown on right hand side secondary axis.

3.12 Components of Social Services

The major contributors under this service for the entire period of study have been water supply and sanitation. Medical and public health is another significant component of social services. However, revenue from this sector has exhibited a declining trend over the years. The receipts from education, sports, Art and culture increased from 4.66 percent in 2002-03 to 10.35 percent in 2011-12 (see Figure 14). Revenue from urban development contributed substantially to social service especially from 2009-10 onwards. Its share as percent to social services increased to 28.07 percent in 2010-11 from mere 0.04 percent in 2002-03.

Figure 14: Share of the components of Social Services (%)



Source: Author's calculations based on (GoG (ReceiptEst) Various Years).

Note: Water supply and sanitation shown on right hand side secondary vertical axis.

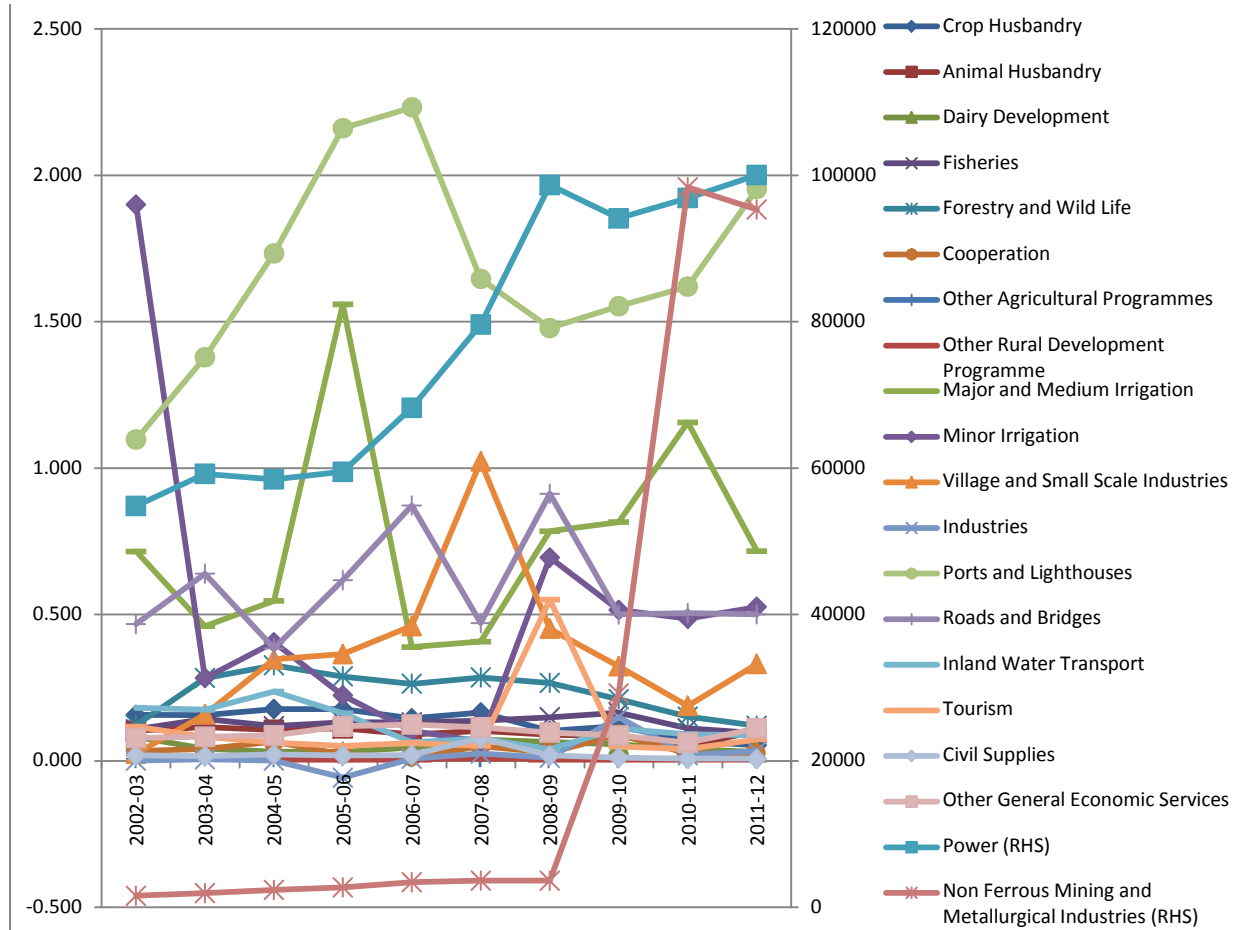
There has been rapid growth in the receipts from urban development, which comprises of Receipts under Goa Tax on Infrastructure Act, 2009.

3.13 Components of Economic Services

In the case of economic services, the two major contributors have been the Power and Non Ferrous Mining and Metallurgical Industries. Power has constituted more than 92 percent of economic services. This trend was seen till 2008-09; however during the same period the contribution made by Non Ferrous Mining and Metallurgical Industries shoot up from 2.6 percent in 2002-03 to 48.04 percent and overtook the power sector in 2010-11.

The rise in average percentage share in mineral concession fees and royalties have led to the increase in the contribution made by the component of the non-ferrous and metallurgical industries.

Figure 15: Share of the components of Economic Services



Source: Author’s calculations based on (GoG (ReceiptEst) Various Years)

Note: Power and Non Ferrous Mining and Metallurgical Industries are shown on the right hand side secondary vertical axis.

3.14 Enhancing revenues from User Charges

The non-tax revenue in lieu of the provision of goods and services by the Government is derived through ‘user charges’. These charges indicate payments that are administratively determined for the goods and services provided by the Government. Trends in revenue from non-tax sources clearly bring out the need to improve the growth of non-tax revenues in the State of Goa. Appropriate user charges serve the twin purposes of having a rational non-tax structure and generating greater means to achieve economic growth. Irrational structure of nontax sources

causes adverse economic effects, invalidating the growth objectives. From the point of view of economics, therefore, one has to keep in mind the objectives of fixation of user charges.

3.15 Actual Revenue Realisation

The actual revenue realization 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, the study presents an estimate of the percentage share of revenue realized (RR) from a service to the revenue expenditure (RE) incurred on providing that service.

The study, however, confines its scope to only 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.

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 the Government of Goa.

In this study we have taken only revenue expenditure (and not the capital 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 the further details for different components of these services for the period 2002-03 to 2011-12 are given in the following tables below.

Table 10: RR/RE for General, Social and Economic Services

Year	RR/RE for GS	RR/RE for SS	RR/RE for ES
2002-03	40.99	12.38	110.48
2003-04	1.56	13.45	103.21
2004-05	2.45	10.78	99.28
2005-06	1.27	10.46	93.11

2006-07	8.54	9.65	88.64
2007-08	8.32	8.77	86.57
2008-09	4.07	7.23	92.68
2009-10	22.74	7.59	93.30
2010-11	4.14	6.75	87.74
2011-12	4.16	7.13	77.59

Source: (GoG (FA) Various Years; GoG (ReceiptEst) Various Years)

Note: GS= General Services, SS= Social Services and ES= Economic Services

In Table 3, Goa's RR/RE from economic services has been higher than general services and social services in all the years under consideration. While RR/RE from social services in Goa decreased from 12.38 percent in 2002-03 to 7.13 percent in 2011-12; in the case of economic services, it increased to a high level of 103.21 percent in 2003-04 from the prevailing high of 110.48 percent in 2002-03.

3.16 Actual Revenue Realization from Select Services

In view of the strategic importance of some of the services in the overall non-tax sources, the study attempts to measure RR/RE for the following services. The study takes note of the entire time period 2002-03 to 2011-12.

- 1) Education, sports, art & culture,
- 2) Medical, public health and family welfare,
- 3) Water supply, sanitation
- 4) Forestry and wild life
- 5) Major and Medium Irrigation
- 6) Minor irrigation
- 7) Mines and minerals,
- 8) Transport (Roads bridges and inland water transport).
- 9) Energy
- 10) Public Works Department.

Making use of the data collected from State Finance Documents, Table 11 gives the percentage share of RR/RE of select components of general, social and economic services at a disaggregated level.

Table 11: Revenue Receipts as proportion of Revenue Expenditures for Select Services

	ESAC	Medical	WSS	Forest	Mjmd_Irr	Minor_Irr	Industry	Mines	Transport	Power	PWD
2002-03	1.1	7.8	54.4	7.8	64.7	150.2	1.1	3405.5	8.5	143.0	4.2
2003-04	4.1	7.4	66.4	15.8	43.7	23.6	6.9	2960.1	10.2	136.6	5.8
2004-05	1.6	8.0	55.5	15.5	47.3	29.6	11.2	3214.9	5.6	136.7	4.9
2005-06	1.4	10.4	53.0	13.9	123.8	12.4	14.1	3684.4	5.3	135.9	5.6
2006-07	2.6	6.8	52.8	14.5	32.6	6.2	13.2	4941.9	7.9	125.1	5.2
2007-08	2.3	5.7	52.0	13.9	25.9	3.7	17.1	4250.9	4.0	123.0	3.8
2008-09	1.7	3.8	39.0	12.4	49.3	40.3	11.4	2434.6	9.6	129.7	5.0
2009-10	1.5	2.2	36.8	9.5	43.2	22.9	9.0	13086.0	5.4	112.3	2.5
2010-11	1.5	2.5	33.8	11.0	97.3	29.2	5.6	40491.0	7.1	107.4	3.0
2011-12	1.7	2.9	33.9	6.5	55.0	33.5	10.7	37001.3	6.6	84.9	3.1

Source: (GoG (FA) Various Years; GoG (ReceiptEst) Various Years)

Note: ESAC= Education, sports, art & culture , WSS= Water supply, sanitation, MjmdIrr= Major and Medium Irrigation, MinorIrr = Minor irrigation, PWD= Public Works Department

On the whole, the actual RR/RE has been high only for two services: Mines and minerals and Power. The average RR/RE, however, was the highest for non-ferrous mining and metallurgical industries. In case of Minor Irrigation, the state exhibited high actual RR/RE only in 2002-03. Similarly for the Major and Medium Irrigation, the average RR/RE has seen a rise in certain years. In the case of water supply and Sanitation, a good revenue was earned in the years till 2007-08.

3.17 Desired Percentage of RR/RE:

Following the methodology adopted by ((Purohit and Purohit 2009), the desired percentage share of revenue realized (RR) from a service to the revenue expenditure (RE) has been calculated. Desired RR/RE is “the rate” which the States should aim at and make continuous efforts to attain. By estimating the desired revenue realization as a percent of revenue expenditure, an appraisal of the performance of the State in collecting RR/RE could be made. For estimating norms for desired RR/RE, an econometric technique for fixing norms for non-tax revenues is used. The econometric model for fixing norms of non-tax revenues will have the following functional form.

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

Where Y_t (where $t=1, 2, \dots, n$) is the non-tax revenue on a particular item collected by the State during the years, X_t is GSDP, Z_t denote a vector of characteristics of the State which are considered important for determining the level of collection of non-tax revenues for a particular service.

For the selected services following equations are used for regression:

(1) RR/RE for education, Art and culture (recedu)

$$\text{recedn} = f\{\text{pcgsdp}, \text{schedufac}\}$$

(2) RR/RE for Medical, public health and family welfare (recmed)

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

(3) RR/RE for Water supply, sanitation, (rewssani)

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

(4) RR/RE Forestry and wild life, (reforw)

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

(5) RR/RE Major irrigation and flood control (recmajirr)

$$\text{recmjirr} = f\{\text{pcnsdp, gsdpagr, gsrirarea}\}$$

(6) RR/RE Medium and Minor irrigation (recminirr)

$$\text{recminirr} = f\{\text{pcnsdp, gsdpagr, gsrirarea}\}$$

(7) RR/RE for Industries

$$\text{Reindus} = f\{\text{pcnsdp, gsdpagr, nsdpmafg}\}$$

(8) RR/RE Mines and minerals (remines)

$$\text{Remines} = f\{\text{pcgsdp, nsdpmin }\}$$

(9) RR/RE Transport (Roads bridges) (reroadbr)

$$\text{Reroadbr} = f\{\text{pcgsdp, gsdptran, nov, }\}$$

(10) RR/RE Energy

$$\text{Reenergy} = f\{\text{pcgsdp, gsdpener, consner}\}$$

(11) RR/RE for Public Works Department

$$\text{Repwd} = f\{\text{pcgsdp, pcsgdpcns}\}$$

In the above equations, for each of the ten select services, the study presents the percentage share of RR/RE for each of the select non-tax sources from the period 2002-03 to 2011-12. These regression equations give estimated RR/RE for each select service by using the average of actual

percentage share of revenue receipts of a service to the corresponding revenue expenditures for the concerned service provided by the Government as the dependent variable.

The independent variables are: per capita income (pcgsdp), proportion of relevant sectoral income in total net State Domestic Product (gsdpcons for construction, gsdpagr for agriculture, gsdpfore for forest, gsdpmin for minerals, gsdptran for transport, gsdpmanu for manufacturing, gsdpener for transport), availability of educational facilities (sch for schools,), availability of medical facilities (beds for beds in hospitals,), area under forest (areaufor), gross irrigated area (grsirrarea), road length (rdl), number of vehicles (nov). With the regression equations we can compare the adequacy of the actual average RR/RE among the selected services.

Table 12: Co-efficients of PCGSDP for the estimated RR/RE of each select service

	Constant	t	Co-efficient (pcgsdp)	t	R-square
Medical, public health and family welfare	25.567	1.48	-0.000032	-4.08	0.67
Mines and minerals	-17218	-3.78	0.305	5.94	0.85
Industries	-23.37	-5.2	-0.000037	-2.89	0.89
Energy	65.3027	1.77	-0.0004	-3.19	0.6
Public Works Department	6.045	9.11	-0.00001	-3	0.61

The above regression results (detailed regression results given in Appendix 1) suggest certain variables which are considered important for determining the level of collection of non-tax revenues for particular service desirable for the state of Goa. The pcgsdp is highly significant for the services like Medical, public health and family welfare, Mines and minerals, industries, energy and public works department. In the state of Goa, thus we can focus on these areas as non tax bases.

In the next chapter we look at the expenditure of the Government.

Chapter 3. Appendix

Regression Results:

(1) RR/RE for education, Art and culture (recedu)

$$\text{recedn} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{schedufac} + \epsilon_t$$

Source	SS	df	MS			
Model	.668893518	2	.334446759	Number of obs =	11	
Residual	7.18911974	8	.898639968	F(2, 8) =	0.37	
Total	7.85801326	10	.785801326	Prob > F =	0.7006	
				R-squared =	0.0851	
				Adj R-squared =	-0.1436	
				Root MSE =	.94797	

reedu	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcgsdp	-1.47e-09	4.97e-06	-0.00	1.000	-.0000115	.0000115
schedufac	-.0175606	.0235462	-0.75	0.477	-.0718583	.0367371
_cons	37.97238	48.07802	0.79	0.452	-72.89573	148.8405

(2) RR/RE for Medical, public health and family welfare (recmed)

$$\text{recmed} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{beds} + \epsilon_t$$

Source	SS	df	MS			
Model	47.2839784	2	23.6419892	Number of obs =	11	
Residual	22.4046763	8	2.80058453	F(2, 8) =	8.44	
Total	69.6886547	10	6.96886547	Prob > F =	0.0107	
				R-squared =	0.6785	
				Adj R-squared =	0.5981	
				Root MSE =	1.6735	

remed	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcgsdp	-.0000329	8.08e-06	-4.08	0.004	-.0000515	-.0000143
medbed	-.0054572	.0059989	-0.91	0.390	-.0192908	.0083763
_cons	25.56738	17.30906	1.48	0.178	-14.34738	65.48215

(4) RR/RE Forestry and wild life, (reforw)

$$\text{reforw} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{gsdpfore} + \epsilon_t$$

Source	SS	df	MS	
Model	33.7532587	2	16.8766293	Number of obs = 11
Residual	62.5487082	8	7.81858853	F(2, 8) = 2.16
Total	96.3019669	10	9.63019669	Prob > F = 0.1780

R-squared = 0.3505
Adj R-squared = 0.1881
Root MSE = 2.7962

reforw	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
gsdpfor	.0003631	.0003732	0.97	0.359	-.0004975	.0012237
pcgsdp	-.0000665	.0000462	-1.44	0.188	-.000173	.00004
_cons	16.89688	2.505522	6.74	0.000	11.11913	22.67462

(5) RR/RE Major irrigation and flood control (recmajirr)

$$\text{recmjirr} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{gsdpagr} + \beta_3 \text{grsirrarea} + \epsilon_t$$

Source	SS	df	MS	
Model	16338.9102	3	5446.30341	Number of obs = 11
Residual	18246.3662	7	2606.62374	F(3, 7) = 2.09
Total	34585.2764	10	3458.52764	Prob > F = 0.1901

R-squared = 0.4724
Adj R-squared = 0.2463
Root MSE = 51.055

recmajdirr	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcgsdp	-.0002973	.000252	-1.18	0.277	-.0008932	.0002986
gsdpagr	.0000423	.0011715	0.04	0.972	-.002728	.0028125
grsirrarea	-.0150582	.0077704	-1.94	0.094	-.0334324	.003316
_cons	683.3687	271.2568	2.52	0.040	41.94825	1324.789

(6) RR/RE Medium and Minor irrigation (recminirr)

$$\text{recminirr} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{gsdpagr} + \beta_3 \text{grsirrarea} + \epsilon_t$$

Source	SS	df	MS	Number of obs =	11
Model	2512.42157	3	837.473856	F(3, 7) =	0.41
Residual	14406.8067	7	2058.11525	Prob > F =	0.7530
Total	16919.2283	10	1691.92283	R-squared =	0.1485
				Adj R-squared =	-0.2164
				Root MSE =	45.366

reminirr	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcgsdp	-.000027	.0002239	-0.12	0.907	-.0005565	.0005025
gsdpagr	-.0009886	.001041	-0.95	0.374	-.0034501	.001473
grsirrarea	.0020432	.0069046	0.30	0.776	-.0142837	.01837
_cons	27.06911	241.0329	0.11	0.914	-542.8832	597.0214

(7) RR/RE for Industries

$$\text{Reindus} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{gsdpagr} + \beta_3 \text{gsdpmanu} + \epsilon_t$$

Source	SS	df	MS	Number of obs =	11
Model	233.085012	3	77.695004	F(3, 7) =	19.03
Residual	28.5746676	7	4.08209537	Prob > F =	0.0010
Total	261.65968	10	26.165968	R-squared =	0.8908
				Adj R-squared =	0.8440
				Root MSE =	2.0204

reindus	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcgsdp	-.0000378	.0000131	-2.89	0.023	-.0000688	-6.83e-06
gsdpagr	.0000499	.000052	0.96	0.370	-.0000731	.0001728
gsdpmanu	.0001141	.0000235	4.86	0.002	.0000586	.0001696
_cons	-23.37739	4.47456	-5.22	0.001	-33.95804	-12.79674

(8) RR/RE Mines and minerals (remines)

$$\text{remines} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{gsdpmin} + \epsilon_t$$

Source	SS	df	MS	
Model	1.7046e+09	2	852317233	Number of obs = 11
Residual	299809611	8	37476201.3	F(2, 8) = 22.74
Total	2.0044e+09	10	200444408	Prob > F = 0.0005

R-squared = 0.8504
Adj R-squared = 0.8130
Root MSE = 6121.8

remines	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcgsdp	.3059885	.0515525	5.94	0.000	.1871081	.4248688
gsdpmine	-.0682458	.0208411	-3.27	0.011	-.1163055	-.0201862
_cons	-17218.02	4550.978	-3.78	0.005	-27712.59	-6723.445

(9) RR/RE Transport (Roads bridges) (reroadbr)

$$\text{reroadbr} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{gsdptran} + \beta_3 \text{novch} + \epsilon_t$$

Source	SS	df	MS	
Model	24.4483331	3	8.14944436	Number of obs = 11
Residual	35.9567442	7	5.13667775	F(3, 7) = 1.59
Total	60.4050773	10	6.04050773	Prob > F = 0.2764

R-squared = 0.4047
Adj R-squared = 0.1496
Root MSE = 2.2664

reroadbr	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcgsdp	.000053	.0000408	1.30	0.235	-.0000435	.0001496
gsdptrans	-.0000274	.000019	-1.44	0.193	-.0000723	.0000175
novch	-.0001992	.0001442	-1.38	0.210	-.0005401	.0001417
_cons	15.24299	4.15029	3.67	0.008	5.429116	25.05687

(10)RR/RE Energy

$$\text{reenergy} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{consner} + \epsilon_t$$

Source	SS	df	MS	Number of obs =	11
Model	2004.19591	2	1002.09796	F(2, 8) =	6.15
Residual	1302.82268	8	162.852835	Prob > F =	0.0241
Total	3307.01859	10	330.701859	R-squared =	0.6060
				Adj R-squared =	0.5076
				Root MSE =	12.761

reenergy	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcgsdp	-.0004051	.0001271	-3.19	0.013	-.000698	-.0001121
conener	.0493355	.0227291	2.17	0.062	-.0030779	.1017489
_cons	65.30273	36.81175	1.77	0.114	-19.58532	150.1908

(11) RR/RE for Public Works Department

$$\text{repwd} = \alpha + \beta_1 \text{pcgsdp} + \beta_2 \text{pcsndpcons} + \epsilon_t$$

Source	SS	df	MS	Number of obs =	11
Model	8.29990375	2	4.14995187	F(2, 8) =	6.43
Residual	5.16663048	8	.64582881	Prob > F =	0.0217
Total	13.4665342	10	1.34665342	R-squared =	0.6163
				Adj R-squared =	0.5204
				Root MSE =	.80363

repwd	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcgsdp	-.000014	4.67e-06	-3.00	0.017	-.0000248	-3.25e-06
gsdpcons	2.09e-06	5.99e-06	0.35	0.736	-.0000117	.0000159
_cons	6.045202	.6632506	9.11	0.000	4.515744	7.574661

4. Expenditure Analysis

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).
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.
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.

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

4.1 Revenue and Capital Expenditures

In the Graph below (Figure 8) we exhibit the trend in expenditures under the broad heads of revenue and capital expenditures taken as a proportion of Total Expenditures (TE) as well as GSDP (factor cost) Current prices. The two series taken as a proportion of Total expenditures is exhibited on the Primary axis (LHS and dotted lines) and when taken as a proportion of GSDP is exhibited on the Secondary Axis (RHS continuous line).

Evidently, Revenue Expenditures (RE) constitute the bulk of the expenses for the state of Goa (see Figure 9). There is a declining trend in RE both as a proportion of TE and GSDP (the pronounced decline in 2004-5 as a proportion of GSDP may be due to a change of base year of prices as noted earlier in the case of other rations too. In addition it needs to be noted that Revenue Expenditures in 2002-3 were unusually high at Rs 20,00,05,66,657 due to a high expenditure on “BH 2075: Miscellaneous General Services” and in that on “103: State Lotteries” which alone accounted for Rs 355,07,20,644. In 2003-4 expenditure on State Lotteries had dropped to Rs 21,19,249 and in 2004-5 it remained at Rs 23,35,192. So if one were to remove “State lotteries” from our Revenue Expenditure discussion, the decline in RE noticed after 2002-

3 is not as significant even though there is a decline. Having decreased in the first few of years, RE has reversed the falling trend after 2008-9. Capital Expenditures (CE) mirror this trend -- a rising trend for most the period but there is a drop in the last year of this period.

Each of the two categories discussed above (Revenue and Capital) are further sub-categorized into three broad heads: General Services, Social Services and Economic Services (see Figure 17). We have tracked the trend in these three sub-categories as a percentage of Total Expenditures as well as a percentage of their respective totals (RE and CE). First we discuss the percentages as a proportion of TE. As discussed earlier revenue expenditures dominate capital expenditures and this is reflected in the Graph below (Figure 17). Interestingly, revenue spending on social sector shows a trend increase over the period but the share of each sub-category is similar but with a declining trend in the sub-category “Economic Services”. Capital expenditures in Economic services however dominates the other two when taken as a proportion of the Total Expenditures.

This trend is replicated when we examine them as a proportion of their own sub-totals – the three service category heads as a proportion of RE for all expenses under the revenue account (see Figure 18) and then under CE (see Figure 19).

Capital expenditure under social services has declined in the last decade and along with General Services accounts for 18-20% of the total capital expenditures (individually) leaving more than 60% for economic services.

4.2 Plan and Non-Plan

Government expenditures in Goa are classified in the Finance Accounts as well as the Budget documents into Plan and Non-Plan groups and the sum of these two under each item constitutes the “Total” expenditure for any particular period under consideration – typically a financial year or a 5- year (plan) period.

Plan Expenditures currently have three sub-categories under which expenditures are made: “State Plan”, “State Share of Centrally Sponsored Schemes (CSS)”, and “CP/GoI share of CSS”.

In our analysis we considered Plan Expenditures as one group since this disaggregation and may not be relevant for this study.

If we are to examine the distribution of expenditures under the Plan spending, the per capita spending both on capital and revenue account has been rising. Interestingly, capital expenditure have been higher than revenue expenditures but in the last year of our study period there is a sharp fall in the growth rate of per capita Plan capital expenditures which is reflected in the total per capita plan expenditures also (see Figure 20).

If we look at the Plan spending on total plan spending (sum of revenue and capital account) as a percentage of GSDP (see Figure 21), we find that there it has varied in a narrow band between 6-7% for most of the period. It had peaked in 2005-6 and dipped in between in 2008-9. After which there has been steady recovery. The peak year of the total plan expenditures is matched by plan capital expenditures and the dip year in 2008-9 is matched by a dip in the plan revenue expenditures.

However, if we separate out the revenue and capital components, we find capital spending under plan expenditures was above revenue heads for most the period but have come together at the end of this period.

Figure 16: Expenditure under Broad heads as a Percentage of Total Expenditures (Primary Axis, LHS) and GSDP (Secondary Axis, RHS)

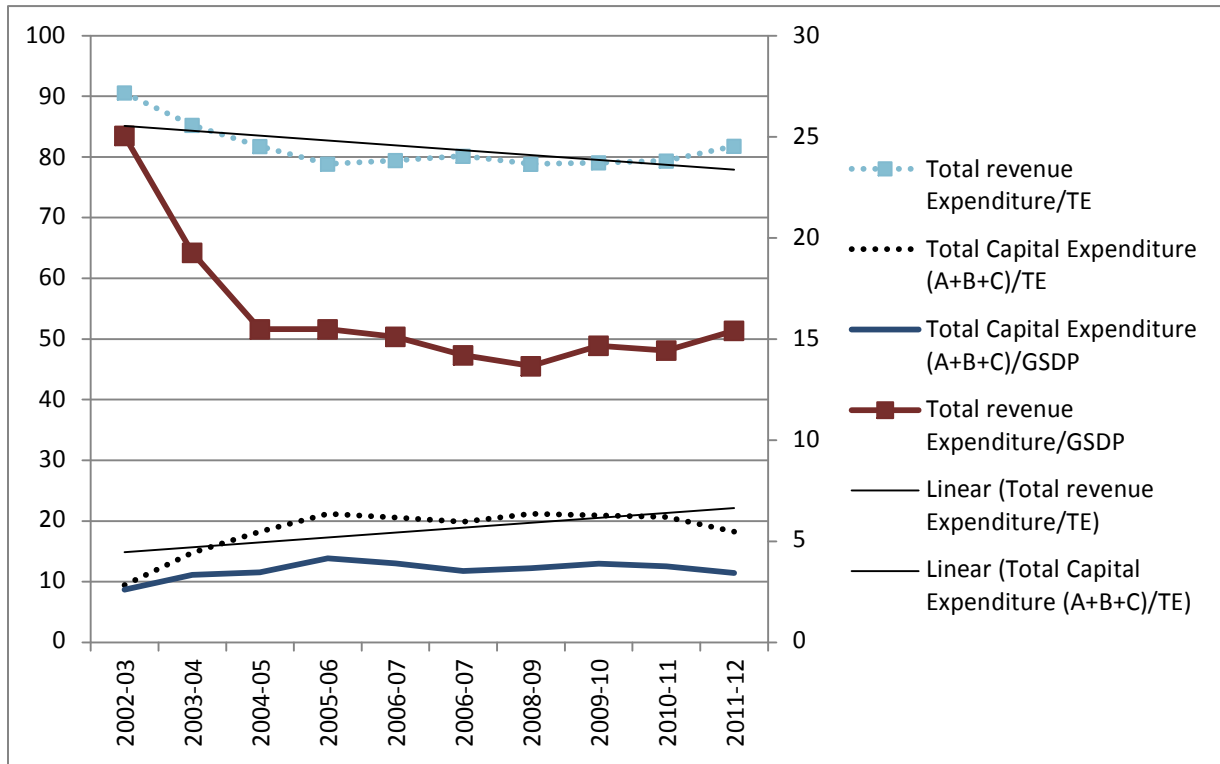


Figure 17: Trends in Categorized Expenditure as a proption of TE

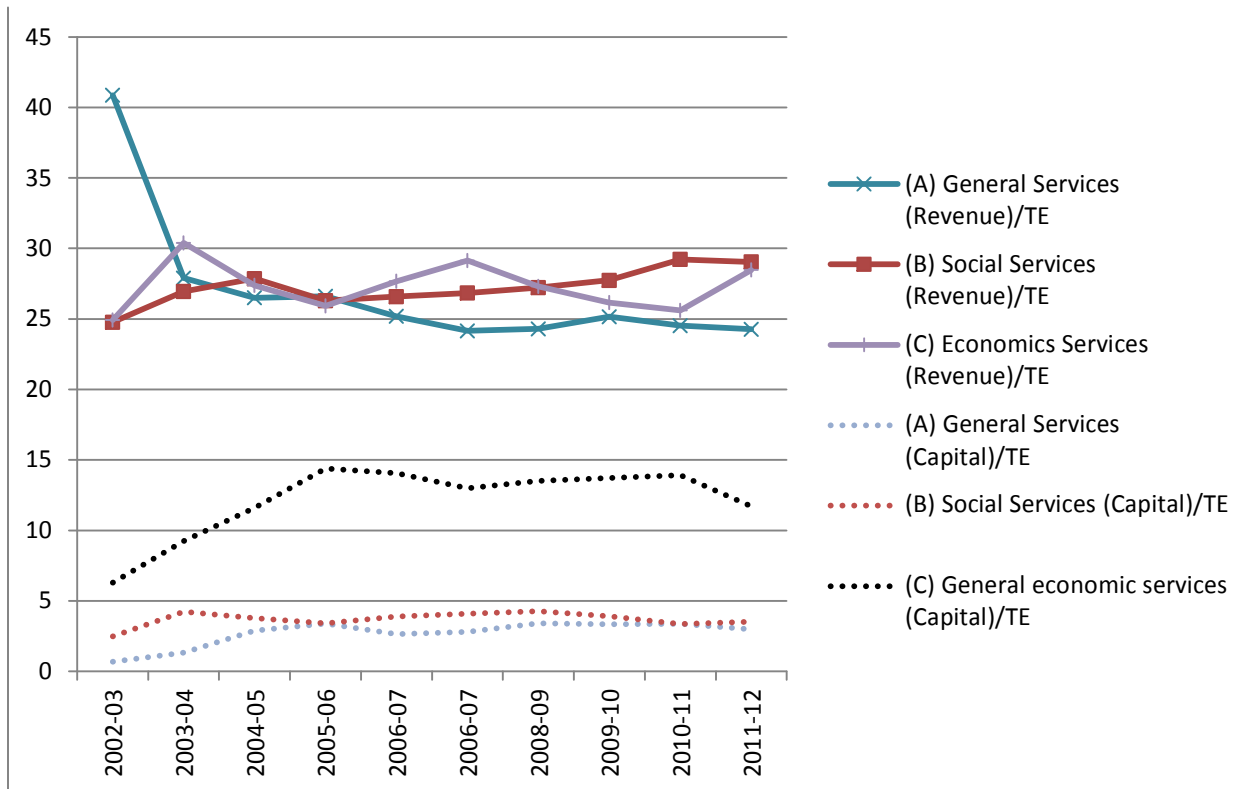


Figure 18: General, Social and Economic Service (Revenue) as a proportion of Total Revenue Expenditure

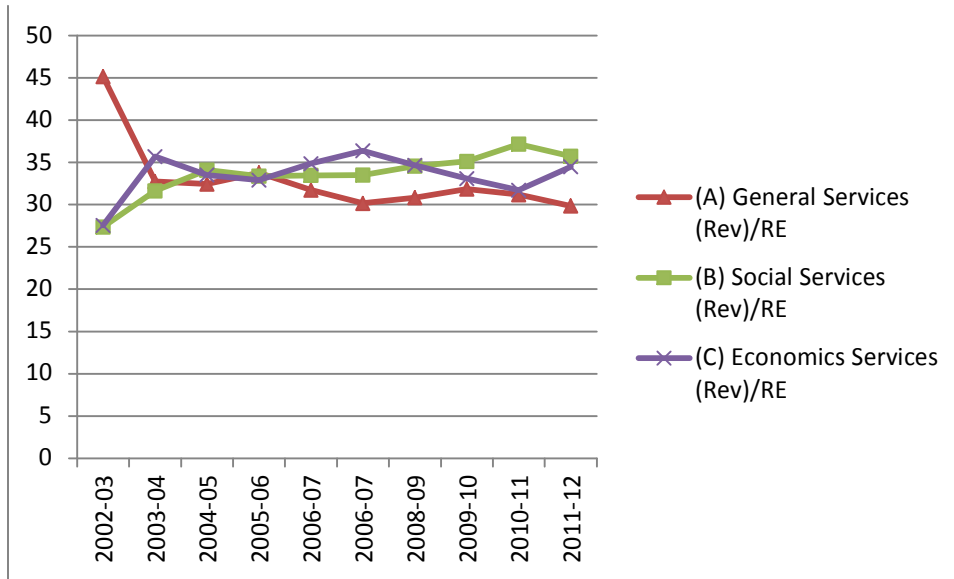


Figure 19: General, Social and Economic Service (Capital) as a proportion of Total Capital Expenditure

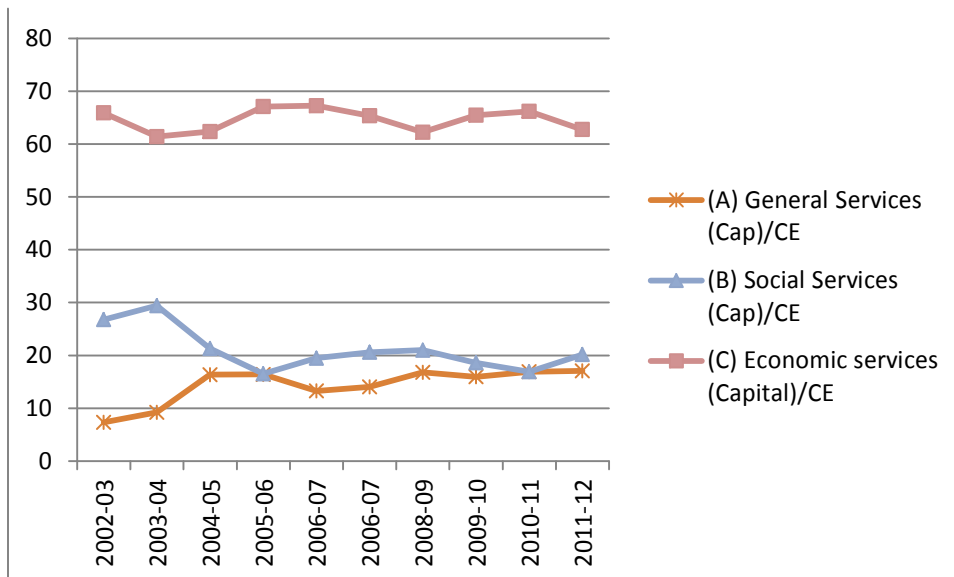


Figure 20: Per Capita Plan Expenditures (in Rs)

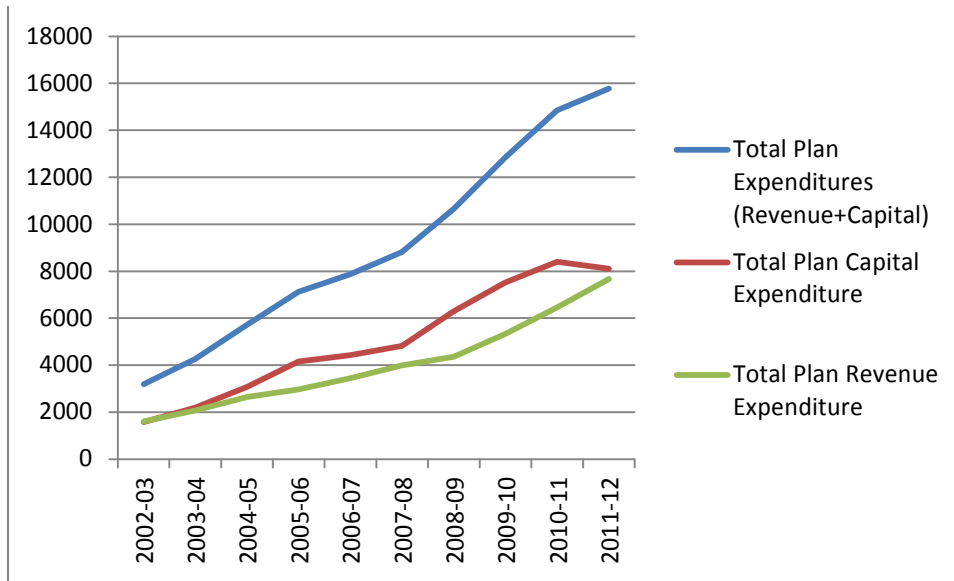
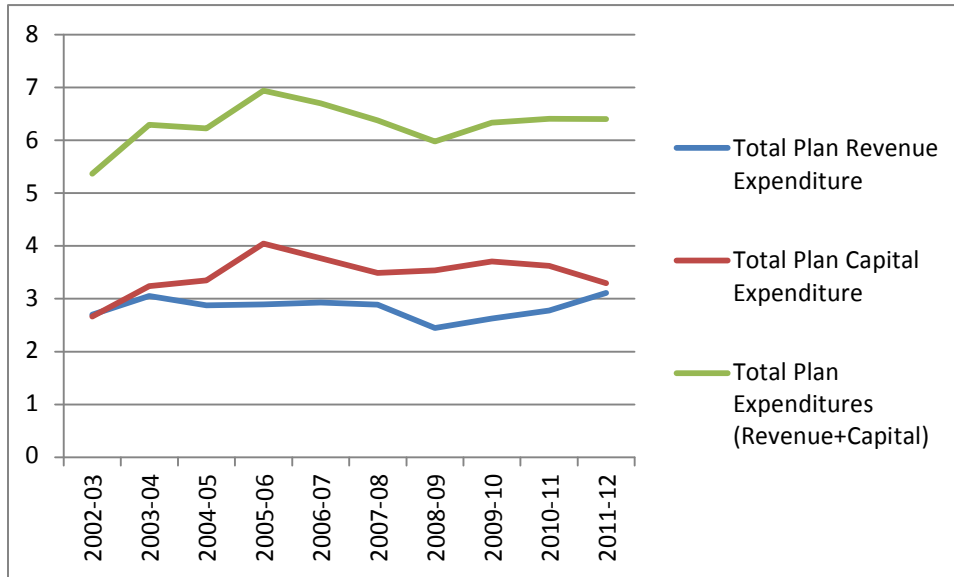


Figure 21: Plan Expenditures as a Percentage of GSDP



We now turn our attention to understanding Non-Plan expenditures. If we look at the per capita expenditures there are two notable things – almost the entire Non-plan expenditure is under

Revenue heads. Secondly, from 2007-8 there has been a steady increase in Total Revenue Non-Plan expenditures.

Table 13: Per capita Non-Plan Expenditure (Rs)

	Total Non-Plan Revenue Expenditure	Total Non-Plan Capital Expenditure	Total Non-Plan Expenditures (Revenue+Capital)
2002-03	13275.11	-69.7399	13205.37
2003-04	10975.25	3.485917	10978.74
2004-05	11582.51	3.280265	11585.79
2005-06	12932.06	10.87905	12942.94
2006-07	14331.77	31.66642	14363.44
2007-08	12301.77	35.72859	12337.5
2008-09	19993.94	-6.66837	19987.27
2009-10	24404.93	369.8745	24774.8
2010-11	26741.28	0.418113	26741.69
2011-12	30117.94	10.72014	30128.66

When we look at the non-plan expenditures as a proportion of GSDP we find that in the last few years it has been stable at about 12% of GSDP. (2002-3, 2003-4 and 2007-8 have been deviations from this, see Table 14).

Table 14: Non-plan Expenditure as a percentage of GSDP (%)

Year	Total Non-Plan Revenue Expenditure	Total Non-Plan Capital Expenditure	Total Non-Plan Expenditures (Revenue+Capital)
2002-03	22.35027	-0.11742	22.23285
2003-04	16.21049	0.005149	16.21564
2004-05	12.6093	0.003571	12.61287
2005-06	12.5861	0.010588	12.59668
2006-07	12.1843	0.026922	12.21123
2007-08	8.898017	0.025843	8.92386
2008-09	11.21636	-0.00374	11.21262
2009-10	12.03501	0.182399	12.21741
2010-11	11.52905	0.00018	11.52923
2011-12	12.21847	0.004349	12.22282

The Plan and Non-plan classification is useful from the point of view of understanding the impact of Plan allocations, it does not completely inform in Third World context of the

developmental impact of government expenditure. For this purpose, the classification of expenditures as Development and Non-Development expenditure is useful. This informs us whether expenditures are being used for enhancing social capacities or not (if we interpret development as a process of social “enabling” or empowerment).

4.3 Development and Non-Development Expenditure:

As per the classification followed in the literature, the different budget sub-heads as classified into these two categories as per the table below:

We now present the trends in Developmental and Non-development expenditures in Goa. These are sub-classified under Revenue and Capital Account.

Total Development expenditure as a proportion of GSDP has seen a steady decline in the assessment period though there seems to be a recovery in 2011-12 (see Figure 22), dashed line, measured on the primary axis). Bulk of the development expenditure is on the Revenue account but Capital Development expenditure as proportion has been rising over the years although there has been a slight dip in the last year 2011-12.

Figure 22: Development Expenditure as a percentage of GDP (factor cost at current prices)

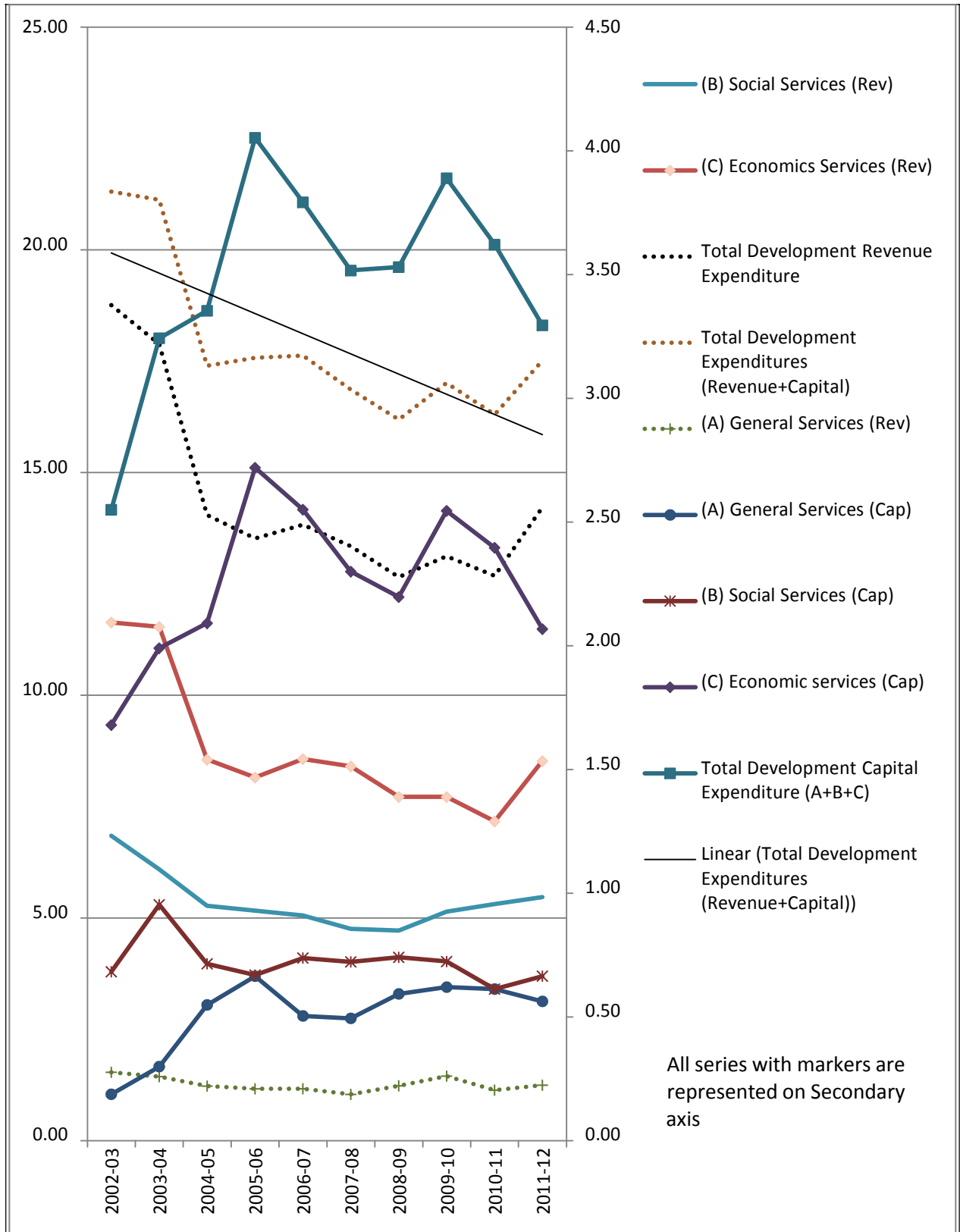


Table 15: Trends in Development expenditure

Year	Revenue Expenditure (Development) /Total Development expenditure	Capital Expenditure (Development) /Total Development expenditure	Total
2002-3	88.03	11.97	100.00
2003-4	84.65	15.35	100.00
2004-5	80.72	19.28	100.00
2005-6	76.94	23.06	100.00
2006-7	78.48	21.52	100.00
2007-8	79.14	20.86	100.00
2008-9	78.19	21.81	100.00
2009-10	77.13	22.87	100.00
2010-11	77.79	22.21	100.00
2011-12	81.18	18.82	100.00

The trends in development and Non-development expenditures as a proportion of GSDP show that after 2003-4 they have hovered around an average of about 21-22% of GSDP while Non-development expenditure has shown a marginal decline.

Table 16: Trends in Development Expenditure as a proportion of GSDP (factor cost) at current prices

Year	Total Development Expenditures (Revenue + Capital)/GSDP	Total Non-Developmental Expenditure(Revenue + Capital)/GSDP
2002-03	21.30238	11.11045
2003-04	21.11867	6.232128
2004-05	17.39573	5.277212
2005-06	17.57139	5.610466
2006-07	17.62099	5.026588
2007-08	16.85819	4.515359
2008-09	16.18289	4.449695
2009-10	17.00527	4.908894
2010-11	16.30018	4.763072
2011-12	17.50752	4.833

Table 17: Budget Items Classified as Non-Development Expenditure (Revenue & Capital Account)

	Non-Development “Revenue Expenditures”
	<i>General Services</i>

	<i>(a) Organs of State</i>
2011	Parliament/State/Union Territory Legislature
2012	President/Vice-President/Governor/Admn. Of UT
2013	Council of Ministers
2014	Administration Of Justice
2015	Elections
	<i>(b) Fiscal Services</i>
2029	Land Revenue
2030	Stamps and Registration
2039	State Excise
2040	Taxes on sales, Trade, etc
2041	Taxes on Vehicles
2045	Other Taxes and duties on commodities and services
2047	Other Fiscal Services
	<i>(c) Interest payments</i>
2048	Appropriation for reduction or avoidance of debt(charged)
2049	Interest Payments(Charged)
	<i>(d) Administrative Services</i>
2051	Public Service Commission(Charged)
2052	Secretariat General Services
2053	District Administration
2054	Treasury and Accounts Administration
2055	Police
2056	Jails
2057	Supplies and Disposals
2058	Stationary and printing
2070	Other Administrative Services
	<i>(e) Pension & Miscellaneous</i>
2071	Pensions and other retirement benefits
2075	Miscellaneous general services
2251	<i>(h) Secretariat social services</i>
	<i>(i) General Economics Services</i>
3451	Secretariat Economic Services
	Non-Developmental Capital Expenditure
	<i>(A) General services</i>
4055	Capital outlay on police
4075	Capital outlay on Misc. general services

Table 18: Budget Items Classified as Development Expenditure (Revenue & Capital Account)

	Development Revenue Expenditure
	(A) General Services
2059	Public works
	(B) Social Services
	(a) Education, Sports Art and Culture
2202	General education
2203	Technical education
2204	Sports and youth services
2205	Art and Culture
	(b) Health and family Welfare
2210	Medical and public health
2211	Family welfare
	(c) Water Supply, Sanitation, Housing and Urban Development
2215	Water supply and sanitation
2216	Housing
2217	Urban Development
2220	(d) Information and Publicity
2225	(e) Welfare of SC's, ST's and other backward classes
2230	(f) Labour and employment
	(g) Social Welfare and Nutrition
2235	Social Security and Welfare
2236	Nutrition
2245	Relief on account of Natural Calamities
	(C) Economics Services
	(a) Agriculture and Allied Activities
2401	crop husbandry
2402	Soil and water conservation
2403	Animal husbandry
2404	Dairy development
2405	Fisheries
2406	Forestry and wild life
2408	Food, storage and warehousing
2415	Agricultural Research and education
2425	Cooperation
2435	Other agricultural programmes
	(b) Rural Development
2505	Rural employment
2515	Other Rural Development programs

2551	(c) Hill Areas
	(d) Irrigation and Flood Control
2701	Major and Medium irrigation
2702	Minor irrigation
2705	Command area development
2711	Flood Control and Drainage
	(e) Energy
2801	Power
2810	Non-conventional Sources of energy
	(f) Industries
2851	Village and small industries
2852	Industries
2853	Non-Ferrous Mining and Metallurgical Industries
2885	Other outlays on industries and minerals
	(g) Transport
3051	Ports and lighthouses
3053	Civil Aviation
3054	Roads and Bridges
3055	Road Transport
3056	Inland water transport services
	(h) Science and technology
3425	other scientific research
3435	Ecology and environment
	(i) General Economics Services
3452	Tourism
3454	Census, Surveys and Statistics
3456	Civil Supplies
3475	Other general economic services
	Development Capital Expenditure
	(A) General Services
4055	Capital outlay on police
4058	Capital outlay on stationary and printing
4059	Capital outlay on public works
4070	Capital outlay on other administrative services
4075	Capital outlay on Misc. general services
4202	Capital outlay on education, sports, Arts and culture
4210	Capital outlay on medical and public health
	(c) Water Supply, Sanitation, Housing and Urban Development
4211	Capital outlay on family welfare
4215	Capital outlay on water supply and sanitation
4216	Capital outlay on housing
4217	Capital outlay on Urban development

	(B) Social Services
4225	Capital outlay on welfare of SC's, ST's and OBC's
4235	Capital outlay on social security and welfare
4250	Capital outlay on other social services
	(C) Economic services (Capital)
	(a) Agriculture and Allied Activities
4401	capital outlay on crop husbandry
4402	Capital outlay on soil and water conservation
4403	Capital outlay on animal husbandry
4405	Capital outlay on fisheries
4406	Capital outlay on forestry and wildlife
4407	Capital outlay on plantations
4408	capital outlay on food, storage and warehousing
4415	capital outlay on agricultural research and education
4425	Capital outlay on cooperation
4515	Capital Outlay on other rural development programmes
4551	Capital outlay on hill areas
	(d) Irrigation and Flood Control
4701	Capital outlay on major and medium irrigation projects
4702	capital outlay on minor irrigation projects
4705	Capital outlay on command area development
4711	Capital outlay on flood control projects
	(e) Energy
4801	Capital outlay on power projects
4810	Capital outlay on Non-conventional sources of energy
	(f) Industries
4851	Capital outlay on village and small industries
4853	Capital outlay on Non-ferrous mining and metallurgical industries
4885	Other capital outlay on industries and minerals
	(g) Transport
5051	Capital outlay on ports and lighthouses
5053	capital outlay on civil aviation
5054	capital outlay on roads and bridges
5055	Capital outlay on road transport
5056	Capital outlay on inland water transport services
5075	Capital outlay on other transport services
5425	Capital outlay on other scientific and environ research
5452	Capital outlay on tourism
5475	General Economic Services

In the next chapter we examine the trends in deficits of the Government of Goa.

5. Deficits

Deficit is possibly the most important indicator to assess the state of finances. We present below trends in the three deficits, revenue, fiscal and primary, conventionally used below in the state of finances of the Government of Goa. Deficit is essentially the outcome of the success in revenue collection and ability to meet expenditure commitments made by the state government under various constraints and demands. The profile of deficits has implications for debt build up, ability to finance plan schemes and in the determination of transfer of financial resources as recommended by the Finance Commission.

5.1 Definition of fiscal deficit: sources and uses

In view of the differences we encountered in the estimates of fiscal deficit as calculated in this Report and as given in the Budget At a Glance tabled by the Government of Goa at the time of presentation of the state budget, it is desirable that we spell out the definition of the fiscal deficit so as to avoid any confusion.

As per the accounts of the Government comprising consolidated fund, contingency fund and the public accounts, the balance sheet is as follows¹.

Public borrowing (net) + SavPF (net) + Contingency Fund (net) + Withdrawal (net) from Public Account + (Opening Balance – Closing Balance) = Revenue Deficit + Capital Outlay + Net Lending + TCF (disbursement-Receipts)

The left hand shows how the resources are garnered from borrowing and other sources excluding that of revenue collection and the right hand side shows how the borrowed resources are utilized.

¹ Revenue Receipts (RR) + Internal Debt Receipts (IDR) + Loans from the Centre (LCR) + Recovery of loans (RLR) + Transfer to Contingency Fund (TCFR) + Contingency Funds Receipts (CFR) + Receipts from Savings/Provident funds (SavPFR) + Public accounts Receipts excluding SavPF (WithdrawalR) + Opening Balance (OB) = Revenue expenditure (RD) + Capital Outlay (CO) + Loans disbursed (RLD) + Internal debt Repayment (IDD) + Repayment of Loans to the Centre (LCD) + Transfer to Contingency Fund disbursement (TCFD) + Contingency fund disbursement (CFD) + Savings and PF repayment (SavPFD) + Public accounts disbursement (WithdrawalD) + Closing balance (CB)

(IDR – IDD) + (LCR – LCD) + CFR – CFD + SavPFR-SavPFD + (WithdrawalR-WithdrawalD) + OB-CB) = RR – RD + CO + (RLD-RLR) + TCFR – TCFD

If we ignore the TCF, the borrowed resources in net terms are used up in funding the deficit in the revenue account, if there is any and the rest is spent on capital formation which is essentially the sum of capital expenditure on general, social and economic services and lending extended by the government in net terms. All the components on the left do not add to the accretion to the debt stock. Withdrawal from the public account excluding that of savings and provident fund is often substantial. We can have a broader definition of the fiscal deficit obtained from the accounting identity as shown above as shown in the Table 19 below.

We can also have a definition based on the right hand side of the identity bereft of the TCF component.

Fiscal Deficit = Revenue Expenditure + Capital outlay + Loans and advances extended – (Revenue receipts + Recovery of Loans + non-debt capital receipts (e.g., disinvestment of public assets)).

As we observe above, both the estimates of fiscal deficits derived from the financing side and composition side are the same. Because of occasional heavy reliance on contingency fund and cash balances from the borrowing side, we prefer to consider the purview of fiscal deficit as the sum of (a), (b) and (c).

Table 19: Key components of Fiscal Deficits as percentages of GSDP, two series

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<i>As percentages of GSDP</i>										
(1) Net borrowing 1/	4.20	5.08	4.04	4.71	3.78	2.69	2.61	2.43	2.06	1.19
(2) Withdrawal of funds	0.43	-0.45	0.29	-0.66	-0.58	-0.46	1.00	1.84	-0.61	1.49
(a) Revenue deficit	2.06	1.51	0.97	0.15	-0.86	-0.85	-0.40	0.44	-1.96	-0.83
(b) Capital outlay	2.55	3.24	3.35	4.05	3.79	3.52	3.53	3.72	3.64	3.29
(c) Net lending	0.07	0.04	0.01	0.01	0.01	0.09	0.07	0.08	0.00	-0.02

<i>As percentages of GSDP_A</i>										
(1) Net borrowing 1/	4.20	5.08	4.47	5.06	4.15	3.31	3.80	3.67	3.26	1.86
(2) Withdrawal of funds	0.43	-0.45	0.32	-0.71	-0.64	-0.57	1.45	2.78	-0.97	2.32
(a) Revenue deficit	2.06	1.51	1.07	0.16	-0.94	-1.05	-0.59	0.66	-3.10	-1.29
(b) Capital outlay	2.55	3.24	3.71	4.35	4.16	4.34	5.14	5.63	5.76	5.13
(c) Net lending	0.07	0.04	0.02	0.01	0.02	0.12	0.11	0.13	0.01	-0.03
Source: Finance Accounts, various issues.										

Observations

1. Though fiscal deficit is defined as the extent of net borrowing which adds to the debt stock, we observe that net borrowing as a percentage of fiscal deficit has not been 100 percent but hovering around of 100 percent. The extent by which it falls below 100, indicates the extent by which the government relied on other sources, like withdrawal from the Public Accounts excluding small savings and provident funds, contingency fund and cash balances which do not add to the accumulation of the debt stock.
2. If it exceeds 100 percent, as it did in 2003-04, 2005-06, 2006-07 and 2010-11, the government used up borrowed resources to inject into the public account.
3. For 2008-09, 2009-10 and 2011-12, the government relied heavily on the withdrawal from the public account other than savings and PF to finance the fiscal deficit.
4. Though the GoG does not depend on Ways and Means advances on routine basis, the transactions are substantial in amount.
5. The GoG also had deficits in the overall account during 2002-03, 2006-07, 2008-09 and 2011-12. Since overall deficit is defined as opening balances minus closing balances, a deficit in the overall account means the government accumulated cash balances.

5.2 An Analysis of trends in Deficit

In the table below, we present the trends in the three deficits as percentages of both the series of GSDP. Because of the substantial differences in the GSDP profile for the period under study, we present both the scenarios.

Table 20: Deficits as percentages of GSDP: Alternate series based on two estimates of GSDP figures (‘-‘means surplus)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Deficits as percentages of GSDP										
Revenue deficit	2.06	1.51	0.97	0.15	-0.86	-0.85	-0.40	0.44	-1.96	-0.83
Fiscal Deficit	4.68	4.79	4.33	4.21	2.95	2.76	3.20	4.24	1.68	2.45
Primary Deficit	1.08	1.19	1.64	1.27	0.24	0.38	1.08	2.14	-0.35	0.40
Deficits as percentages of GSDP_A										
Revenue deficit	2.06	1.51	1.07	0.16	-0.94	-1.05	-0.59	0.66	-3.10	-1.29
Fiscal Deficit	4.68	4.79	4.80	4.51	3.24	3.41	4.66	6.42	2.66	3.81
Primary Deficit	1.08	1.19	1.81	1.37	0.27	0.47	1.57	3.24	-0.55	0.63

Source: (GoG (FA) Various Years)

After incurring deficit in the revenue account till 2005-06, the state finances experienced a turnaround with revenue surplus in 2006-07. Only once in 2009-10, the revenue account balance turned into a deficit of 0.44 percent of GSDP. This also possibly led to a rise in the fiscal deficit in 2009-10 to 4.24 by nearly one percentage point compared to the previous year.

There has been a gradual decline in the fiscal deficit from a peak of 4.68 percent in 2002-03 to 2.45 in 2011-12. The fall was rather sharp in 2010-11 from 4.24 in the previous year to 1.68. This could be attributable to the sudden emergence of a surplus in the revenue account. Primary

deficit exhibits a fall throughout the period barring during 2010-11, there was in fact a primary balance.

In the second set of estimates, the scenario looks a little more alarming due to the lower growth in the GSDP estimates. Fiscal deficit of around of 3.8 percent in 2011-12 is on the higher side and showed resistance to decline during the period.

5.3 Fiscal deficit and capital outlay

Table 21: Revenue Deficit and Capital Outlay

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Revenue Deficit % of FD	44.07	31.55	22.35	3.63	-29.03	-30.72	-12.64	10.29	-116.64	-33.76
Capital outlay % of FD	54.45	67.71	77.31	96.26	128.55	127.32	110.32	87.73	216.43	134.46
Capital outlay % GSDP_1	2.55	3.24	3.35	4.05	3.79	3.52	3.53	3.72	3.64	3.29
Percentage rise in CO	11.73	46.04	41.33	36.23	7.92	9.93	30.29	20.85	12.65	-3.07

Source: (GoG (FA) Various Years)

During the years the government had revenue surpluses, it could be expected that the GoG must have had resources to spend on capital formation. Capital outlay as a percentage of fiscal deficit went up and exceeded 100 percent as the revenue account had surpluses. But if we look at the actual rise in capital outlay either in terms of GSDP or in terms of percentage rise over the previous year, the rise has always been rather modest and did not respond positively to the surplus generated in the revenue account as indicated by the extent of percentage rise in the capital outlay and also in terms of GSDP.

Table 22: Financing and Composition of Fiscal Deficit (in Rs lakhs)

	2002-03	2003-04	2004-05	2005-06	2007-08	2007-08	2008-09	2009-10	2010-11	2011-12
Fiscal deficit (estimated from defn.)										
Financing of Fiscal Deficit	-28096	44517	55106	60293	48725	71080	64317	123577	56426	88037
(1) Net borrowing 1/	33985	47229	51330	67519	62470	52564	66299	70640	69172	42937
(2) Withdrawal of funds	3514	-4195	3662	-9461	-9595	-9080	25317	53564	-20606	53495
(3) Ways & means adv.(RBI & Centre)										
(4) Overall deficit	-1,020	1,600	19	2,214	-4,149	10,596	-10,293	-334	7,561	-8,395
(5) Contingency fund (net)	-64,576	-117	95	22	0	17,000	-17,006	-293	299	0
Fiscal deficit =(1+2+3+4+5)	-28096	44517	55106	60293	48725	71080	64317	123577	56426	88037
Composition of Fiscal deficit										
(a) Revenue deficit	16,705	14,047	12,318	2,186	-14,145	-16,615	-10,280	12,720	-65,817	-29,724
(b) Capital outlay	20,639	30,142	42,600	58,035	62,634	68,853	89,707	108,408	122,120	118,377
(c) Net lending	560	328	188	72	236	1,842	1,890	2,449	122	-617

(d) Transfer to contingency fund	-66000	0	0	0	0	1700 0	- 1700 0	0	0	0
Fiscal Deficit = (a+b+c+d)	-28,096	44,517	55,106	60,293	48,725	71,080	64,317	123,577	56,425	88,036
Fiscal Deficit	37904	44517	55106	60293	48725	54080	81317	123577	56425	88036
Primary Deficit	8718	11082	20807	18257	4045	7394	27337	62315	- 1161 1	14519
<i>Menu: Revenue Deficit/Fiscal Deficit (%)</i>	<i>44.071</i>	<i>31.554</i>	<i>22.354</i>	<i>3.625</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>10.293</i>	<i>NA</i>	<i>NA</i>
<i>Menu: Net borrowing/fiscal deficit %</i>	<i>90</i>	<i>106</i>	<i>93</i>	<i>112</i>	<i>128</i>	<i>97</i>	<i>82</i>	<i>57</i>	<i>123</i>	<i>49</i>
Source: Finance Accounts, various issues.										

5.4 Plan Financing

In the table below, we provide the sources of plan financing in the state. The notable feature is the significant rise in the BCR in 2009-10 (LE) by nearly 70 percent and then again by 60 percent in 2011-12 (LE). This enabled the state to make larger amount resources for the purpose of plan financing.

Table 23: Plan Financing in the State of Goa

		2007-08	2007-08	2008-09	2008-09
A. State Government		AP	LE/RE	AP	LE
1. State's Own Resources (a to e)		416.44	416.44	572.08	566.86
a	BCR	383.33	383.33	534.08	528.76
b	MCR (excluding deductions for repayment of loans)	5.01	5.01	4.90	5.00

c	Plan grants from GOI (TFC)	8.10	8.10	8.10	8.10
d	ARM	20.00	20.00	25.00	25.00
e	Adjustment of opening balance	0.00	0.00	0.00	0.00
2. State's Borrowings (i) - (ii)		803.08	803.08	826.14	762.82
(i) Gross Borrowings (a to g)		908.93	908.93	908.55	908.55
a	State Provident Fund	30.00	30.00	30.00	30.00
b	Small Savings	150.00	150.00	164.56	124.00
c	Negotiated Loans	31.00	31.00	57.00	57.00
d	Loans for EAPs & B2B	75.00	75.00	75.00	75.00
e	Notional Loans for NCA	76.57	76.57	77.07	40.56
f	Market Borrowings	546.36	546.36	504.92	581.99
g	Bonds/Debentures	0.00	0.00	0.00	0.00
(ii) Repayments		105.85	105.85	82.41	145.73
State's Own Resources (incl. Borrowings)		1219.52	1219.52	1398.22	1329.68
3	Central assistance(Grants)	96.82	96.82	202.78	202.78
a	Normal Central Assistance	32.81	32.81	33.03	33.03
b	ACA for EAPs	0.00	0.00	0.00	0.00
c	Others	64.01	64.01	169.75	169.75
Total A : State Government Resources (1+2+3)		1316.34	1316.34	1601.00	0.00
Public Sector Enterprises (PSE)					
	Internal Resources	10.25	10.25	13.17	13.17
	Extra Budgetary Resources	75.00	75.00	90.00	90.00
	Budgetary Support	2.45	2.45	2.99	2.99
Total B: PSEs (1+2+3)		87.70	87.70	106.16	106.16
Local Bodies					
I. Urban Local Bodies					
a	Internal resources	12.73	12.73	14.00	14.00
b	Extra Budgetary resources	0.00	0.00	0.00	0.00
c	Budgetary Support	10.39	10.39	11.35	11.35

	Total (a+b+c)	23.12	23.12	25.35	25.35
II. Rural Local Bodies					
a	Internal resources	-0.76	-0.76	1.54	1.54
b	Extra Budgetary resources	0.00	0.00	0.00	0.00
c	Budgetary Support	3.60	3.60	3.60	3.60
	Total (a+b+c)	2.84	2.84	5.14	5.14
Total C : Local Bodies (I + II)		25.96	25.96	30.49	30.49
PSEs & Local Bodies (B+C)		113.66	113.66	136.65	136.65
AGGREGATE PLAN RESOURCES (A+B+C)		1430.00	1430.00	1737.65	1669.11

Table 24: Plan Financing in the State of Goa (continued)

		2009-10	2009-10	2010-11	2010-11	2011-12
A. State Government		AP	LE	AP	LE	AP
1. State's Own Resources (a to e)		1027.42	987.9	1318.13	1149.7	1845.65
A	BCR	1020.95	981.43	1283.23	1119.79	1684.14
B	MCR (excluding deductions for repayment of loans)	-1.63	-1.63	27.49	22.46	23.5
C	Plan grants from GOI (TFC)	8.10	8.1	7.41	7.45	58.01
d	ARM	0.00	0	0	0	80
E	Adjustment of opening balance	0.00	0	0	0	0
2. State's Borrowings		925.99	915.48	808.1	870.87	919.36

(i) - (ii)						
(i) Gross Borrowings (a to g)		1104.51	1094	1012.54	1075	1124.36
a	State Provident Fund	30.00	30	220	220	220
b	Small Savings	21.95	24	50	100	125
c	Negotiated Loans	142.00	142	125	525	100
d	Loans for EAPs & B2B	150.00	178	150	100	100
e	Notional Loans for NCA	40.56	0	0	30	30
f	Market Borrowings	720.00	720	467.54	100	549.36
g	Bonds/Debentures	0.00	0	0	0	0
(ii) Repayments		178.52	178.52	204.44	204.13	205
State's Own Resources (incl. Borrowings)		1953.41	1903.38	2126.23	2020.57	2765.01
3	Central assistance(Grants)	149.94	215.53	441.06	441.06	277.97
a	Normal Central Assistance	37.30	37.3	44.62	44.62	50.68
b	ACA for EAPs	0.00	0	0	0	0
c	Others	112.64	178.23	396.44	396.44	227.29
Total A :		0.00	0	0	0	0

State Government Resources (1+2+3)						
Public Sector Enterprises (PSE)						
	Internal Resources	13.17	13.17	14	-35	-40.89
	Extra Budgetary Resources	90.00	90	91.2	0	0
	Budgetary Support	2.99	2.99	3.15	194.04	224.76
Total B: PSEs (1+2+3)		106.16	106.16	108.35	159.04	183.87
Local Bodies					0	0
I. Urban Local Bodies					0	0
a	Internal resources	14.00	14	15.23	20.34	23.91
b	Extra Budgetary resources	0.00	0	0	0	0
c	Budgetary Support	11.35	11.35	12.47	7.05	7.43
	Total (a+b+c)	25.35	25.35	27.7	27.39	31.34
II. Rural Local Bodies					0	0
a	Internal resources	1.54	1.92	2.1	12.95	21.71

b	Extra Budgetary resources	0.00	0	0	0	0
c	Budgetary Support	3.60	4.12	4.56	30.96	40.1
	Total (a+b+c)	5.14	6.04	6.66	43.91	61.81
Total C : Local Bodies (I + II)		30.49	31.39	34.36	71.3	93.15
PSEs & Local Bodies (B+C)		136.65	137.55	142.71	230.34	277.02
AGGREGATE PLAN RESOURCES (A+B+C)		2240.00	2256.46	2710	2691.97	3320

Source: Planning Commission website

Having examined the states of deficits in each year of the study period we next examine the trends in the stock of debt which has important long term consequences in terms of financial stability.

6. Debt: An Analysis of Trends

Debt overhang in the state has remained a matter of concern. As per the FRBM Act in the state, the outstanding debt as a percentage of GSDP was supposed to remain restricted to 30 percent by 2009. We discuss below the trends in the debt to GSDP ratio in terms of the two GSDP series, the changing composition of the debt structure and trends in some commonly used indicators of debt management.

The figures pertaining to debt as discussed below are based on the Finance Accounts estimates. The public debt outstanding as given in the Budget in Brief tabled during the presentation of the state budget refers to the public debt comprising only internal debt and debt owed to the central government. Internal debt includes market loans and loans from other financial organisations including LIC, NABARD, etc. Total debt outstanding as given in the Finance Accounts includes debt accumulated due to small savings and provident fund as well. We furnish below two estimates of debt stock as percentages of GSDP.

A rough and simple indicator for assessing debt sustainability is to look at the trend in the debt to GSDP ratio and here again the GSDP series that we use becomes crucial for the analysis.

6.1 Debt sustainability

As per the 12th Finance Commission, debt to GSDP ratio should remain limited to 30 percent. Since the GSDP has been growing at a high rate, the public debt to GSDP ratio has fallen from 31.5 to 19.1 percent and total debt from 37.4 to 23.2 percent during the period, 31 March 2002 to 31 March 2012. If we consider the alternate series of GSDP, the debt to GSDP settles at a level higher than 30 percent. Public debt outstanding in terms of share in GSDP falls marginally from 31.5 to 29.8 percent but total Debt outstanding being defined inclusive of savings and provident fund, the ratio declines only marginally from 37.4 to 36.1 percent during the period.

Table 25: Debt as a percentage of GSDP

	2002 -3	2003 -4	2004 -5	2005 -6	2006 -7	2007 -8	2008 -9	2009 -10	2010 -11	2011- 12
Internal Debt	10.0	11.0	8.8	8.1	7.4	8.1	8.2	19.0	18.0	17.4
Loans from Centre	21.5	21.0	18.7	20.6	21.0	18.1	13.9	1.9	1.7	1.7
Small Savings, PF, etc	5.5	5.2	4.1	4.0	3.8	3.7	3.5	3.9	3.9	4.1
Total Public Debt	31.5	32.0	27.5	28.8	28.4	26.2	22.1	20.9	19.7	27.7
Total Debt	36.9	37.2	31.6	32.8	32.2	29.9	25.6	24.8	23.6	31.8
<i>Debt as a percentage of GSDP_A</i>										
Internal Debt	9.1	10.0	11.0	9.8	8.7	8.1	10.0	11.9	28.7	28.6
Loans from Centre	22.4	21.5	21.0	20.7	22.1	23.0	22.3	20.3	17.6	2.6
Small Savings, PF, etc	5.9	5.5	5.2	4.6	4.3	4.2	4.5	5.1	5.9	6.1
Total Public Debt	31.5	31.5	32.0	30.4	30.9	31.2	32.3	32.2	46.3	31.2
Total Debt	37.4	36.9	37.2	35.0	35.2	35.4	36.8	37.3	52.2	37.3
Notes: For 2004 1 Apr, debt is increased by Rs 4500 lakhs due to proforma corrections FA 2004-05 page 177).										

Source: (GoG (FA) Various Years)

Further, internal debt to GSDP ratio has risen during the period commensurate with a fall in the debt owed to the Centre. Debt on account of small savings and provident fund has declined as a percent of GSDP.

6.2 Changing Composition of the Debt Structure

In terms of composition of debt, the percentage of internal debt in outstanding public debt increased from 29 percent to 91 percent during 2002 to 2012 whereas the debt to central government fell from 71 to 9 percent during the same period.

If savings and provident fund are included in the definition of outstanding debt, similar trends prevail for internal debt and debt to the central government associated with a marginal 2 percentage points rise in the savings and provident fund from 16 to 18 percent during the same period. For internal debt, the share rose from 24 percent to 75 percent whereas debt owed to the Centre fell from 60 percent to a mere 7 percent.

Table 26: Composition of Outstanding Debt

Description of debt	2002-3	2003-4	2004-5	2005-6	2006-7	2007-8	2008-9	2009-10	2010-11	2011-12
6003 - Internal Debt of the State Government										
101 - Market Loans	71	70	82	86	88	90	93	91	43	43
103 - Loans from LIC	6	4	3	3	2	2	2	1	0	0
105 - Loans from NABARD	3	3	3	3	2	1	1	4	3	4
108 - Loans from NCDC	0	0	0	0	0	0	0	0	0	0
109 - Loans from Other Institution	14	12	9	9	7	6	5	5	2	2
110 - Ways and Means Advances	6	11	6	0	0	0	0	0	0	0
111- Special securities issued to NSSF	0	0	0	0	0	0	0	0	51	51
Share of Internal Debt in Public Debt	29	32	34	32	28	26	31	37	91	92
Share of Internal Debt in Debt-(I)	24	27	30	28	25	23	27	32	77	77
6004 - Loans and Advances given by the Central Government										
Non-Plan Loans	43	46	56	65	73	77	79	79	86	15
Loans for State/Union Territory Plan Schemes	57	53	44	34	27	22	21	21	13	83
Loans for Central Plan Schemes	0	0	0	0	0	0	0	0	0	0
Loans for Centrally Sponsored Plan	1	1	0	0	0	0	0	0	0	2

Schemes										
Ways and Means Advances	0	0	0	0	0	0	0	0	0	0
Share of Debt to Centre in Public Debt	71	68	65	68	72	74	69	63	56	8
Share of Debt to Centre in Total Debt (II)	60	58	56	59	63	65	61	54	47	7
(a) Small Savings	0	0	0	0	0	0	0	0	0	0
(b) Provident Funds	98	98	98	98	98	98	98	98	98	98
(c) Other Accounts	2	2	2	2	2	2	2	2	2	2
Small Savings, Provident Funds, etc (III)	16	15	14	13	12	12	12	14	16	16
<i>Total (I+II+III)</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>139</i>	<i>100</i>

Out of internal debt, the share of market loans has fallen from 71 percent to 44 percent associated with a sudden jump in the share of debt arising out of Special Securities issued to NSSF during 2009-10 to 2011-12. For debt arising out of loans and advances given by the Centre, the share of non-plan loans has declined associated with a rise in the share of loans for state plan schemes.

Overall, the debt to GSDP ratio profile as it emerges is not really a matter of concern. There was a sudden dip in the extent of borrowing both from the market as well as the Centre in 2005-06.

The effective interest rate on outstanding debt has over the years fallen from nearly 13 percent to 11 percent which is the ratio interest payments in period t and debt outstanding in the period (t-1). The other ways of looking at the problem of debt sustainability is to examine whether debt poses problem for fiscal management. We consider percentage of revenue receipts which has to be earmarked for interest payment and repayment of loans as a percentage of gross borrowing.

Table 27: Select Indicators of Debt Management

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Effective interest rate on debt (Int_t/D_{t-1})	13.1	11.3	12.0	10.8	10.0	10.5	10.9	11.2	11.1	11.3
Interest payment % Revenue Receipts	15.92	20.60	18.85	19.38	17.12	15.86	15.30	14.94	12.50	12.72
Repayment of Loans on Public Debt % Revenue Rec.	48.65	62.22	42.22	3.26	2.81	2.32	4.71	4.33	3.82	4.81
Repayment of Loans on Public Debt % Public Debt Rec.	73.89	70.18	61.97	10.11	11.46	13.53	25.09	28.12	27.93	51.87

Source: (GoG (FA) Various Years)

At the beginning of the period, almost 16 percent of revenue collections was used up for payment of interest which declined to a less than 13 percent. Repayment of loans in terms of revenue receipts has declined substantially but in terms of gross borrowing, the ratio fell and then it began to rise again. In 2011-12, nearly 52 percent of borrowing was used up in repayment of loans.

6.3 Rate of interest wise Debt composition

The maturity profile of internal debt and debt arising out of loans and advances given by the Centre for the last two years of our period under consideration is shown below. Almost 70 percent of the internal debt is concentrated within the range 8 to 10 percent as usually the case is.

Table 28: Internal Debt of the State government as on 31.03.2011 (Rs in lakhs)

Rate of Interest	Market loans Bearing Rates	Others#	Total	Share
4.00 to 4.99	-		-	
5.00 to 5.99	17,354.7	-	17,354.7	2.86
6.00 to 6.99	22,675.4	25,286.4	47,961.8	7.92
7.00 to 7.99	61,068.4	-	61,068.4	10.08
8.00 to 8.99	152,927.0	9.9	152,936.9	25.25
9.00 to 9.99	2,000.3	267,880.7	269,880.9	44.55
10.00 to 10.99	4,000.5	41,553.9	45,554.5	7.52
11.00 to 11.99	360.2	3,146.8	3,506.9	0.58
12.00 to 12.99	600.0	3,589.9	4,189.9	0.69
13.00 to 13.99	20.0	1,602.5	1,622.5	0.27
Floating Rate	-		1,716.7	0.28
UT Loans	-		-	
Total	261,006.47	344,786.69	605,793.16	100.00
#others include loans raised from LIC, HUDCO, NCDC, PFC, NABARD and other special securities issued to NSSF of the Centre.				

Source: (GoG (FA) Various Years)

Table 29: Internal Debt of the State government as on 31.03.2012 (Rs in lakhs)

Rate of Interest	Market loans Bearing Rates	Others#	Total	share
4.00 to 4.99	-		-	
5.00 to 5.99	17,354.7	-	17,354.7	2.78
6.00 to 6.99	22,675.4	31,260.3	53,935.7	8.62
7.00 to 7.99	61,068.4	-	61,068.4	9.77
8.00 to 8.99	170,000.0	7.5	170,007.5	27.19
9.00 to 9.99	5,000.0	267,242.1	272,242.1	43.53
10.00 to 10.99		41,160.7	41,160.7	6.58

11.00 to 11.99	0.2	3,146.8	3,146.9	0.50
12.00 to 12.99		113.6	113.6	0.02
13.00 to 13.99	20.0	4,571.1	4,591.1	0.73
Floating Rate	-		1,738.2	0.28
UT Loans	-		-	
total	276,118.70	349,240.11	625,358.81	100.00
#others include loans raised from LIC, HUDCO, NCDC, PFC, NABARD and other special securities issued to NSSF of the Centre.				

Source: (GoG (FA) Various Years)

The rate of interest wise composition of debt owed to the Centre shows that outstanding debt in the range of 7.00 to 7.99 percent dipped from 54.5 percent to 45.72 percent as on end March 2012. This was largely due to a sudden rise in the loans taken at floating rates of interest.

Table 30: Loans and Advances from the Central Government as on 31.03.2011 and as on 31.03.2012 (Rs in lakhs)

Rate of Interest	Total	Share	Total	Share
4.00 to 4.99				
5.00 to 5.99				
6.00 to 6.99				
7.00 to 7.99	30309.07	54.49	28288.49	45.72
8.00 to 8.99				
9.00 to 9.99	6991.84	12.57	6498.04	10.50
10.00 to 10.99	28.73	0.05	26.05	0.04
11.00 to 11.99	14.26	0.03	10.07	0.02
12.00 to 12.99	317.29	0.57	287.91	0.47
13.00 to 13.99	21.33	0.04	18.63	0.03
Floating Rate	2990.62	5.38	14515.66	23.46
*			-2715.53	-4.39
UT Loans	14948.54	26.88	14948.54	24.16
total	55621.68	100	61877.86	100
Note: * Due to misclassification of repayment NSSF for the FY 2011-12.				

Source: (GoG (FA) Various Years)

7. Fiscal Responsibility & Budget Management Act (FRBM) and Medium Term Fiscal Policy (MTFP)

Government of Goa in accordance with the recommendation of the 12th Finance Commission, enacted the FRBM Act in 2006-07. It was felt that in view of the high level of fiscal deficit and debt outstanding, enactment of the Act was an imperative for prudent fiscal management. The State wanted to reap the benefits of writing off of the debt repayment to the central government and debt restructuring by effecting reduction in the revenue deficits and fiscal deficits. As per the requirement, the revenue deficit should be reduced to zero and the fiscal deficit should remain restricted within 3 percent of GSDP by 2008-09.

As per the provisions of the FRBM, a medium term fiscal policy statement (MTFP) was presented for the period 2006-07 to 2009-10. The MTFP² pointed out that to achieve the targeted fiscal deficit, capital outlay might be required to be pruned other than raising revenues. Reduction in the allocation for social sector in particular education and health was required to be reined in.

As explained earlier, the entire analysis of fiscal restructuring is crucially dependent on the assumption of GSDP projections. The GSDP series used in this Report had a higher growth profile and hence in terms of percentage shares would look smaller than the ones discussed and referred in the MTFP. It may be noted that while the nominal figures for the fiscal variables are the ones which are reported in the budget and hence amenable to policy decision directly, the ratios are not because the growth in GSDP is determined by a host of factors the fluctuations in which make the entire exercise of targeting ratios rather difficult.

7.1 MTFP

The MTFP required the revenue deficit to be altogether eliminated by the end of 2008-09 and zero thereafter. Fiscal deficit as a percentage of GSDP was to be reduced to 3 and maintained at that level thereafter. The public debt to GSDP ratio should remain within 30 percent and interest payment to revenue receipts to not exceed 20 percent.

² Medium Term Fiscal Policy for Goa, February 2009, Finance Division (Debt Management).

If we compare the performance of the state government during the year 2008-09 with the scenario envisaged in the MTFP, we make the following observations.

The fiscal deficit target could not be achieved as it just above 3 percent and the revenue account registered a surplus. As per the MTFP (February 2009), the actual fiscal performance compared favourably with the fiscal scenario projected. Though the debt remained within limit, capital outlay was not compressed. However, the revenue expenditure on social services and economic services were trimmed. As desired in the MTFP

7.2 The emerging fiscal scenario

As noted in our earlier discussion on deficits, the fiscal deficit declined from 4.6 percent of GSDP in 2002-03 to 2.45 in 2011-12, well below the stipulated 3 percent. The revenue deficit turned into surplus in 2006-07 barring in 2009-10 when the revenue balance turned negative. The primary deficit is low as interest payment has declined by nearly 0.6 percentage points along with the decline in the fiscal deficit. The Debt to GSDP ratio is not alarming either. The question is how has the decline in the fiscal deficit been achieved?

7.3 Revenue Collection and fiscal adjustment

Revenue receipts as a percent of GSDP declined by 6.5 percentage points from 22.63 percent of GSDP in 2002-03 to 16.1 percent in 2011-12. Excluding miscellaneous general services (i.e., lotteries), the revenue receipts fell from 18.1 to 16.1 percent during the period. What led to the decline without jeopardising the state of fiscal balances indicates that expenditure borne the burden of adjustment in achieving revenue balance and targeted fiscal deficit.

During the period, own tax revenue witnessed a fall by one percentage point from 7.44 to 7.1 which is mainly attributable to the decline in the sales tax collection. Collection from sales tax was 5.4 percent in terms of GSDP in 2001-02 and it declined to 4.6 percent in 2011-12. There has been a gradual decline in the share of sales tax in own tax revenue. Share in central taxes has experienced a marginal rise from 1.4 to 1.9 percent in terms of GSDP during the period. The fall in revenue receipts is mainly due to a fall in the non-tax revenue (excluding lotteries) which fell

by nearly 2 percentage points during the period. Out of the four components of non-tax revenue, the decline is concentrated mainly in the economic services. Social and general services have been contributing less to the exchequer in the recent years. We must note that the GSDP growth has been on the higher side which would also partly explain the decline in the contributions from the non-tax sources in terms of GSDP.

7.4 Expenditure adjustment

Total expenditure comprising revenue expenditure and capital outlay has declined by more than 9 percentage points from 27.3 percent to 18.6 percent. However, net of lotteries, revenue expenditure went down by 5 percentage points from 20.3 of GSDP in 2002-03 to 15.3 percent in 2011-12. Capital outlay has risen albeit not significantly. Compared to CAGR at 11.8 for revenue expenditure (in Rs lakhs), capital outlay had a CAGR of 22 percent which is impressive. So it is the fall in revenue expenditure which could explain the downward trend in the total expenditure which led to the targeted fiscal adjustment in the face of moderate and nearly stagnant tax buoyancy and declining non-tax revenue. The shares of revenue expenditure on general, social and economic services in GSDP have all declined. There was a commensurate fall in the expenditure in miscellaneous general services due to lottery. Though CAGR of social and general services during the period were 15.6 and 14.0 percent, the growth rates were lower the nominal growth in GSDP. Education, health and energy grew at the compound annual growth rates of 15.1, 16.5 and 11.8 percent respectively.

Revenue surplus and a declining fiscal deficit enabled the state to increase spending on capital outlay which went beyond 4 percent in 2005-06 and came down to 3.3 percent in 2011-12. As noted earlier, during the entire period, the capital outlay grew at an impressive growth of 22 percent per annum. The need for mobilizing resources from market fell drastically in 2005-06 and loans from the Centre in 2007-08.

Table 31: Major Fiscal Variables as percentages of GSDP

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
A. Revenue Expenditure	24.7	19.0	15.3	15.3	14.9	14.2	13.5	14.5	14.3	15.3
<i>Revenue Exp net of misc Gen Ser</i>	20.3	18.9	15.3	15.3	14.9	14.2	13.5	14.5	14.2	15.3
B. Capital Outlay	2.5	3.2	3.4	4.1	3.8	3.5	3.5	3.7	3.6	3.3
Total Expenditure (A+B)	27.2	22.2	18.6	19.3	18.7	17.7	17.0	18.2	17.9	18.6

<i>Financed by</i>										
I. Revenue Receipts	22.6	17.5	14.3	15.1	15.8	15.0	13.9	14.1	16.2	16.1
Own tax revenue	7.4	7.6	6.7	7.7	7.8	6.9	6.7	6.1	6.4	7.1
Share in central taxes	1.4	1.5	1.3	1.7	1.9	2.0	1.6	1.5	1.7	1.9
Non tax revenue	12.8	7.8	5.7	5.3	5.6	5.3	4.9	5.9	6.8	6.4
<i>Non tax excl misc General services</i>	8.3	7.8	5.7	5.3	5.6	5.1	4.9	5.1	6.7	6.4
Grants	1.0	0.6	0.6	0.5	0.5	0.8	0.7	0.6	1.3	0.7
II. Net borrowing	4.2	5.1	4.0	4.7	3.8	2.7	2.6	2.4	2.1	1.2
III. Withdrawal from Pub Account	0.4	-0.5	0.3	-0.7	-0.6	-0.5	1.0	1.8	-0.6	1.5
Total Receipts (I+II+III)	27.3	22.1	18.6	19.2	19.0	17.3	17.5	18.3	17.7	18.8
<i>Fiscal indicators</i>										
Revenue Deficit	2.1	1.5	1.0	0.2	-0.9	-0.8	-0.4	0.4	-2.0	-0.8
Fiscal Deficit	4.7	4.8	4.3	4.2	2.9	2.8	3.2	4.2	1.7	2.5
Primary Deficit	1.1	1.2	1.6	1.3	0.2	0.4	1.1	2.1	-0.3	0.4
Outstanding Public Debt	31.5	32.5	27.5	28.8	28.4	26.2	22.1	20.9	19.7	19.1
Outstanding Debt	36.9	37.7	31.6	32.8	32.2	29.9	25.6	24.8	23.6	23.2
Notes: The differences in the estimates between total expenditure and total receipts are due to the non-consideration of other sources of financing fiscal deficit such as contingency fund, cash balances, etc. Total expenditure does not take into consideration the extent of net lending because the estimates in terms of GSDP are low.										

Source: (GoG (FA, Demand for Grants, AFS) Various Years)

In view of the substantial differences in the estimates of GSDP we have used with the one used by the Government of Goa in their MTFP and budget projections, we give below the trends in the major fiscal variables in terms of the alternate series of GSDP (GSDP_A).

Table 32: Major Fiscal Variables as percentages of GSDP alternate

	2002 -03	2003 -04	2004 -05	2005 -06	2007 -08	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12
A. Revenue Expenditure	24.7	19.0	16.9	16.4	16.4	17.5	19.6	22.0	22.6	23.7
B. Capital Outlay	2.5	3.2	3.7	4.3	4.2	4.3	5.1	5.6	5.8	5.1
Total Expenditure (A+B)	27.2	22.2	20.6	20.8	20.6	21.8	24.7	27.6	28.3	28.9
<i>Financed by</i>										
I. Revenue Receipts	22.6	17.5	15.9	16.2	17.4	18.5	20.2	21.3	25.7	25.0
Own tax revenue	7.4	7.4	7.6	7.5	8.2	8.6	8.6	9.7	9.2	10.1
Share in central taxes	1.4	1.5	1.4	1.8	2.1	2.5	2.4	2.2	2.8	2.9
Non tax revenue	12.8	7.8	6.4	5.7	6.1	6.6	7.1	9.0	10.7	10.0
Grants	1.0	0.6	0.6	0.5	0.6	0.9	1.0	0.9	2.1	1.0
II. Net borrowing	4.2	5.1	4.5	5.1	4.2	3.3	3.8	3.7	3.3	1.9
III. Withdrawal fr Pub Account	0.4	-0.5	0.3	-0.7	-0.6	-0.6	1.4	2.8	-1.0	2.3

Total Receipts (I+II+III)	27.3	22.1	20.6	20.6	20.9	21.3	25.4	27.8	28.0	29.2
<i>Fiscal indicators</i>										
Revenue Deficit	2.1	1.5	1.1	0.2	-0.9	-1.0	-0.6	0.7	-3.1	-1.3
Fiscal Deficit	4.7	4.8	4.8	4.5	3.2	3.4	4.7	6.4	2.7	3.8
Primary Deficit	1.1	1.2	1.8	1.4	0.3	0.5	1.6	3.2	-0.5	0.6
Public Debt	31.5	32.5	30.4	30.9	31.2	32.3	32.2	31.6	31.2	29.8
Debt incl Savings&PF	36.9	37.7	35.0	35.2	35.4	36.8	37.3	37.5	37.3	36.1

Source: (GoG (FA) Various Years)

Since the fluctuations in GSDP growth may often obscure the true movements in the variables in the analysis of the MTFP and FRBM, we also present below the annual growth rates.

Table 33: Major Fiscal Variables: Annual growth rates

	2002 -03	2003 -04	2004 -05	2005 -06	2007 -08	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12
A. Revenue Expenditure	-4.8	-11.8	10.2	12.7	12.7	12.5	23.3	23.4	13.2	14.6
B. Capital Outlay	11.7	46.0	41.3	36.2	7.9	9.9	30.3	20.8	12.6	-3.1
Total Expenditure (A+B)	-3.5	-6.4	14.7	17.0	11.7	12.0	24.7	22.9	13.1	11.0
<i>Financed by</i>										
I. Revenue Receipts	-2.1	-11.5	12.1	19.2	20.3	12.8	19.9	16.2	32.7	6.2
Own tax revenue	5.8	17.9	20.5	28.0	17.8	5.2	24.6	4.1	21.4	19.3
Share in central taxes	6.4	18.7	20.0	50.9	27.6	26.1	5.5	2.8	36.7	16.4
Non tax revenue	-8.5	-30.3	0.6	4.4	20.6	13.6	18.5	40.0	31.0	2.0
Grants	29.9	-31.8	37.3	-7.8	33.0	67.8	23.4	-2.1	150.7	-47.6
II. Net borrowing	-6.8	39.0	8.7	31.5	-7.5	-15.9	26.1	6.5	-2.1	-37.9
III. Withdrawal fr Pub Account	-40.2	-	-	-	1.4	-5.4	-	111.6	-	-
		219.4	187.3	358.4			378.8		138.5	359.6
Total Receipts (I+II+III)	-3.8	-7.0	15.4	16.0	14.2	7.7	31.5	20.2	11.0	13.8
<i>Fiscal indicators</i>										
Revenue Deficit	-26.9	-15.9	-12.3	-82.3	-	17.5	-38.1	-	-	-54.8
					747.2			223.7	617.4	
Fiscal Deficit	-8.2	17.4	23.8	9.4	-19.2	11.0	50.4	52.0	-54.3	56.0
Primary Deficit	-42.6	27.1	87.8	-12.3	-77.8	82.8	269.7	128.0	-	-
									118.6	225.1
Public Debt	14.1	18.6	15.6	18.0	13.7	9.3	9.7	8.1	8.8	3.9
Debt incl Savings&PF	12.8	17.3	14.6	16.8	13.3	9.9	11.3	10.8	9.6	5.4

Source: (GoG (FA) Various Years)

8. Evaluation of Finances of Panchayati Raj Institutions and Urban Local Bodies in State of Goa

In this chapter we look at the bodies entrusted with grass roots local governance in the state of Goa.³

8.1 Introduction

India economy is constituted of multi-level governance structure. At the national level we have central government, followed by state and union territories at regional or state level and Panchayati Raj Institutes and Urban Local Bodies at local level in rural and urban areas respectively. With the aim of achieving gram swaraj and implementing the policy of decentralized governance in its true spirits, the Central Government in 1992 introduced the 73rd and 74th Amendments to the Constitution. The 73rd Amendment gave constitutional status to PRI's and 74th amendment gave it to ULB's in urban areas. Many provisions were incorporated under the 73rd Amendment Act with the intention of making panchayats self-governing institutions. The important provisions of the 73rd Amendment Act are: compulsory elections to PRIs once in five years, reservation of seats and executive positions for Scheduled Castes/Scheduled Tribes (SCs/STs), backward classes (optional) and women, the constitution of Finance Commission and District Planning Committees. These have made the panchayats one of the permanent political structures in India. In most parts of India, Panchayats have a three-tier structure below the state, namely, Zilla/District Panchayat at the district level, intermediate/middle level Panchayat at the Taluk/block level and Village/Grama Panchayat at the village level. But in Goa, only two-tier structure exists; namely Gram Panchayat at village

³ Note: Data on income and expenditure pattern of Gram Panchayat and Municipal Councils in Goa was available from 3 sources -- Directorate of Planning, Statistics and Evaluation, the Second State Finance Commission and Comptroller Accountant General of India. There were differences in the numbers from these sources. We also were unable to find expenditure classification under revenue/capital and development/non-development expenditure by Gram Panchayats and Municipal Councils. Further, we were unable to get a full series for the period 2002-3 to 2011-12. Data was available only for six years -- they are 2002-03, 2005-06, 2008-09, 2009-2010, 2010-11, 2011-12.

level and Zilla-Panchayat at district level. This hierarchical kind of structure doesn't exist at the ULBs level.

An effective and efficient functioning of local self governing institutes would require a fair degree of financial independence and not mere constitutional amendments. Autonomy with respect to levy of taxes, fees, borrowing of funds, share in state taxes and predictable and certain grants from higher level governments would need to be assured. The local governments should not only have the power to raise revenues but the own source of revenues should constitute a very significant share in the total revenues (Babu 2009). Further, the opinion is that the extent to which the local governments are self-financing indicates their fiscal autonomy, because outside financing may come with conditions that limit local discretion in the use of funds (World Bank, 1988: 155). Further, grants should not be too large a share of local expenditure because, when revenues get tight, higher level governments tend to cut off transfers to local governments.

8.2 Functional Devolution under 73rd Amendment

No doubt state government has initiated process of functional devolution of powers to Gram Panchayats and Zilla Panchayats but still of 29 functions to be totally devolved to these two-tier of PRI's eight functions like Technical Training and Vocational Education, Public Distribution System, Fisheries, Minor Forest Produce, Fuel and Fodder, Land improvement, implementation of land reforms, land consolidation and soil conservation, Small- scale industries, including food -processing industries, Khadi, village and cottage industries are still under the state control.

A total of 25 and 7 functions have been devolved to Gram Panchayats and Zilla Panchayats respectively, of which four functions are performed by both Gram and Zilla- Panchyats in their own capacity. These functions include:

- 1) Health and Sanitation, including Hospitals. Primary Health Centers and dispensaries 2) Cultural Activities: Promotion of Social-cultural Activities.
- 3) Roads, Culverts, bridges, ferries, waterways and other means of communication

4) Drinking Water

A details list of the functions performed by Zilla and Gram Panchayat under schedule 1 of the Goa Panchayati Raj Act, 1994 have been in the table below (see Table 34):

Table 34: Functional Devolution under 73rd Amendment in Goa

Sl. No	Subjects in the Eleventh Schedule	Zilla Panchayat under schedule 1 of the Goa Panchayat Raj Act, 1994	Gram Panchayat , village Panchayats under schedule 1 of the Act
1	Agriculture, including agricultural extension	Conducting training classes for farmers in improved Agriculture, Horticulture	
2	Land improvement, implementation of land reforms, land consolidation and soil conservation		
3	Minor irrigation, water management and watershed development	Constructions, improvement repairs and maintenance of MI work excluding irrigation wells.	
4	Animal Husbandry, dairying and Poultry	Conducting training classes for farmers dairy, poultry and piggery	
5	Fisheries		
6	Social forestry and farm forestry		Social forestry and farm forestry, tree planting and preservation on roadsides and Panchayat land
7	Minor Forest Produce		
8	Small- scale industries, including food -		

	processing industries		
9	Khadi village and cottage industries		
10	Rural Housing		Rural housing including acquisition of land for house sites
11	Drinking Water	Implementation of Rural Water Supply Scheme	Drinking water including construction, repairs and maintenance of drinking water wells, tanks and ponds
12	Fuel and fodder		
13	Roads, Culverts, bridges, ferries, waterways and other means of communication	repairs and maintenance of rural roads, culverts and roadside drains	construction, maintenance and repairs of village roads, culverts, roadside drains etc.
14	Rural electrification, including distribution of electricity		Rural electrification, including providing and maintenance of street lightening of public places.
15	Non Conventional energy sources		Non Conventional energy sources including promotion and development of Non Conventional energy Schemes
16	Poverty alleviation programme		Public Awareness and participation in poverty alleviation programmes implemented by DRDA
17	Education , including primary and secondary schools		Construction of school buildings entrusted by DRDA
18	Technical Training and vocational education		

19	Adult and non-formal education		Promotion of adult literacy through programmes of Education Department
20	Libraries		Village Libraries and Reading Rooms
21	Cultural activities	Promotion of social and cultural activities	Promotion of social and cultural activities
22	Markets and Fairs		Regulation of markets, fairs and festivals
23	Health and Sanitation, including Hospitals. Primary Health Centres and dispensaries	Sanitation for primary Schools <hr/> Repairs and maintenance of buildings of Rural Health Centres , Sub-Centres, Cottage Hospitals and Community Health Centres	Maintenance of general sanitation, cleaning of public roads, drains, taps wells and nallah and other public places, maintenance of burning and burial grounds, maintenance of public latrines
24	Family Welfare		Participation in schemes of Directorate of Health Services as regards public health and family welfare
25	Women and Child Development		Participation in the implementation of programmes of Directorate of Women and Child Development
26	Social Welfare including welfare of the handicapped		Participation in the implementation of programmes of Social Welfare Department for the welfare of the handicapped , mentally retarded and destitute
27	Welfare of the weaker sections, particularly of SCs and STs		Welfare and weaker sections including scheduled Castes and Schedules Tribes by implementing the Schemes of Goa SC/ST/OBC

			Development Corporation Promotion of public awareness with regards to the welfare of weaker sections, Scheduled Castes and Scheduled Tribes and implementation of programmes of Social Welfare Department of their welfare
28	Public Distribution System		
29	Maintenance of community assets		Maintenance of Community assets created through the Panchayat fund on transferred to the Panchayats by the DRDA or by the Government
	Other Functions		General functions under Goa Panchayati Raj Act, 1994
	Total	7	18

Source: DoP, Government of Goa

8.3 74th Amendment and State Municipal Act of Goa (1968)

The 74th Amendment Act envisages that the State Governments may, by law, endow them with such powers and authority as may be necessary to enable them to function as institutions of self government and such law may contain provision for the devolution of powers and responsibilities upon Municipalities, subject to such conditions as may be specified therein, with respect to (i) the preparation of plans for economic development and social justice; (ii) the performance of functions and implementation of schemes as may be entrusted to them including those in relation to the matters listed in the Twelfth Schedule.... [Article 243W]. Thus, the role envisaged of the Urban Local Bodies is much broader as providers of public services.

8.4 Decentralisation initiative under Twelfth Schedule to Constitution – State Municipal Act – 1968

The 74th Amendment assigned enormous responsibilities to municipalities, which include the preparation of plans for economic development and social justice as well as the implementation of schemes as may be entrusted to them including those in relation to the 18 items listed in the Twelfth Schedule to the constitution.

Table 35: Functional Devolution under 74th Amendment in Goa

1	Urban planning including town planning
2	Regulation of land use and construction of buildings
3	Planning for economic and social development
4	Roads and bridges
5	Water supply for domestic, industrial and commercial purposes
6	Public health, sanitation, conservancy and solid waste management
7	Fire services
8	Urban forestry, protection of the environment and promotion of ecological aspects
9	Safeguarding the interests of weaker sections of society, including the handicapped and the mentally retarded
10	Slum improvement and up gradation
11	Urban poverty alleviation
12	Provision of urban amenities and facilities such as parks, gardens, and playgrounds
13	Promotion of cultural, educational and aesthetic aspects
14	Burials and burial grounds, cremations, cremation ghats/grounds, and electric crematoria
15	Cattle pounds, prevention of cruelty to animals
16	Vital statistics including registration of births and deaths
17	Public amenities including street lighting, parking lots, bus stops and public Conveniences
18	Regulation of slaughter houses and tanneries

Source: DMA

In addition to the items of responsibilities referred to in the Constitution, the Legislature of a State, by law, can assign responsibilities to Urban Local Bodies relating to the two items mentioned above. To perform these tasks, local bodies have to be financially sound with commensurate amount of powers for raising own resources. However, while the Constitution has specified and listed the expenditure responsibilities, it does not provide a clear regime of taxes and revenue sources of ULB's. (YASHADA, 2009)

As a result, most ULB's find it difficult to match the available resources with the responsibilities assigned to them by the Constitution and the respective States. The taxes, duties, tolls and fees to be levied by the municipalities and assigned to them as also the grants-in-aid to be given to them have been left at the discretion of State Governments. This has allowed the fiscal imbalance to continue because of inadequate decentralization of ULB resources to correspond to the decentralization of ULB expenditures. (YASHADA, 2009)

The State Finance Commissions are expected to review the financial position of ULBs and make recommendations regarding the *principles* of devolution of resources from the State Government to ULB's and the *measures* needed to improve their finances and functioning (YASHADA, 2009).

Local Self-Government Institutions or Local Bodies directly influence the welfare of the people by providing civic, social and economic infrastructure services and facilities in both urban and rural areas. Given their strategic position in delivering services in the hierarchy of Government set up, following the Constitutional (73rd & 74th) Amendment Acts, more functions, powers and resources have been provided to them. However, over a period of time, the functions and responsibilities of ULBs have increased considerably without commensurate enhancement of their resource base. Constitutionally built-in imbalances in functions and finances assigned to various levels of government eventually reflect in the high dependency of local bodies on State Governments and the latter, in turn, on Central Government for funds (YASHADA, 2009).

8.5 Evaluation of PRI's Finances

Goa Panchayati Raj Act, 1994 have classified panchayat into four categories. Panchayat with population of more than 8000 are classified as 'A' level panchayat with 11 elected members. 'B' level panchayat have population of more than 5000 but less than 8000 and 9 elected members. With a population of more than 2000 but not more than 5000, an area is classified under 'C' level panchayat with 7 elected members. 'D' level panchayats have population of 1500 or more but not more than 2000 and 5 elected members (GPRA,1994).

8.6 Mobilization of resources

The Village Panchayats are authorized to collect various taxes and fees under the Goa Panchayati Raj Act, 1994 and are encouraged to mobilize their own resources. The Directorate is continuously monitoring the resource mobilization by Village Panchayats through inspections and issue of various directions from time to time. Matching grants are released to the Village Panchayats in proportion to the taxes collected by the Panchayats.

8.6.1 Own Revenue

Sources of Tax revenue for panchayats include house tax, lighting tax, bicycle tax, trade profession calling and employment tax, advertisement/hoarding tax, entertainment tax, tax on land not subject to agricultural assessment, drainage/garbage tax, tax for supply of water for drinking and other purposes.

Non-tax revenue includes fees for construction licenses, sale of goods in markets, melas, fairs and festivals, registration of birth and death, certified copies, octroi, registration of cattle brought for sale, grazing cattle on grazing grounds, extraction of sand, laterite stones and others, various certificate issued by panchayat, sale of premises for transfer of house tax, licensing for hotels, shops etc. construction permission of factories and installation of machinery, cattle pound, buses and taxis and auto stands provided adequate facilities are provided for travelers, pilgrims of persons attending jattras and festivals provided necessary arrangements for water supply, health and sanitation are made, garbage collection, occupation of public landing places (GPRA,1994). Rent and sale proceeds are obtained from sale of tender forms, number plates, garden produce, auction sale proceeds of stray cattle, rent for lease of premises shops, community hall, rent for hiring of village panchyat goods vehicle.

2) Grants:

Panchayats get following types of **grants**

- (a) Matching grants linked to tax collections of previous year

(b) Grants in lieu of octroi

(c) Specific Purpose Grants

(i) Salary Grants/Establishment Grants

(ii) Grants to weaker panchayats for strengthening their administration

(d) Development Purpose Grants

(i) From District Rural Development Agency

(ii) Finance Commission Grants and Loans from Government and banks.

8.6.2 Expenditure

We now examine the expenditure pattern of Panchayats. Expenditure is incurred by Panchayats on General administration, Sanitation and public health, Public works, Education and culture, Planning and development, Social Welfare and Miscellaneous (GoG (FC) 2007).

Table 36: Sources of Revenue and Expenditure of Panchayati Raj Institutions in Goa (Rs. in Lakhs)

Item	2002-03	2005-06	2008-09	2009-10	2010-11	2011-12
Number of Panchayats	189	189	189	189	189	189
Revenue						
a) Grant from Government	599.69	1449.07	2352.59	2748.33	3447.34	4741.8
b) Other Grants	328.47	309.87	538.55	775.14	680.61	876.52
c) Proceeds of taxes, fees, etc.	751.07	1052.98	1645.28	2230.45	2158.72	2158.76
d) Others	492.62	449.48	1080.4	1185.92	1490.33	1355.9
Own revenue	1243.69	1502.46	2725.68	3416.37	3649.05	3514.66
TOTAL INCOME	2171.85	3261.4	5616.82	6929.71	7777	9132.98
Expenditure						
a) Administration	292	656.72	1027.16	1026.95	1593.55	1581.01
b) Sanitation & Public Health	104.37	158.4	388.52	379.21	336.23	343.78
c) Public Works	851.68	1505.67	2304.4	3041.83	3621.47	4243.16
d) Planning & Development	29.8	81.96	102.23	46.39	103.88	74.84
e) Education & Culture	96.32	146.56	77.52	75.29	107.95	170.89
f) Social Welfare	44.83	48.9	58.75	72.59	79.44	102.28
g) Miscellaneous	161.48	302.52	756.53	793.33	877.19	910.96
TOTAL EXPENDITURE	1580.48	2900.73	4715.11	5576.76	6719.71	7426.92

Source: (GoG (SH) Various Years)

Grants from government has been major source of revenue for Panchayats for all the years included in the study except during 2002-03 where in major contribution had come from proceeds of taxes and fees. Major expenditure during all the years given in Table 36, has been incurred on Public Works. The percentage of expenditure incurred on public works as a proportion of total expenditure has always been near about 50%.

Evidently total revenue of PRI's has been more than total expenditure. Rate of percentage change in total revenue during last three year viz; 2008-09 to 2009-10, 2009-10 to 2010-11 and 2010-11 to 2011-12 has been 23.37%, 12.23% and 17.44% respectively. During the above mentioned years total expenditure experienced a percentage change of 83.53%, 62.55%, 18.27%, 20.49% and 10.52% respectively. Both total revenue and expenditure have increased at a decreasing rate post 2008-09 (See Table 36).

Table 37: Percentage of own Revenue and Grants to Total Revenue of PRI's and Own Revenue to Total Expenditure

Years	Percentage OR/TR	Percentage GR/TR	OR/TE (%)
2002-03	57.26	42.74	78.69
2003-04	DNA	DNA	DNA
2004-05	DNA	DNA	DNA
2005-06	46.07	53.93	51.80
2006-07	DNA	DNA	DNA
2007-08	DNA	DNA	DNA
2008-09	48.53	51.47	57.81
2009-10	49.30	50.85	61.26
2010-11	46.92	53.08	54.30
2011-12	38.48	61.52	47.32

Source: (GoG (SH) Various Years)

Note:

DNA – Data Not Available

OR/TR – Percentage of own revenue to total revenue

OR - Total of Tax and Non-tax revenue

GR/TR – Percentage of grants- in-aid and other grants to total revenue

OR/TE – Percentage of own revenue to total expenditure (self –sustainability ratio)

Evidently own revenue as a percentage of total revenue is decreasing whereas the percentage of grants-in-aid and other grants from government is increasing. This trend shows increasing

dependence of Gram Panchayats on state (see Table 37). The trend from 2002-03 to 2011-12 (6 years) shows the capacity of gram panchayats to finance their own expenditure is declining. The percentage of own revenue to total expenditure of the Panchayats declined from 78.69% in 2002-03 to 47.32% in 2011-12.

Table 38: Per capita Revenue and Expenditure of PRI's in Goa

Years	Rural Population (in Lakhs)	PCR (Rs.)	PCE (Rs.)
2002-03	6.63	327.35	238.22
2003-04	6.50	DNA	DNA
2004-05	6.37	DNA	DNA
2005-06	6.24	522.29	464.53
2006-07	6.12	DNA	DNA
2007-08	6.00	DNA	DNA
2008-09	5.88	955.69	802.27
2009-10	5.76	1203.14	968.24
2010-11	5.64	1377.81	1190.49
2011-12	5.53	1651.06	1342.64

Source: Author's calculation based on (GoG (SH) Various Years)

PCR – Per Capita Revenue is calculated as (Total Revenue) /Rural population

PCE- Per Capita Expenditure calculated as (Total Expenditure)/ Rural Population

Table 38 gives a picture of per capita revenue and expenditure of Panchayati Raj institutions in Goa. Per capita revenue has been calculated as percentage of total revenue which includes own revenue and grants given by government and other agencies. Per capita revenue has been higher than per capita expenditure for all the years during the period of study.

Table 39: Dependency Quotient of PRI's in Goa (Rs./Person)

Years	Own Revenue (Rs. in Lakhs)	PCE (Rs.)	PCR (Rs.)	DQ/Person(Rs.)
2002-03	1243.69	238.22	187.46	50.76
2003-04	DNA	DNA	DNA	DNA
2004-05	DNA	DNA	DNA	DNA
2005-06	1502.46	464.53	240.61	223.92
2006-07	DNA	DNA	DNA	DNA
2007-08	DNA	DNA	DNA	DNA

2008-09	2725.68	802.27	463.77	338.50
2009-10	3416.37	968.24	593.15	375.09
2010-11	3649.05	1190.49	646.48	544.01
2011-12	3514.66	1342.64	635.38	707.26

Source: (GoG (SH) Various Years)

Note:

PCR is calculated based on Own revenue, it helps to analyse dependence on state support for incurring expenditure.

PCE- Per Capita Expenditure calculated {Total Expenditure/Population}.

DQ is defined as Dependency Quotient of PRI's ($DQ = \frac{\text{Total Expenditure} - \text{Total Revenue}}{\text{Rural Population}}$).

In Table 39 we calculate 'Dependency Quotient' of Panchayati Raj institutions. It is defined as difference between per capita expenditure and per capita revenue. In this table per capita revenue is calculated as ratio of own revenue by rural population. The figures for all the years in last column (DQ) suggest huge dependence of panchayats on state support in order to incur their expenditure.

We next discuss the financial situation of Urban Local Bodies.

8.7 Evaluation of Finances of Urban Local Bodies in Goa

As per Census of India (2011) an urban area is defined as all places with a municipality, corporation, cantonment board or notified town area committee, etc. and all other places which satisfied the following criteria:

1. A minimum population of 5,000;
2. At least 75% of the male main working population engaged in non-agricultural pursuits; and
3. A density of population of at least 400 persons per sq. km.

The Goa Municipalities Act, 1968 classifies municipal areas into three categories on the basis of population. A municipal area with a population of more than 50,000 shall be a 'A' class municipal area. With a population of more than 10,000 but not more than 50,000 shall be 'B'

class municipal area. 'C' class municipal area is defined as one with population of 10,000 or less than that.

8.8 Revenue Sources

Revenue of municipal councils comprises of grant in aid from government for different purposes and own revenue. Own resources of municipal councils comprise of tax and non-tax revenue. Components of own tax revenue are property tax, octroi, general water tax, special water tax, general sanitary case, toll, tax on vehicles and animals, drainage, sewage, water tax, lighting and pilgrim tax, signboards, posters and hoarding tax.

Non tax revenue includes receipts under special acts consisting of charges on cattle pound, cases on lands within municipal limits, rent on land and building, transfer fees of lease for municipal blocks and shops, Income from garden, income from house tax transfer, secondary, technical and industrial education, income from medical institution, income from veterinary dispensary, income from market (sopo), income from slaughter house, income from stables, trade license fees, lease on lands, income from pay-parking within municipal jurisdiction, construction license fees, income from municipal hall, cemeteries and crematoriums fees and sanitation charges from house tax payers.

Other receipts clubbed as miscellaneous includes interest from municipal investments, copying and comparing fees, NOC's and certified copies etc., sales proceeds of old stores, interest on delayed payments, income from sale of municipal vehicle, income from income/character/residence certificate, income from sale of tender forms, fines, income from municipal library, income under right to information act, income from hearse van, income from night soil tanker, income from birth and death registration, provident fund subscription, receipts of security deposit and few others.

Expenditure is incurred broadly on general administration, public safety, public health and convenience and miscellaneous activities (GMA,1968). Data is not available for 2006-07 and 2007-08.

Table 40: Distribution of Revenue of Municipal Councils (Rs. in Lakhs)

INCOME	2002-03	2003-04	2004-05	2005-06	2008-09	2009-10	2010-11	2011-12
Municipal rates and Taxes	1089.65	1530.3	1085.35	1266.51	1988.13	3297.07	3205.1	2612.7
a) Octroi	330.21	447.76	293.2	319.67	533.02	1443.52	1321.2	744.92
b) Taxes on House and Land	681.23	883.2	691.49	804.37	1181.82	1288.13	1353.18	1498.18
c) Others	78.21	199.31	100.66	142.47	273.29	565.42	530.67	369.55
Receipts from:	837.03	2313.2	1040.71	905.31	1391.84	1442.56	1816.4	3101.9
a) Realisation under special acts	9.25	11.38	13.09	8.08	13.32	0.02	24.3	33.01
b) Markets	140.38	213.39	165.59	150.51	196.98	227.1	285.79	328.51
c) Slaughter houses	3.02	2.11	9.34	3.13	1.08	2.27	2.41	2.75
d) Rent for houses and lands	286.16	1234.5	249.64	257.03	353.08	341.06	465.18	416.73
e) Other fees & revenue	398.22	851.79	603.05	486.56	827.38	872.11	1038.73	2320.94
Income from Other source :	1708.27	2160.1	1468.53	1634.34	3437.59	3831.78	5834.6	7262.3
a) Government grants	856.47	1089.2	925.8	905.32	2878.61	2825.17	4129.63	5368.16
b) Interest on receipts	119.63	127.45	157.43	170.58	205.14	294.46	402.15	403.46
c) Miscellaneous	214.14	943.43	385.3	558.44	353.84	712.15	784.79	500.48
d) Security deposit/EMD/loans & advances	518.03	--	---	--	---	0	518.03	990.23
Total Income	3634.95	6003.5	3594.59	3806.16	6817.56	8571.41	10856	12977

Source: (GoG (SH), Various Years)

Table 41: Expenditure Pattern of Municipal Councils in Goa (Rs. in lakhs)

EXPENDITURE	2002-03	2003-04	2004-05	2005-06	2008-09	2009-10	2010-11	2011-12
General Administration	680.28	982.61	1103.92	945.48	1742.28	2697.34	2899	2221.6
Public safety								
a) Public lighting	37.74	20.97	21.37	25.48	56.15	70.12	73.2	58.04
b) Others	99.42	61.67	97.01	96.32	248.1	15.08	45.96	7.01
c) Public safety	8.26	29.63	30.91	10.84	22.13	225.55	34.01	28.29
Sub-Total	145.42	112.27	149.29	132.64	326.38	310.75	153.17	93.34
Public Health Conveniences and Instructions								
a) Water Safety	16.37	18.28	18.48	18.14	61.04	119.04	8.13	10.01
b) Drainage, Conservancy and Sanitary	901.69	736.62	818.36	940.53	8790.1	586.76	1467.38	2142.2
c) Public Garden	75.13	41.96	46.88	28.22	37.84	33.79	250.59	172.11
d) Public Works	907.49	939.9	1141.9	1104.62	1842.91	1495.39	2705.68	3256.64
e) Public Instructions	18.59	15.62	18.51	15.19	13.25	51.01	2.99	20.56
Sub-Total	1919.27	1752.4	2044.13	2106.7	2834.04	2285.99	4434.8	5601.5
Miscellaneous								
a) Repayment of loans and interest etc.	13.13	12.61	9.66	7.6	33.79	2.36	10.47	1.61
b) Others	197.29	135.35	137.22	116.32	427.93	1122.37	1017.15	1037.22
Sub-Total	210.42	147.96	146.88	123.92	461.73	1124.73	1027.6	988.83
Total Expenditure	2955.39	2995.2	3444.22	3308.74	5364.41	6418.81	8514.5	8905.3

Source: (GoG (SH) Various Years)

Table 40 reflect that the major revenue earner for Urban Local Bodies in Goa has been income from other sources which includes government grants, interest on receipts, security deposits, miscellaneous receipts, receipts from other sources. Even if government grant is excluded from this category still they contribute more than tax revenue of government. In the absence of detail data it is difficult to list out items under these receipts. Major item of expenditure has been public health, convenience and instructions for all the years included in study except during 2009-10 wherein major expenditure has been incurred on general administration. The percentage of expenditure during this financial year on public health, convenience and instruction has been

35.61% while on general administration it was around 42%. For rest all the years the expenditure on public health which includes expenditure on water safety, drainage, conservancy and sanitary, public garden, public works and public instruction has been over 50%. A possible reason for decline only in 2009-10 could be because of implementation of 6th Pay scales during the year (see Table 41).

From the table above we note that the percentage change in total revenue of ULB's from 2002-03 to 2003-04 was 65.16%, but revenue fell in 2004-05 by 40.13%. It increased by marginally by a percentage of 5.89% during 2005-06. During the last three years of study total revenue increased by 25.73%, 26.65% and 19.54% respectively (see Table 40).

Table 42: Percentage of Own Revenue and Grants to Total Revenue and Total Expenditure

Years	OR/TR	GR/TR	OR/TE
2002-03	76.44	23.56	94.01
2003-04	81.86	18.14	164.07
2004-05	74.24	25.76	77.49
2005-06	76.21	23.79	87.67
2006-07	DNA	DNA	DNA
2007-08	DNA	DNA	DNA
2008-09	57.78	42.22	73.43
2009-10	67.04	32.96	89.52
2010-11	61.96	38.04	79.00
2011-12	58.63	41.37	85.44

Source: (GoG (SH) Various Years)

Note: DNA – Data Not Available

Table 42 shows that own revenue as a percentage of total revenue of ULB's has been higher than grants received by these bodies. Though there has been decline in the rate of increase of own revenue still the rate is substantially higher than rate of increase in grants received. Percentage of own revenue to total revenue have reduced from 76.44% in 2002-03 to 58.63% in 2011-12, whereas percentage of grants during the same period increased from 23.56% to 41.37%.

The percentages of own revenue to total expenditure indicates that ULB's is able to bear a sizeable share of their expenditure.

Table 43: Per Capita Revenue and Expenditure of ULB's in Goa (in Rs.)

Years	Urban Population (in Lakhs)	PCR	PCE
2002-03	6.91	525.94	427.62
2003-04	7.12	843.36	420.76
2004-05	7.33	490.25	469.74
2005-06	7.55	503.98	438.12
2006-07	7.78	DNA	DNA
2007-08	8.01	DNA	DNA
2008-09	8.25	826.13	650.04
2009-10	8.50	1008.40	755.15
2010-11	8.76	1239.98	972.53
2011-12	9.02	1439.05	987.54

Source: (GoG (SH) Various Years)

DNA- Data Not Available

Per Capita Revenue - (Total Revenue)/ Urban Population

Per capita expenditure – (Total Expenditure)/Urban Population

In Table 43 the data on per capita revenue and expenditure is presented. Per capita revenue is calculated as ratio of total revenue to urban population. The per capita revenue has been higher than per capita expenditure of ULB's in Goa.

Table 44: Dependency Quotient of ULB in Goa (Rs./person)

Years	Own revenue (Rs. in Lakhs)	PCE (Rs.)	PCOR (Rs.)	DQ/Person (Rs.)
2002-03	2778.48	427.62	402.02	25.60
2003-04	4914.34	420.76	690.35	-269.59
2004-05	2668.79	469.74	363.98	105.76
2005-06	2900.84	438.12	384.11	54.01
2006-07	DNA	DNA	DNA	DNA
2007-08	DNA	DNA	DNA	DNA
2008-09	3938.95	650.04	477.31	172.73
2009-10	5746.24	755.15	676.03	79.13
2010-11	6726.43	972.53	768.29	204.23
2011-12	7608.76	987.54	843.76	143.78

Source: (GoG (SH) Various Years)

DNA- Data Not Available

Per Capita Revenue is calculated based on Own revenue, it helps to analyse dependence on state support for incurring expenditure

DQ is defined as Dependency Quotient of ULB's ($DQ = \frac{\text{Total expenditure} - \text{Total Revenue}}{\text{Urban Population}}$)

PCE- Per Capita Expenditure calculated as $\frac{\text{Total Expenditure}}{\text{Urban Population}}$

In Table 44 an attempt has been made to calculate the magnitude of ULB's dependence on state for financial support. To analyse this 'Dependency Quotient' as a difference between per capita expenditure and per capita revenue is calculated. In this table we have taken per capita revenue on the basis of own revenue of ULB's. The last column of the table reflect that state support does help ULB's in performing many of their task and deliver different public services.

8.9 Jawaharlal Nehru National Urban Renewal Mission

The urban areas of India contribute over 50% of country's Gross Domestic product. It is believed that if cities have to realize their total potential in contributing effectively towards economic growth of a nation then there has to be proper infrastructure development of these areas. To achieve this objective Jawaharlal Nehru Urban Renewal Mission was launched on 3rd December 2005. The scheme also aims to provide basic services to urban poor in terms of improved housing, water supply, sanitation, better facilities in field of education, health and social security (JNNURM,Website).

JNNURM has two sub-missions. They are as follows:

- 1) Urban Infrastructure and Governance (UIG)
- 2) Basic Services to Urban Poor (BSUP)

Two other components of the Scheme include:

- 1) Urban Infrastructure Development of Small & Medium Towns (UIDSSMT)
- 2) Integrated Housing and Slum Development Programme (IHSDP) (JNNURM, Website)

8.10 Projects under JNNURM in Goa

Under Urban Infrastructure and Governance sub mission city of Panaji has been chosen by Government of Goa whereas to implement UIDSSMT the remaining 13 municipal areas have been considered.

The state has managed to get sanctioned for three projects from government of India for city of Panaji to launch UIG. These projects include:

- 1) 24x7 drinking water supply for Panaji City estimating to Rs. 7121.83 lakhs
- 2) Heritage project for an estimated cost of Rs. 362.25 lakhs
- 3) E- Governance project for an estimated cost of Rs. 1979.17 lakhs.

To accomplish these objectives state government has floated tenders inviting quotations from interested parties (GSUDA).

The state government has also forwarded three important projects in July 2013 to Central government. They include Development of St. Inez creek worth 27 crores, Solid Waste management Project worth 96.64 crores and comprehensive Mobility Plan for the Panaji City worth Rs. 742.91 crores are under consideration (GSUDA).

Urban Infrastructure Development for Small and Medium Towns (UIDSSMT) has been implemented in other 13 municipal councils which come under Non-Mission City. The Road and Infrastructure project has been sanctioned for Bicholim, Sanquelim and Sanguem worth Rs. 843 lakhs, Rs.1447 lakhs and Rs. 585 Lakhs respectively are approved by the Ministry of Urban Development, Government of India. The projects in Bicholim and Saquelim are almost complete

whereas the one in sanguem is only 10% completed Project under consideration includes storm water Drain and Road project for the Mapusa Town worth Rs. 2683.25 lakhs (GSUDA)..

The main objective of the Comprehensive Mobility Plan (biggest project proposed) is to ensure safe, affordable, quick, comfortable, reliable and sustainable access for growing number of city residents to jobs, education and other needs. The city corporation of Panaji aims to achieve it by providing following processes and services:

1. Improved public transport;
2. Facilities for use of motorized vehicle;
3. Greater involvement of private sector;
4. Innovative financing mechanisms;
5. Reduced travel demand better integration of land use and transport planning;
6. Use of cleaner technology;
7. Better awareness; and
8. Capacity building individual and institutional.

The significant problems of the city are listed below: (GSUDA)

Due to inefficient and inadequate public transport system people are forced to use private vehicles. The number of vehicles owned by family today is more than one.

Traffic congestion arises due to one entry-point for inter and Intra-city buses to Panaji City, So also existing Kadamba Bus Stand unable to handle the existing traffic.

Lack of proper parking facilities in the city compels people to park their vehicles on road.

The Project aims to provide the following services in Panaji:

- a) Road Improvements
- b) Pedestrian and NMV Plan
- c) Public transport
- d) Interchange points
- e) Freight traffic
- f) Parking
- g) Traffic management plan

9. Impact of Public Enterprises Finances on State's Financial Health

State Public Sector Enterprise (PSEs) - are owned, managed and controlled by the State on behalf of public at large. The State Level Enterprise (PSEs) form an important part of state economies and have played a very important role in the development of different states in India. Besides the public utilities, the SLPEs 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 (Bandyopadhyay 2006). While a number of SLPEs 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.

9.1 Introduction

In Goa, the State PSEs occupy a moderate place in the state economy. The State Public Sector Enterprise (PSEs) consist of:

- a) **State Government Companies:** refer to companies in which not less than 51 *per cent of the paid up capital is held by Government(s)*. It includes a subsidiary of 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)*.
- b) **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.

As owners, 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 PSUs 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.

While various forms of organizations prevail vis-à-vis the organizational structure of SLPEs, the “company” and “statutory corporation forms” are the more dominant ones. Indeed, the SLPEs are not the same as “departmental undertakings”, and have to be on their own rather than depend on budgetary support from the Government. There have been both economic and social objectives behind the establishment of SLPEs (Bandyopadhyay 2006). The SLPEs have been set up by the different States/UTs to 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 SLPEs generate profits on a sustainable basis. In other words, the returns from sales are more than the cost of operation. If they incur losses, the SLPEs become a liability on the States/UTs.

On the basis of the available data a list of the 18 State level Public enterprises is considered in the Report. For the purposes of analysis various public sector enterprises have been classified into five categories viz., Agriculture & allied, Finance, Infrastructure, Manufacturing, and Services (CAG Report 2011). For the details regarding the different types of PSUs in Goa see (Table 45). Time-series data on important financial parameters of individual enterprises is also included in the Appendix of the Report. As per the data made available to us, some of the PSU did not have data for all the years under consideration from 2002-03 to 2011-12. For the PSUs like Goa State Scheduled Caste and Other Backward Classes Finance and Development Corporation Limited, Goa State Schedule Tribes Finance and Development Corporation Limited, Goa Information Technology Development Corporation (Statutory Corporation) no financial information was available. In case of Sewerage and Infrastructural Development Corporation Limited no regular business activities were carried out, as such no Profit Loss statement was

prepared for 2006-07 and 2007-08. Similarly for the Goa Meat Complex Limited and Info Tech Corporation of Goa Limited data was available for few years. -

Table 45: Types of Public Sector Undertakings in Goa

S.No	Sector and Name of the Company
GOVERNMENT COMPANIES	
AGRICULTURE AND ALLIED	
1	Goa Forest Development Corporation Limited
2	Goa State Horticultural Corporation Limited
3	Goa Meat Complex Limited
FINANCE	
4	Economic Development Corporation Of Goa, Daman & Diu
5	Goa Handicraft, Rural and Small Scale Industries Development Corporation Limited
6	Goa State Scheduled Caste and Other Backward Classes Finance and Development Corporation Limited (GSSCOBCFDCL)
7	Goa State Schedule Tribes Finance and Development Corporation Limited (GSSTFDCL)
INFRASTRUCTURE	
8	Goa State Infrastructure Development Corporation Limited
9	Info Tech Corporation of Goa Limited (ITCGL)
10	Sewerage and Infrastructural Development Corporation Limited (SIDCL)
MANUFACTURING	
11	Goa Auto Accessories Limited
12	Goa Antibiotics and Pharmaceuticals Limited (GAPL)
SERVICES	
13	Goa Electronic Limited (GEL)
14	Goa Tourism Development Corporation Limited (GTDCL)
15	Kadamba Transport Corporation Ltd
16	Pollution Control Board
STATUTORY CORPORATION	
INFRASTRUCTURE	
17	Goa Industrial Development Corporation
18	Goa Information Technology Development Corporation (GITDC)

The PSUs 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 PSUs in Goa. Of the total 18 State PSUs for which information is available, two belong to the

manufacturing category while five are infrastructural enterprises. About four belong to the finance and the agricultural category and three to the service categories. It is evident that the infrastructural enterprises followed by the agriculture and finance enterprises dominate the scenario. The State PSUs can 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. Most of the State Governments set up these enterprises to prop up 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 characterised by twin elements of business i.e. a mix of commercial as well as promotional goals directing their functioning. These enterprises include the Enterprises dealing with dairy development, fisheries development, industrial finance, industrial development, infrastructure development etc
- 3) Promotional State PSUs: In the case of these enterprises, promotional activities became the primary objective and profit earning became a secondary consideration. These State PSUs include the SC/ST Finance Corporation, Backward Classes Corporation. Major activities of Goa State PSUs are concentrated in Infrastructure development sector.

9.2 Definitions:

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.

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:

$$\frac{\text{PBID}}{\text{Capital invested}} \times 100$$

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:

$$\frac{\text{Long Term Debt}}{\text{Equity}} \times 100$$

Accumulated Losses to Paid-up Capital Ratio:

This quantifies the relationship between accumulated losses and paid-up capital in percentage terms. Expressed as a formula, it is:

$$\frac{\text{Accumulated Losses}}{\text{Paid up Capital}} \times 100$$

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.

9.3 Analysis of Financial Aggregates

An analysis of some core indicators and major financial aggregates for State PSUs has been conducted and findings of the PSUs have been compiled in the appendix given below. The comparison of these core indicators is made for the period 2002-03 to 2010-11. However for some of the PSUs, due to the unavailability of continuous data, analysis has been carried out years for which data was available-

9.3.1 Total 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. The equity support of the State Government has increased for all the PSUs in Goa. The PSU where the increase was more were Economic Development Corporation of Goa, wherein the equity increased from 449 million in 2002-03 to 1009 millions in 2011-12. For Goa Antibiotics and Pharmaceuticals Limited the contribution of the state Government increased from 39 million in 2002-03 to 190 millions in 2011-12, similarly for Info Tech Corporation of Goa Limited there was an increase from 31 million in 2002-03 to 163 million in 2006-07. Within the agricultural sector, for the Goa Forest Development Corporation Limited the state equity rose from 5 million in 2002-03 to 26 million in 2010-11 and for the Goa State Horticultural Corporation Limited the equity rose from 12 million to 49 million in 2002-03 and 2010-11 respectively. Under the service category, the state equity was high for Goa Tourism Development Corporation Limited (87 million in 2002-03 and 226 million in 2010-11) and Kadamba Transport Corporation Ltd(229 million and 526 million in 2002-03 and 2010-11 respectively). This indicates that among all the three sources the State government has demonstrated its commitment to the State PSUs by increasing its investment in the form of equity in all the sectors.

9.3.2 Total Debt:

The total debt comprises of the loans outstanding from the State government, the central Government and the other sources. Theoretically the State Governments were not required to contribute to the day to day needs of the PSEs (PC 2002). However for all the PSUs in Goa the share of State debt in total debt has remained at a high level. In fact, the state debt has been the only contributor towards the total debt for all the PSUs under consideration except the Goa Industrial Development Corporation (Statutory Corporation). For The Goa Industrial Development Corporation the equity support was provided by the Central Government and other sources which include deposit received from other than the Government for other schemes of development and loans from public for all the years. The state debt has been much higher than the state equity in case of the Goa State Infrastructure Development Corporation Limited.

9.3.3 Debt-equity ratio:

The debt-equity ratio of these enterprises has declined throughout the period of the study. This was particularly because of the rise in the state equity in comparison to the loan outstanding of the different PSUs.

9.3.4 Total Investment:

The total investment comprises of Equity and Debt. The rise in the total investment has been particularly because of the increase in state equity. Only in the service and the manufacturing sector enterprises, there has been a rise in the total investment. The Goa Electronic Limited showed an increase in the total investment because of the rise in the loans by the state government, the equity share of the state government was constant at 18 million for the entire period. The Goa Tourism Development Corporation Limited saw an increase from Rs 107 millions in 2002-03 to Rs 226 millions in 2010-11. There was a rise from Rs 421 million to Rs 1060 million in 2010-11 in case of the Kadamba Transport Corporation Ltd. The investment in Finance sector and the infrastructural sector was reduced during the period. The total investment has however declined from Rs 3755 million to Rs 1939 million for the Economic Development Corporation of Goa, Daman & Diu in the same period under consideration. Similar is the case with Goa State Infrastructure Development Corporation Limited.

9.3.5 Net Profit:

Net profit helps in updating the technology, contribute to an organic growth and provides a unified direction. It adds to building up reserves and surpluses and higher earnings per share. It is interesting to note that among all the enterprises, Goa Meat Complex Limited, Economic Development Corporation Of Goa, Daman & Diu, Goa Handicrafts Rural And Small Scale Industries Development Corporation, Goa State Infrastructure Development Corporation Limited, Goa Tourism Development Corporation Limited have made net profit all through, with Goa Industrial Development Corporation making profits from 2006-07 onwards.

9.3.6 Accumulated Losses:

Accumulated losses continued to be worrisome of the PSUs in Goa. Within the agricultural and allied sector, the Horticulture development Corporation, accumulated losses have been incurred continuously for all the years under consideration. The Goa Forest Development Corporation Limited initially had surpluses but eventually from 2005-06 has seen a rise in the accumulated losses. In contrast, for the Goa Meat Complex Limited the accumulated profits increased from Rs 12 million to Rs 16 million in 2002-03 and 2007-08 respectively. In the case of the finance sector enterprises, for the Economic Development Corporation of Goa, Daman & Diu there were accumulated losses till 2004-05, thereafter there has been accumulated profit till 2010-11. The Goa Handicrafts Rural and Small Scale Industries Development Corporation had losses accumulated only for two years from 2009-10 to 2010-11. Info Tech Corporation of Goa Limited (ITCGL) is the only PSU in the infrastructural category that has accumulated losses for all the years under consideration. In contrast, the Goa State Infrastructure Development Corporation Limited has had accumulated profits for the entire period. The enterprises in the manufacturing and the service sector have accumulated losses for the entire period, except for the Goa Antibiotics and Pharmaceuticals Limited there were accumulated profits from 2008-9 onwards. Goa Industrial Development Corporation Ltd has accumulated profits for all the years in the study. The study reveals the fact that the accumulated losses were a common occurrence for the PSUs during the years.

9.3.7 Profitability before Interest, Depreciation & Taxes (PBDIT)

The enterprises with net losses before interest, depreciation and taxes were found in all the sectors. PSUs with healthy PBDIT for all the years were Economic Development Corporation Of Goa, Daman & Diu Goa State Infrastructure Development Corporation Limited, Goa Tourism Development Corporation Limited There are enterprises like Goa Forest Development Corporation Limited, Goa State Horticultural Corporation Limited, Info Tech Corporation of Goa Limited and the Goa Antibiotics and Pharmaceuticals Limited that have incurred net losses before interest and taxes almost for all the years. The net losses incurred by these PSUs wiped out the total profits made and are responsible for the phenomenon of loss making.

9.3.8 Performance of PSUs:

The financial results of PSUs, financial position and working results of working statutory corporations are detailed in the appendix. A ratio of PSU turnover to GSDP shows the extent of PSU activities in the State economy. Accordingly, the role of State PSUs in a State can be assessed from the total turnover as a percentage of the Gross State Domestic Product. The extend of PSU activities in the state economy has shown a declining trend for almost all the PSUs. However for Goa State Infrastructure Development Corporation Limited it has been rising.

Some other key parameters pertaining to State PSUs are given below. The return on Capital Employed showed a rising trend only for certain PSU like the Economic Development Corporation Of Goa, Daman & Diu. The position of accumulated losses to capital employed has been positive only for Economic Development Corporation Of Goa, Daman & Diu, Goa Meat Complex Limited, Goa Handicraft, Rural and Small Scale Industries Development Corporation Limited, Sewerage and Infrastructural Development Corporation Limited (SIDCL) and the Goa State Infrastructure Development Corporation Limited. (See Table 48)

9.3.9 Contribution of PSEs to the Total Revenue of the Government of Goa

The revenue generated from the dividends and profits is an important constituent of the State's Tax Receipts. Revenue from dividends and profits arise from the State Government's investment in the shares of co-operative institutions, statutory corporations, Government companies and other joint stock companies. Over the years the contribution made by the PSE's to the Total Revenue of the Government of Goa has been fluctuating. (see Table 46) Even its share as percent to TR has always remained less than 1.

Table 46: Dividends and profits of PSEs and Total Revenue

Year	Dividends and Profits(D&P)	Total Revenue (TR)	(D&P) as a % of TR
2002-03	19.0	71682.27	0.027
2003-04	3.0	84583.93	0.004
2004-05	27.0	101860.38	0.027
2005-06	18.0	134119.06	0.013
2006-07	40.0	160364.65	0.025
2007-08	33.0	175263.72	0.019

2008-09	89.0	210899.35	0.042
2009-10	115.0	218975.98	0.053
2010-11	19.0	272378.08	0.007
2011-12	148.1	323160.93	0.046

9.4 Review of Profitability and Measures Taken to Improve performance

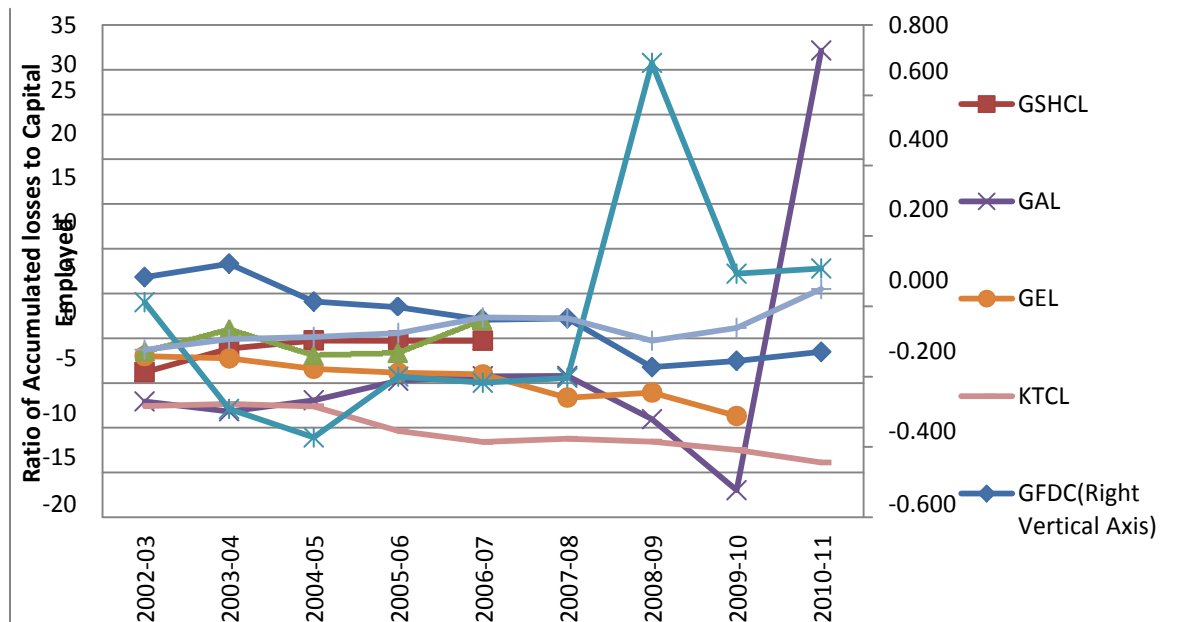
The PSUs in Goa are engaged in different activities ranging from industrial development, finance, trading and marketing, construction services, consumer goods, engineering goods as also development of backward regions and weaker sections of the society. Amongst the profit making PSUs, the prominent ones have been EDC Ltd, Goa Meat Complex Limited, Goa Handicrafts Rural and Small Scale Industries Development Corporation, and Goa State Infrastructure Development Corporation Limited. However, accumulated losses continued to be worrisome for the PSUs in Goa. Across all the sectors around seven PSUs have accumulated losses for the entire period of study.

The PSUs in Goa seem conscious of the situation and are actively considering and implementing measures to improve their status. For example, KTCL has responded to the increased demand for passenger services between major towns by increasing their shuttle services for intra-state as well as inter-state services. To stabilize revenues a system of monthly passes have been introduced as well as parcel services to cater to the courier service providers. In order to keep up the competition from other state services and private sector they have introduced online booking on long distance routes as well as upgradation of fleet like introduction of Volvo luxury coaches. In order to boost their revenues, they have introduced advertising space sales on all buses plied by KTCL and bus stands operated by them. To cut salary liability, casual contract workers are being hired to replace salaried staff. The introduction of electronic ticket vending machines is expected to improve the efficiency in the services.

Similarly, GTDC is in the process of capping new recruitments and instead use contractual appointments. They are considering the use of currently unused “barren” properties.

Goa State Horticultural Corporation Limited 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.

Figure 23: Ratio of Accumulated Losses to Capital Employed



The ratio of accumulated profits to capital employed quantifies the relationship between accumulated losses and capital employed (the sum total of investments in the net fixed assets and working capital) in percentage terms.

PSUs like the Goa State Horticultural Corp Ltd (GSHCL), the Info Tech Corporation of Goa Limited (ITCGL), Goa Auto Accessories Ltd, Goa Electronic Limited (GEL), Kadamba Transport Corp Ltd and the Goa Tourism Development Corporation Limited (GTDCL) this ratio has been consistently negative (see

Figure 23). For the Corporations in the **Service sector** viz: the Kadamba Transport Corporation limited (KTCL) the losses have been increasing over the years. However, it is necessary to note that Goa has long dependence on privatized bus-transport as well Kadamba Transport. To a large extent, KTC 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 KTC, and if private owners want to provide transport facilities to the profitable areas, they could pay some form of fee to KTC, so that the income earned from this source can make the KTCL sustainable to provide the services. Similar strategy could be adopted for the interstate transport provided by KTCL.

The KTCL operates bus stands in different places covering almost all of Goa's cities and towns. However these bus stands have establishments like shops etc, wherein recoveries, renewals or rents are not paid on regular basis amounting to massive losses.

A complete review of these establishments could be made and accordingly a policy could be framed for the fixation of rent, renewal. Under the administrative expenses it has been noted that the expenditures made on the Office of the Chairman, Vice Chairman is high, this could be brought down. The Chairman, Vice Chairman and the Board of Directors appointed could be experts in the field. The overhead cost needs to be reduced substantially. Again, the purchases of the buses need to be made more transparent and as far as possible and it could follow the DGS&D (Directorate General of supplies and Disposals) rates.

Secondly, the Goa Tourism Development Corporation Limited (GTDCL) had incurred losses for most of the years except for 2010-11. It has been observed that certain amount of land owned by the GTDCL is either barren or is encroached upon, this could be identified and used optimally by the GTDCL for commercial purposes. GTDCL owned hotels which are running under losses could be privatised. Professional approach could be adopted by the GTDCL wherein, hotels owned by the GTDCL located at the beach side areas could be given star up gradation. Amusement parks, Oceanarium could be set by the GTDCL to attract more tourists.

In the case of Goa Electronic Limited (GEL), the purchases made by the state Government could be routed to the GEL and not to the private enterprises. Goa Electronic Limited (GEL), the Goa Information Technology Development Corporation (GITDC) and the Info Tech Corporation of Goa Limited (ITCGL), which has incurred losses for the entire period, are running on the same grounds, providing similar services and are competing with each other. These corporations could be merged.

Under the **Agricultural sector** category, the Goa State Horticultural Corp Ltd (GSHCL) has incurred losses for the entire period under consideration. 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.

Under the **finance sector**, Goa Handicraft, Rural and Small Scale Industries Development Corporation Limited has been incurring losses for the last two years viz: 2009-10 and 2010-11. 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. In case of the Economic Development Corporation, losses were made only in the first three years of study.

The state government, has tied up with the Bank of India to advance loans to interested government employees for the purchase of a house, motor car (Motor Car Advance) etc. These loans are available to the Government employees at a lower interest rates (as it is subsidised by the State Government). Instead of negotiating with the Bank of India, these loans could be provided through the EDC.

For the Goa Industrial Development Corporation, there could be complete transparency in the allotment of plots and a complete professional approach could be adopted for the same. A well framed policy for the allotment of the plots is needed.

In the case of the three electronics-related companies, Goa Electronic Limited (GEL), the Goa Information Technology Development Corporation (GITDC) and the Info Tech Corporation of Goa Limited (ITCGL), could be merged to reduce costs of operation and increase profitability.

The government may consider appointing experts in respective fields to the posts of the Chairman, Vice Chairman and the Board of Directors in order to bring in more professionalism in management of these organisations. There is also urgent need to appoint suitable expert committee to create a road map for social and financial viability of PSUs in the state.

Chapter 9: Appendix

Table 47: Statement showing particulars of paid-up capital, loans outstanding and the Debt Equity Ratio in respect of Government Companies and Statutory Corporations.

Sector and Name of the Company

1. Agriculture And Allied

a. Goa Forest Development Corporation Limited

	Paid-up Capital*				#Loans Outstanding				Debt Equity Ratio
	State Government	Central Government	Others	Total	State Government	Central Government	Others	total	
2002-03	5000000	-	-	5000000		-	-	-	-
2003-04	5000000	-	-	5000000		-	-	-	-
2004-05	25000000	-	-	25000000	389666	-	-	389666	0.02
2005-06	25000000	-	-	25000000	429546	-	-	429546	0.02
2006-07	26891000	-	-	26891000	1094746	-	-	1094746	0.04
2007-08	26891000	-	-	26891000		-	-	-	-
2008-09	26891000	-	-	26891000		-	-	-	-
2009-10	26891000	-	-	26891000		-	-	-	-
2010-11	26891000	-	-	26891000		-	-	-	-

b. Goa State Horticultural Corporation Limited

	Paid-up Capital				Loans Outstanding				debt equity ratio
	State Government	Central Government	Others	total	State Government	Central Government	Others	total	
2002-03	12250000			12250000					
2003-04	16650000			16650000					
2004-05	49650000			49650000					
2005-06	49650000			49650000	12400000			12400000	0.25
2006-07	49650000			49650000	12400000			12400000	0.25

c. Goa Meat Complex Limited

	Paid-up Capital*				# Loans Outstanding				debt equity ratio
	State Government	Central Government	Others	total	State Government	Central Government	Others	total	
2002-03	6182400								

2003-04	6182400								
2004-05	6182400								
2005-06	6182400								
2006-07	6182400								
2007-08	6182400								
2008-09	6182400								
2009-10	6182400								

2. Finance

a. Economic Development Corporation Of Goa, Daman & Diu

	Paid-up Capital*			total	# Loans Outstanding			total	Debt Equity Ratio
	State Government	Central Government	Others		State Government	Central Government	Others		
2002-03	449248000			449248000	3305973118			3305973118	7.36
2003-04	479248000			479248000	2953303206			2953303206	6.16
2004-05	489248000			489248000	2224785859			2224785859	4.55
2005-06	499248000			499248000	2042918740			2042918740	4.09
2006-07	659248000			659248000	2955430729			2955430729	4.48
2007-08	809248000			809248000	415309752.58			415309752.6	0.51
2008-09	959248000			959248000	422582605.71			422582605.7	0.44
2009-10	1009248000			1009248000	0.00			0	0.00
2010-11	1009248000			1009248000	930107332.97			930107333	0.92
2011-12	1009248000			1009248000					0.00

b. Goa Handicrafts Rural and Small Scale Industries Development Corporation

	Paid-up Capital*			total	Loans Outstanding			total	Debt Equity Ratio
	State Government	Central	Others		State Government	Central Government	Others		
2002-03	35001300			35001300					
2003-04	35001300			35001300	6427740.18			6427740.18	0.183642898
2004-05	35001300			35001300					
2005-06	35001300			35001300					
2006-07	35001300			35001300					
2007-08	75001300			75001300					
2008-	75001300			75001300					

09									
2009-10	75001300			75001300					
2010-11	80000000			80000000					

3. Infrastructure

a. Goa State Infrastructure Development Corporation Limited (GSIDCL)

	State Government	Paid-up Capital*			# Loans Outstanding				Debt Equity Ratio for the Year
		Central	Others	total	State Government	Central	Others	total	
2002-03	31000060			31000060	1664927365			1664927365	53.70
2003-04	31000060			31000060	1539134079			1539134079	49.64
2004-05	31000060			31000060	2217865350			2217865350	71.54
2005-06	31000060			31000060	1415695690			1415695690	45.66
2006-07	31000060			31000060	1495488380			1495488380	48.24
2007-08	31000060			31000060	1698858847			1698858847	54.80
2008-09	31000060			31000060	2142116850			2142116850	69.10
2009-10	37200070			37200070	1854915273			1854915273	49.86
2010-11	37200070			37200070	1309233701			1309233701	35.19

b. Info Tech Corporation of Goa Limited (ITCGL)

	State Government	Paid-up Capital*			# Loans Outstanding				debt equity ratio
		Central Government	Others	total	State Government	Central Government	Others	total	
2002-03	31890443	-	-	31890443	3310176	-	-	3310176	0.10
2003-04	123346843	-	-	123346843	-	-	-	-	--
2004-05	123346843	-	-	123346843	1500000	-	-	1500000	0.01
2005-06	163346843	-	-	163346843	-	-	-	-	-
2006-07	163346840	-	-	163346840	-	-	-	-	0

c. Sewerage and Infrastructural Development Corporation Limited (SIDCL)

	State Government	Paid-up Capital*			# Loans Outstanding				debt equity ratio
		Central Government	Others	total	State Government	Central Government	Others	total	

2006-07	20500060	-	-	20500060	-	-	-	-	-
2007-08	48500060	-	-	48500060	-	-	-	-	-
2008-09	48500060	-	-	48500060	-	-	-	-	-
2009-10	48500060	-	-	48500060	-	-	-	-	-
2010-11	48500060	-	-	48500060	-	-	-	-	-

4. Manufacturing

a. Goa Auto Accessories Limited

	Paid-up Capital				Loans Outstanding				debt equity ratio
	State Government	Central Government	Others	total	State Government	Central Government	Others	total	
2002-03	6700000	-	-	6700000	56487952	-	-	56487952	8.43
2003-04	6700000	-	-	6700000	10114035	-	-	10114035	1.51
2004-05	6700000	-	-	6700000	7172758	-	-	7172758	1.07
2005-06	55900000	-	-	55900000	11242117	-	-	11242117	0.20
2006-07	55900000	-	-	55900000	11612350	-	-	11612350	0.21
2007-08	55900000	-	-	55900000	14751029	-	-	14751029	0.26
2008-09	55900000	-	-	55900000	12249561	-	-	12249561	0.22
2009-10	55900000	-	-	55900000	18762013	-	-	18762013	0.34
2010-11	55900000	-	-	55900000	25913853	-	-	25913853	0.46
2011-12	55900000	-	-	55900000	-	-	-	-	-

b. Goa Antibiotics and Pharmaceuticals Limited (GAPL)

	Paid-up Capital*				# Loans Outstanding				debt equity ratio
	State Government	Central Government	Others	total	State Government	Central Government	Others	total	
2002-03	39900000			39900000	100998038.3			100998038.3	2.5
2003-04	39900000			39900000	112208930			112208930	2.8
2004-05	39900000			39900000	116637509			116637509	2.9
2005-06	190200000			190200000	166678563.4			166678563.4	0.9
2006-07	190200000			190200000	176990250.7			176990250.7	0.9
2007-08	190200000			190200000	188413520.1			188413520.1	1.0

2008-09	190200000			190200000	127573300.4			127573300.4	0.7
2009-10	190200000			190200000	136756988.4			136756988.4	0.7
2010-11	190200000			190200000	147508723			147508723	0.8

5. Services

a) Goa Electronic Limited (GEL)

	Paid-up Capital*				# Loans Outstanding				debt equity ratio
	State Government	Central Government	Others	total	State Government	Central Government	Others	total	
2002-03	18000000	-	-	18000000	221151025.98	-	-	221151025.98	12.29
2003-04	18000000	-	-	18000000	257094895.8	-	-	257094895.8	14.28
2004-05	18000000	-	-	18000000	250427894.8	-	-	250427894.8	13.91
2005-06	18000000	-	-	18000000	237728868.8	-	-	237728868.8	13.21
2006-07	18000000	-	-	18000000	23628046.83	-	-	23628046.83	1.31
2007-08	18000000	-	-	18000000	210472237.8	-	-	210472237.8	11.69
2008-09	18000000	-	-	18000000	210268895.8	-	-	210268895.8	11.68
2009-10	18000000	-	-	18000000	212027125.7	-	-	212027125.7	11.78
2010-11	18000000	-	-	18000000	214614888.8	-	-	214614888.8	11.92
2011-12	18000000	-	-	18000000	107140516.9	-	-	107140516.9	5.95

a. Goa Tourism Development Corporation Limited (GTDCL)

	Paid-up Capital*				# Loans Outstanding				debt equity ratio
	State Government	Central Government	Others	total	State Government	Central Government	Others	total	
2002-03	87429000			87429000	20369680			20369680	0.232985394
2003-04	159424689			159424689	15462180			15462180	0.096987362
2004-05	203538816			203538816	10649141			10649141	0.052319952
2005-06	203538800			203538800	18051884			18051884	0.088690137
2006-07	203538800			203538800	10000000			10000000	0.049130682
2007-08	226469173			226469173	10000000			10000000	0.04415612
2008-09	226469173			226469173	73916700			73916700	0.326387468

2009-10	226469173			226469173	73916700			73916700	0.326387468
2010-11	226469100			226469100	0			0	0
2011-12	226469100			226469100	0			0	0

b. Kadamba Transport Corporation Ltd

	Paid-up Capital*				# Loans Outstanding				debt equity ratio
	State Government	Central Government	Others	total	State Government	Central Government	Others	Total	
2002-03	229096200			229096200	192161827.6			192161827.6	0.84
2003-04	229096200			229096200	261319696.1			261319696.1	1.14
2004-05	259096200			259096200	296848922			296848922	1.15
2005-06	259096200			259096200	324411329			324411329	1.25
2006-07	365933200			365933200	339515028.4			339515028.4	0.93
2007-08	425933200			425933200	379666455.4			379666455.4	0.89
2008-09	458933200			458933200	427781429.7			427781429.7	0.93
2009-10	488933200			488933200	481157820			481157820	0.98
2010-11	526433200			526433200	534516686.6			534516686.6	1.02
2011-12	-796579621			-796579621	322425227.7			322425227.7	-0.40

Statutory Corporations

1. Infrastructure

Goa Industrial Development Corporation Ltd

	Paid-up Capital*				# Loans Outstanding				debt equity ratio
	State Government	Central Government	Others	total	State Government	Central Government	Others	total	
2002-03					177818634.5	82453000	359287709	619559343.5	
2003-04					180818634.5	97453000	56861068.0	335132702.5	
2004-05					180218634.5	100053000	58278500.4	338550134.9	
2005-06					180218634.5	100053000	67519536.6	347791171.1	
2006-07					180218634.5	100053000	87991115.8	368262750.3	
2007-08					180218634.5	100053000	336345727.4	3643728909	

2008-09					180218634.5	148948561	99372094.8	428539290.3	
2009-10					180218634.5	133974163	117854848	432047645.3	
2010-11					180218634.5	143818963	124748703	448786300.3	

Table 48: Summarised financial results of Government Companies and Statutory Corporations

1. Agriculture And Allied

a. Goa Forest Development Corporation Limited

Net Profit(+)/ Loss(-)										
Year	Net P/L BID	Interest	Depreciation	Net Profit/Loss	Turnover (in lakh))	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accumulated Profit or loss/Cap employed
2002-3		5328	238459			5000000	3777335.22	45588739	0	0.083
2003-4		2039	247442			5000000	6868425.59	56638565	0	0.121
2004-5	1093588		207113	1300701		25000000	980500			
2005-6	-159802		266603	106801		25000000	-223352	74927057	-0.002	-0.003
2006-7	2913296		415055	-2498241		26891000	-2861176	73941615	-0.039	-0.039
2007-8	1738251		485970	-2224221	187.28	26891000	-2460273	71552669	-0.024	-0.034
2008-9	9983975		483328	-10467303	169.47	26891000	-10560461	61013417	-0.164	-0.173
2009-10	7703426		495910	-8199336	357.66	26891000	-8207177	52814081	-0.146	-0.155
2010-11	5445916		548508	-5994424	233.73	26891000	-6072144	46819657	-0.116	-0.130

b. Goa State Horticultural Corporation Limited

Net Profit(+)/ Loss(-)										
Year	Net Profit/loss BID	In te re st	Depreciation	Net Profit/loss	Turnover (in lakh))	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employe d
2002-03	1643623.98		152454	-1796078.8	41.43	12250000	-8669771	2289674	-0.72	-3.79
2003-04	2290042.69		263785	-2553828.1	60.96	16650000	-11223599	9787703	-0.23	-1.15
2004-05	1556677.91		347245	1903922.91	117.11	49650000	-12600838	49837440	-0.03	-0.25
2005-06	-302364.31		297100	-599464.54	236.45	49650000	-13453124	48896876	-0.01	-0.28
2006-07	110246.77		267415	-157169	345.63	49650000	-13453124	48896876	0.00	-0.28

c. Goa Meat Complex Limited

Net Profit(+)/ Loss(-)										
Year	Net Profit/loss BID	Interest	Depreciation	Net Profit/loss	Turnover(in lakh)	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
2002-03	4894682		2026857	2867826	209.21	6182400	12926083	28612263	0.17	0.45
2003-04	6944909		1983383	4961527	246.51	6182400	12425391	38141193	0.18	0.33
2004-05	4089821		1900395	2189426	216.74	6182400	13584922	36785644	0.11	0.37
2005-06	5640688		2176249	3464439	202.75	6182400	16587550	52799878	0.11	0.31
2006-07	-4860349		2205364	7065713	127.67	6182400	2177450	44727374	-0.11	0.05
2007-08	-2956830		2173422	5130252	165.65	6182400	2177450	42409468	-0.07	0.05
2008-09	-4220850		2148342	6369192	168.69	6182400	16638082	36016277	-0.12	0.46
2009-10	-320555		2160710	2481265	194.30	6182400	11900772	33686965	-0.01	0.35

2. Finance

a. Economic Development Corporation Of Goa, Daman & Diu

Net Profit(+)/ Loss(-)										
Year	Net Profit/loss BID	Interest	Depreciation	Net Profit/loss	Turnover(in lakh)	Paid-up Capital	Accumulated P/L	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
2002-3	304315366	428104831	3907392	127696857	3615.10	449248000	-123042331	3018355339	0.101	-0.04
2003-4	447406326	343360461	3020167	101025698	4864.76	479248000	-435092793	2203039318	0.203	-0.20
2004-5	596238228	270970397	3599156	321668676	3462.48	489248000	-116354261	1384870660	0.431	-0.08
2005-6	411313860	201686245	2307401	207320213	4510.75	499248000	132711303	1433884501	0.287	0.09
2006-7	636834574	147406567	2296297	487131710	9891.83	659248000	481513750	3084703624	0.206	0.16
2007-8	927149381	882408137	2370537	836538031	10809.85	809248000	117734226	1703591767	0.544	0.07
2008-9	298312813	430697903	2923553	252319470	4333.53	959248000	244449066	2155181852	0.138	0.11
2009-10	339373791	349679534	4208984	300196854	4409.85	1009248000	245379592	2086816446	0.163	0.12
2010-11	263439833	455831416	4380916	213475776	4062.22	1009248000	97350498	3159237432	0.083	0.03
2011-12	360489496.5	856143527	4613857	270261288	5602.07	1009248000	0	3646252647	0.099	0.00

b. Goa Handicraft, Rural and Small Scale Industries Development Corporation Limited

Year	Net Profit(+)/ Loss(-)			Net Profit/loss	Turnover (in lakh)	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
	Net Profit/loss BID	Interest	Depreciation							
2002-03	4984345	65288	609422.53	4309635	1366.4	35001300	7417506	44414948	0.11	0.167
2003-04	1137994	457849	669467	10678	2017.4	35001300	4122144	73699282	0.02	0.056
2004-05	7697209	949364	678136	6069709	2761.2	35001300	2752489	91620233	0.08	0.030
2005-06	12825249	212506	640812	11971931	1637.7	35001300	12389875	76251266	0.17	0.162
2006-07	1846924	960813	678568	207543	2977.9	35001300	156541	88677265	0.02	0.002
2007-08	5957366	456471	646635.	4854260	3342.9	75001300	3518664	101124783	0.06	0.035
2008-09	8369308	668985	640507	7059816	2932.3	75001300	1433092	97535360	0.09	0.015
2009-10	-2179785	110139	708538.	-2998462	3013.9	75001300	-4166693	96597905	-0.02	-0.043
2010-11	24995891	187077.6	781756	25964725	2974.8	80000000	-31109633	76404078	-0.33	-0.407
2011-12	12170548	143924	901205	13215677	3683.9	80000000				

3. Infrastructure

a. Goa State Infrastructure Development Corporation Limited

Year	Net Profit(+)/ Loss(-)			Net Profit/loss	Turnover (in lakh)	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
	Net Profit/loss BID	Interest	Depreciation							
2002-03	173206968	172020060	192258	994650	1845.1	31000060	929653	1696176026	0.10	0.001
2003-04	171920482	166976742	418357	4525383	6247.6	31000060	1207494	1566039174	0.11	0.001
2004-05	189975280	177925553	722377	11327350	13376.2	31000060	4594702	2246447417	0.08	0.002
2005-06	173720968	168027921	1236185	4456862	6237.1	31000060	5752883	1453760680	0.12	0.004
2006-07	177199201	147322915	1285311	28590975	10294.1	31000060	23425796	1548778156	0.11	0.015
2007-08	160755815	7515657	133287805	19952353	16916.6	31000060	34607659	1766067819	0.09	0.020
2008-09	220826551	199639450	1753434	19433667	20030.4	31000060	48720047	2223768913	0.10	0.022
2009-10	222438673	202823234	1770310	17845129	16720.5	37200070	52528445	19263578054	0.01	0.003
2010-11	197459472	163114464	1819482	32525526	18965.5	37200070	71860779	1415091599	0.14	0.051

b. Info Tech Corporation of Goa Limited (ITCGL)

Net Profit(+)/ Loss(-)										
Year	Net Profit/loss BID	Interest	Depreciation	Net Profit/loss	Turnover (in lakh)	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
2002-03	-3322843		979424	4302266.95	18.5	31890443	-4108878	31091740	-0.11	-0.13
2003-04	-2934196		813313	3747508.71	23.3	123346843	-7856387	115490456	-0.03	-0.07
2004-05	-7001392		795212	7796603.97	172.8	123346843	-15652991	109193852	-0.06	-0.14
2005-06	-3148918		754534	3903452.43	947.0	163346843	-19556443	143790400	-0.02	-0.14
2006-07	-341243	16845	1522182	-1880270	6301.4	163346840	-21436713	521813817	0.00	-0.04

c. Sewerage and Infrastructural Development Corporation Limited (SIDCL)

Net Profit(+)/ Loss(-)										
Year	Net Profit/loss BID	Interest	Depreciation	Net Profit/loss	Turnover (in lakhs)	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
2006-07			130027			20500060		3455013.11		
2007-08			124220			48500060		31123940		
2008-09	7473830	113	215226	7258491	115.0	48500060	2080208	42500113	0.176	0.05
2009-10	15736909		241942	15494967	237.5	48500060	14382396	44606156	0.353	0.32
2010-11	20644790	33	265529	20379261	357.0	48500060	27992176	70871179	0.291	0.39

4. Manufacturing

a. Goa Auto Accessories Limited

Net Profit(+)/ Loss(-)										
Year	Net Profit/loss BID	Interest	Depreciation	Net Profit/loss	Turnover (in lakhs)	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
2002-03	3991238	7146051	2549969	14720252	491.47	6700000	71476266	10105297	0.3	-7.07
2003-04	4840051	7796725	1836598	-5642085	651.45	6700000	77128425	9425857	0.5	-8.18
2004-05	2718074	1020495	1636678	2182878	806.38	6700000	74966459	10793183	0.2	-6.95
2005-06	3741341	846054	1620849	251171	881.17	55900000	76019629	15956009	0.2	-4.76
2006-07	190493	1008896	1353429	1379016	913.62	55900000	74769967	17575904	0.0	-4.25
2007-08	-4033022	1343700	1195114	-2348321	825.40	55900000	77234623	18249927	-0.22	-4.23
2008-09	-7697035	1164104	991849	-6188975	667.12	55900000	83735444	9247638	-0.83	-9.05

2009-10	-	12683883	1291020	1245145	10233200	626.89	55900000	93968644	5526889	-2.29	-17.00
2010-11	-	14662086	1978203	1441280	18081569	905.65	55900000	110072010	-3424636	4.28	32.14
2011-12	-	3147094	2607915	1551620	-1012441	921.09	55900000	-1245926	58559026	0.05	-0.02

b. Goa Antibiotics and Pharmaceuticals Limited (GAPL)

Net Profit(+)/ Loss(-)										
Year	Net Profit/loss BID	Interest	Depreciation	Net Profit/loss	Turnover (in lakhs)	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
2002-03	13555717	11892236	2815390	-1151909	2489.6	39900000	1115353	100249364	0.1352	0.01
2003-04	-	9594729	2555514	24481482	1795.9	39900000	24518350	83936704	-0.1469	-0.29
2004-05	-	8989267	2855703	24200975	855.1	39900000	24048259	64404063	-0.1919	-0.37
2005-06	-	6658968	2810192	23297008	1038.6	190200000	19092803	95250435	-0.1452	-0.20
2006-07	-7481326	10865870	2966035	21313232	1100.6	190200000	18917087	86900035	-0.0861	-0.22
2007-08	-3089934	10895639	3063530	17049104	1078.0	190200000	16624767	81621040	-0.0379	-0.20
2008-09	9495266	3786893	2906880	2801493	1950.1	190200000	46680404	67473280	0.1407	0.69
2009-10	21013649	5683169	3519532	11810948	2505.4	190200000	8516806	92203222	0.2279	0.09
2010-11	29286593	6679638	3762468	18844487	2333.5	190200000	12599664	117433897	0.2494	0.11
2011-12	32463860	6327015	5136142	21000703	2944.9	190200000				

5. Services

a. Goa Electronic Limited (GEL)

Net Profit(+)/ Loss(-)										
Year	Net Profit/loss BID	Interest	Depreciation	Net Profit/loss (NPAID)	Turnover (in lakhs)	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
2002-03	-2146495	6120163	3065735	11332394.67	323.9	18000000	-152214596	75489024	-0.03	-2.02
2003-04	-8329786	17618243	287059	26235089.38	3120.5	18000000	-163546990	72060141	-0.12	-2.27
2004-05	4673713	9862543	285526	5474356.19	3988.3	18000000	-201589046	58630046	0.08	-3.44
2005-06	4292922	3000411	161944	1130567.33	2308.9	18000000	-208681818	54029128	0.08	-3.86
2006-07	140822	2496713	325255	2681146.59	305.7	18000000	-201699741	49717710	0.00	-4.06
2007-08	-3204091		333051	3537142.21	404.0	18000000	-204540337	30709541	-0.10	-6.66

2008-09	2458831		33354 2	2125289.56	594.1	18000000	-197762697	32493022	0.08	-6.09
2009-10	-9727832		36412 1	10091953.2 9	491.6	18000000	-195775874	22466856	-0.43	-8.71
2010-11	2979593		43308 5	2546508.04	676.2	18000000	-205999300	24959508		
2011-12	6853868	889523	53463 5	6319233	990.9	18000000				

b. Goa Tourism Development Corporation Limited (GTDC)

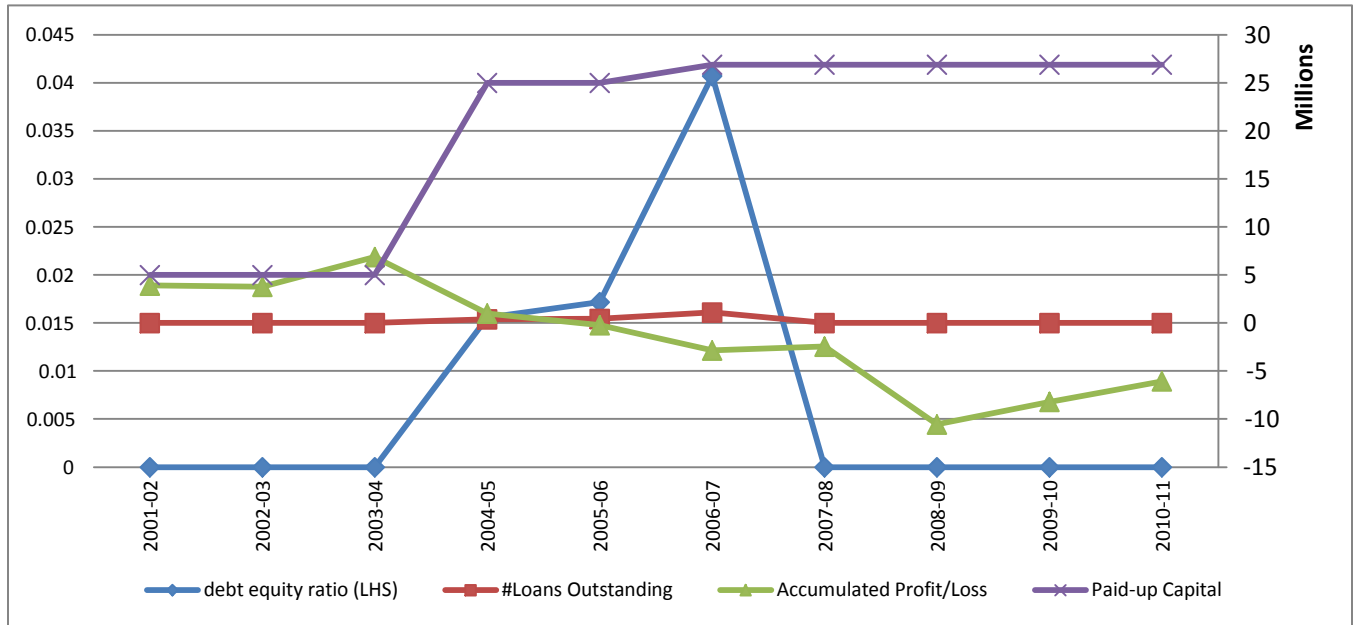
Net Profit(+)/ Loss(-)										
Year	Net Profit/loss before Interest and depreciation	Interest	Depreciation	Net Profit/loss	Turnover (in lakhs)	Paid-up Capital	Accumulated Profit/Losses	Capital employed	Return on Capital employed	Accumulated Profit or loss/Capital employed
2002-03	7463463.1	2501003		4962460.1	851.13	87429000	-	96017711	0.08	-0.12
2003-04	12634250.5	2321861		10312389.5	991.14	159424689	-	158774294	0.08	-0.09
2004-05	16530500	1415546		15114954	1113.72	203538816	-	196992369	0.08	-0.09
2005-06	21852524.98	1056995		20795529.98	1224.81	203538800	-	206356802	0.11	-0.08
2006-07	25372796.06	486137	16743977.8	8142681.26	1477.97	203538800	-6800321	212619030	0.12	-0.03
2007-08	21860925.19		19508422	2352503.19	1736.75	226469173	-8152208	235569998	0.09	-0.03
2008-09	6178387.63		22091425	-15913037.37	1720.09	226469173	-	282993723	0.02	-0.10
2009-10	26447043.6		21340883	5106160.6	1845.14	226469173	-	288099885	0.09	-0.06
2010-11	-13774523		18952989	5178466	2116.81	22646910	13922999	285442524	-0.05	0.05
2011-12	-80802237		18053665	-62748572	2476.66	226469100	-	292044174	-0.28	-0.28

c. Kadamba Transport Corporation Ltd (KTCL)

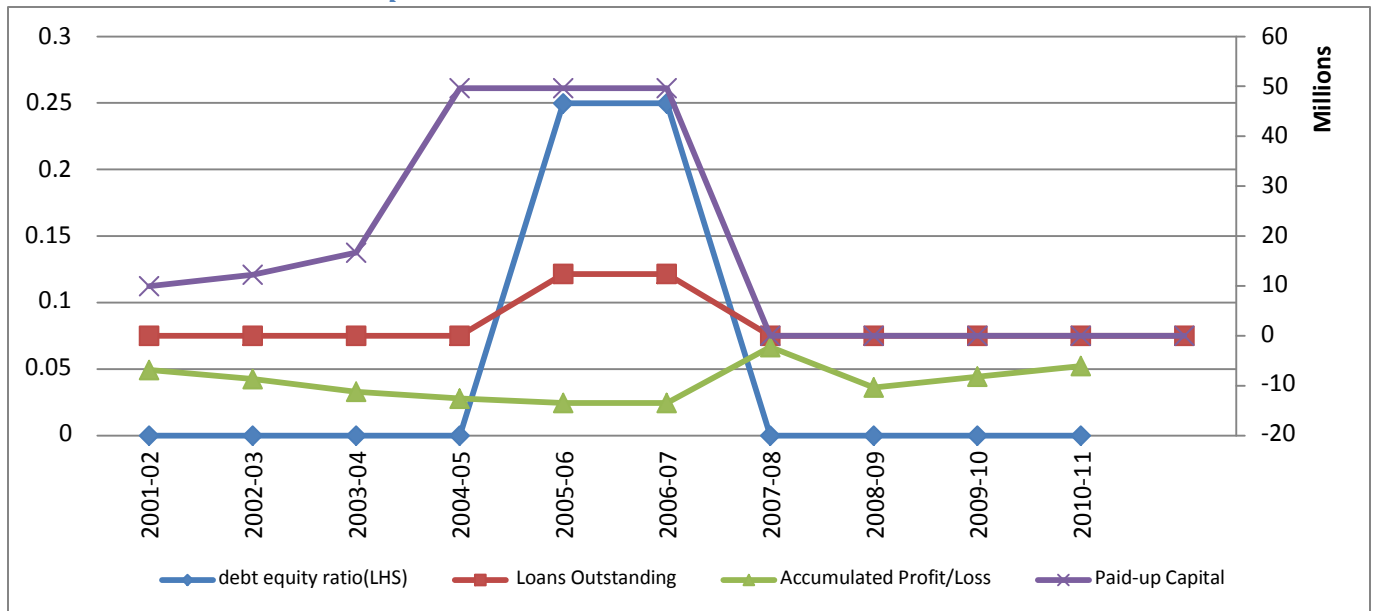
Net Profit(+)/ Loss(-)										
Year	Net Profit/loss before Interest and depreciation	Interest	Depreciation	Net Profit/loss	Turnover (in lakhs)	Paid-up Capital	Accumulated Profit/Loss	Capital employed	Return on Capital employed	Accu Profit or loss/Cap employed
2002-03	15282889	21206747	30794518	-36718377	4171.9	229096200	-394914935	52001265	0.29	-7.59
2003-04	15389472	24276287	35413382	-44300198	4614.2	229096200	-438846878	59689670	0.26	-7.35
2004-05	8516403	27245436	42277259	-61006292	4907.0	259096200	-529330703	69522695	0.12	-7.61
2005-06	-6038434	28064405	34352041	-68454880	5609.7	289096200	-648487413	62416446	-0.10	-10.39
2006-07	4041521	30944707	30686135	-57589322	6158.2	365933200	-714675134	61630842	0.07	-11.60
2007-08	-52118658	40377794	34561758	-127058210	5728.0	425933200	-842462381	74939552	-0.70	-11.24
2008-09	-69873582	48405661	37697157	-155976401	6171.4	458933200	-995219096	86102818	-0.81	-11.56
2009-10	-48352859	53900647	37145239	-139398745	7353.0	488933200	1135909704	91045886	-0.53	-12.48
2010-11	-64000113	53548916	39485194	-157034223	8291.5	526433200	1293016571	93034110	-0.69	-13.90
2011-12						596433200				

Figures showing Debt-equity ratio, Loans Outstanding, Accumulated Profit and Loss and Paid up Capital of select Government Companies and Statutory Corporations.

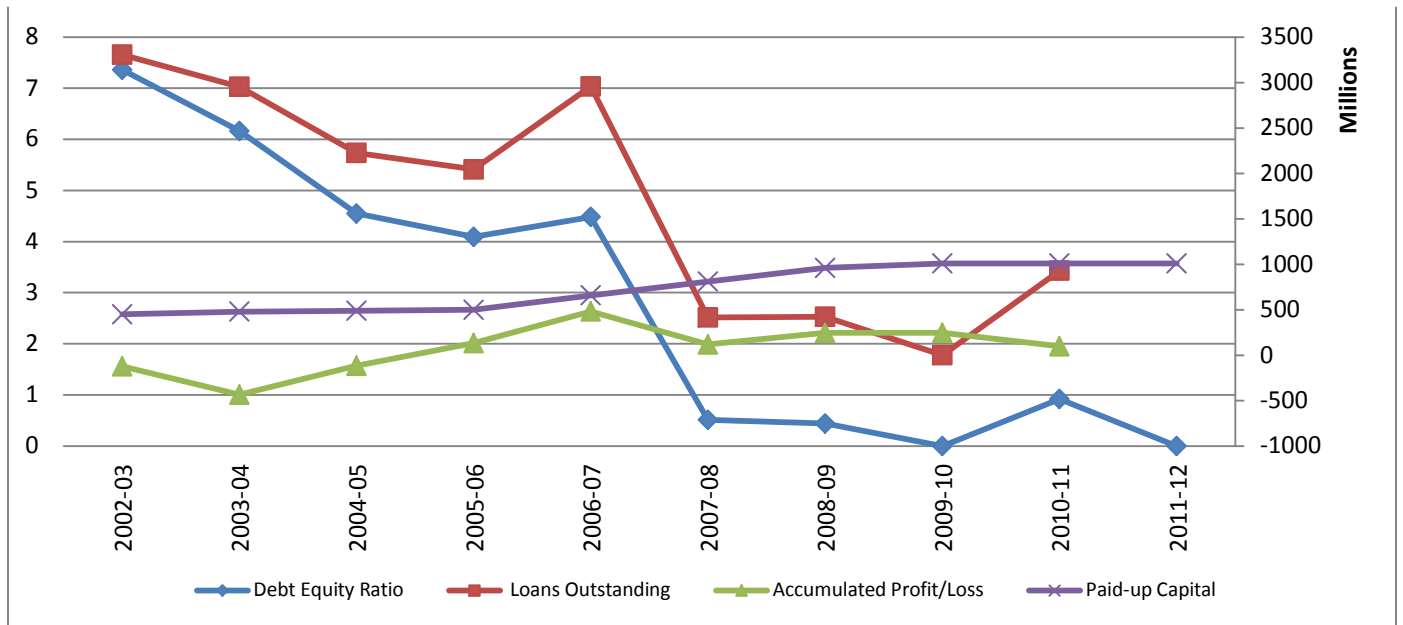
a. Goa Forest Development Corporation Limited



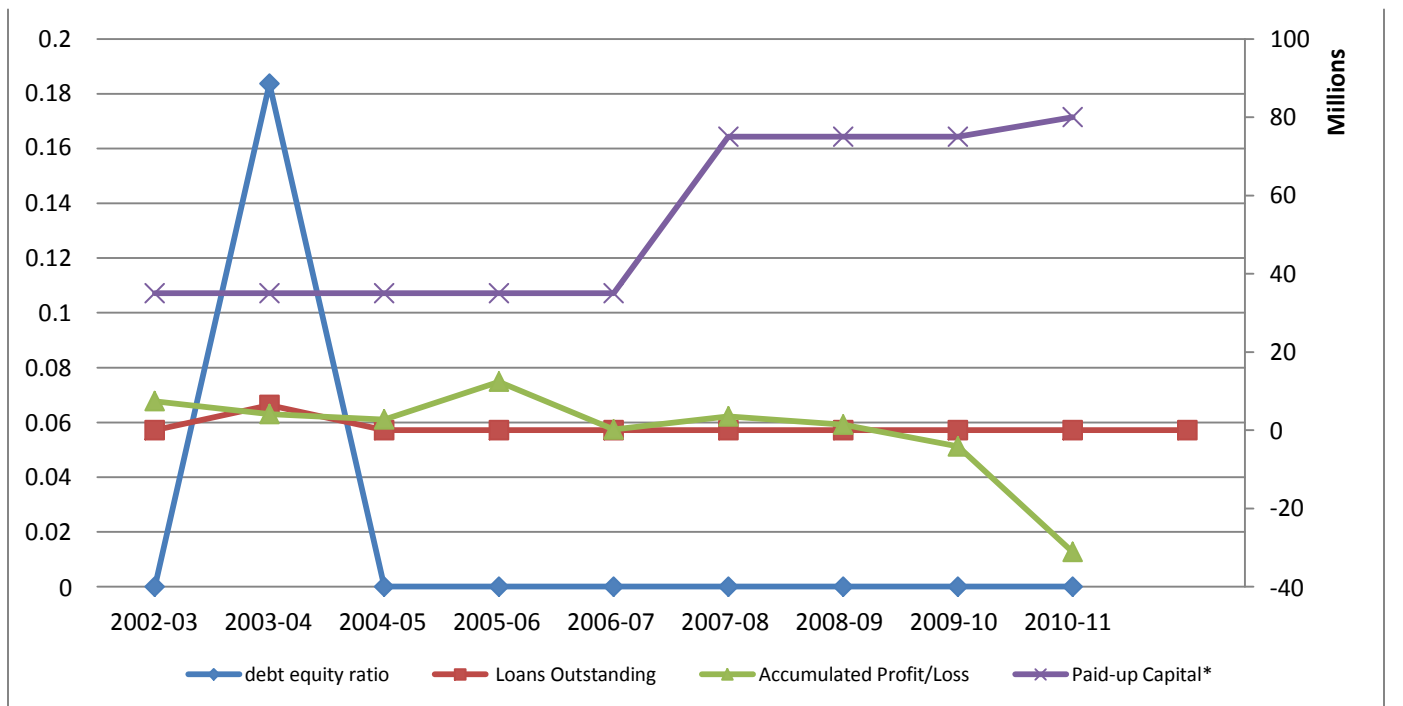
b. Goa State Horticultural Corporation Limited



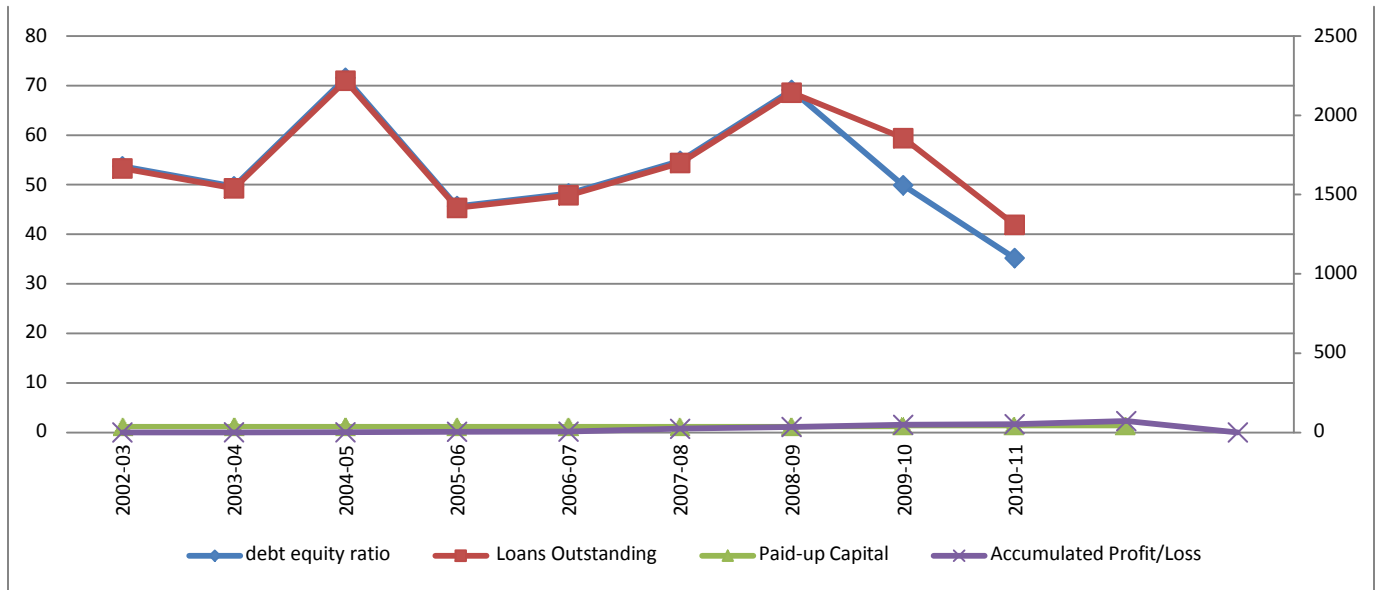
c. Economic Development Corporation Of Goa, Daman & Diu



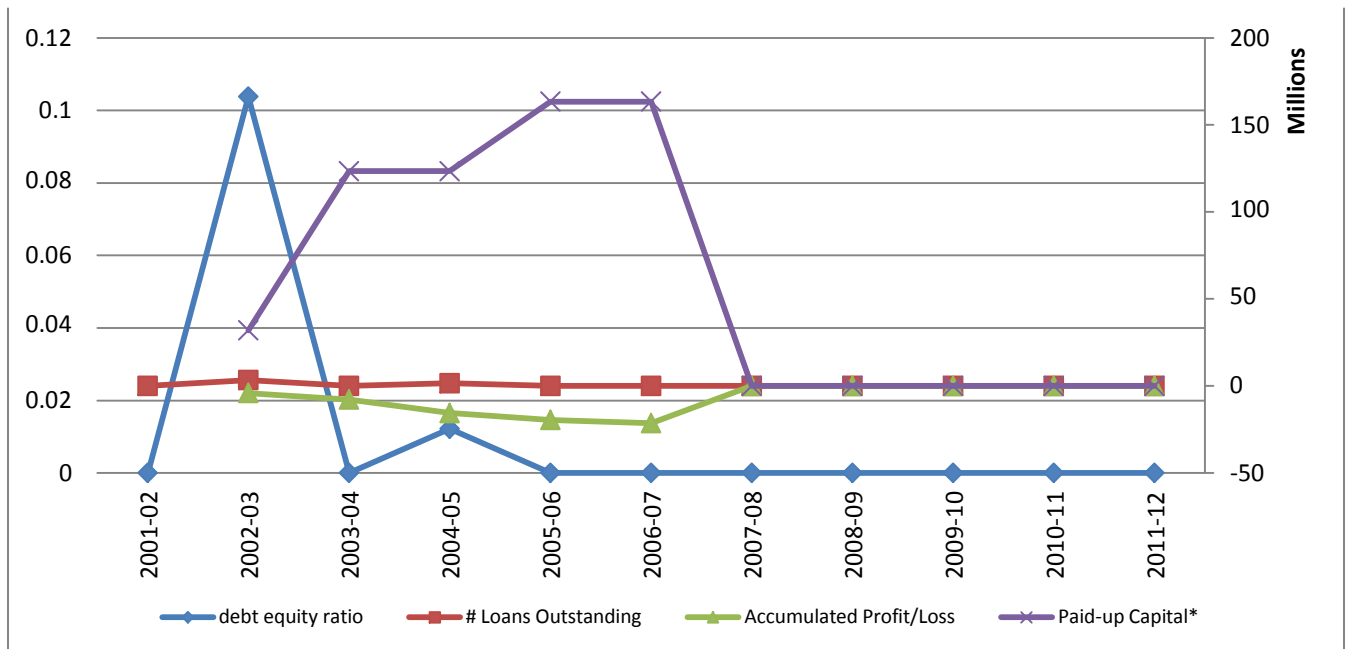
d. Goa Handicrafts Rural And Small Scale Industries Devp Corp



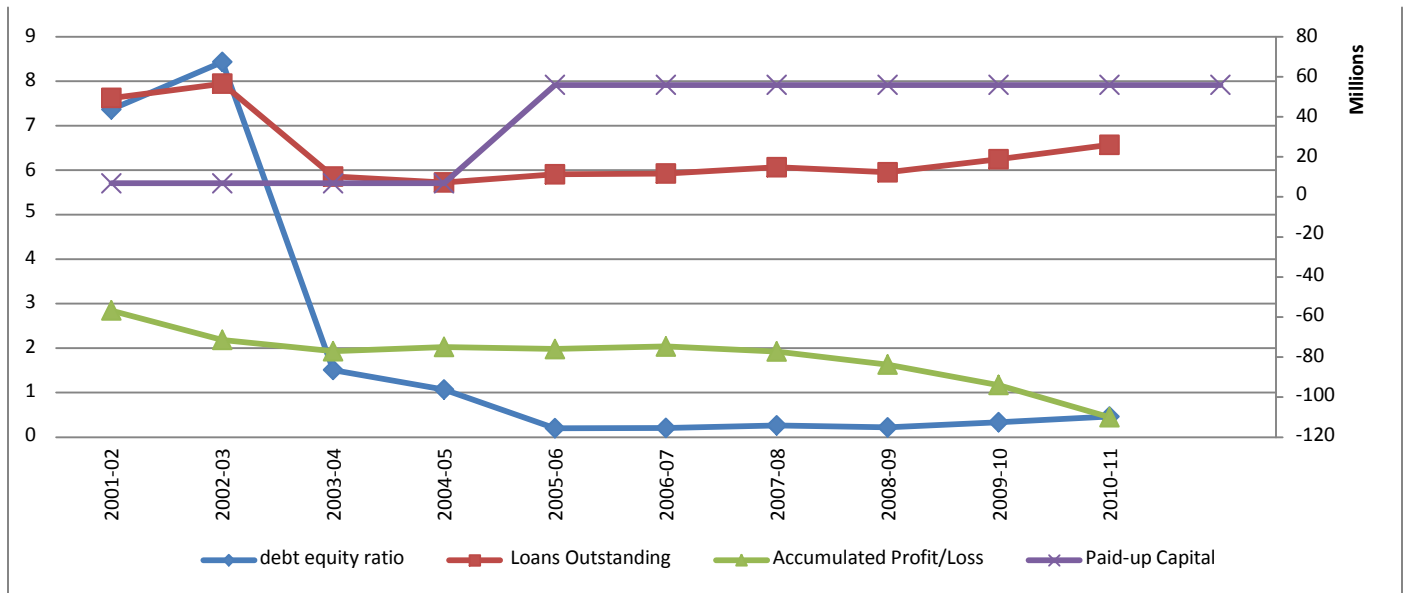
e. Goa State Infrastructure Development Corporation Limited (GSIDCL)



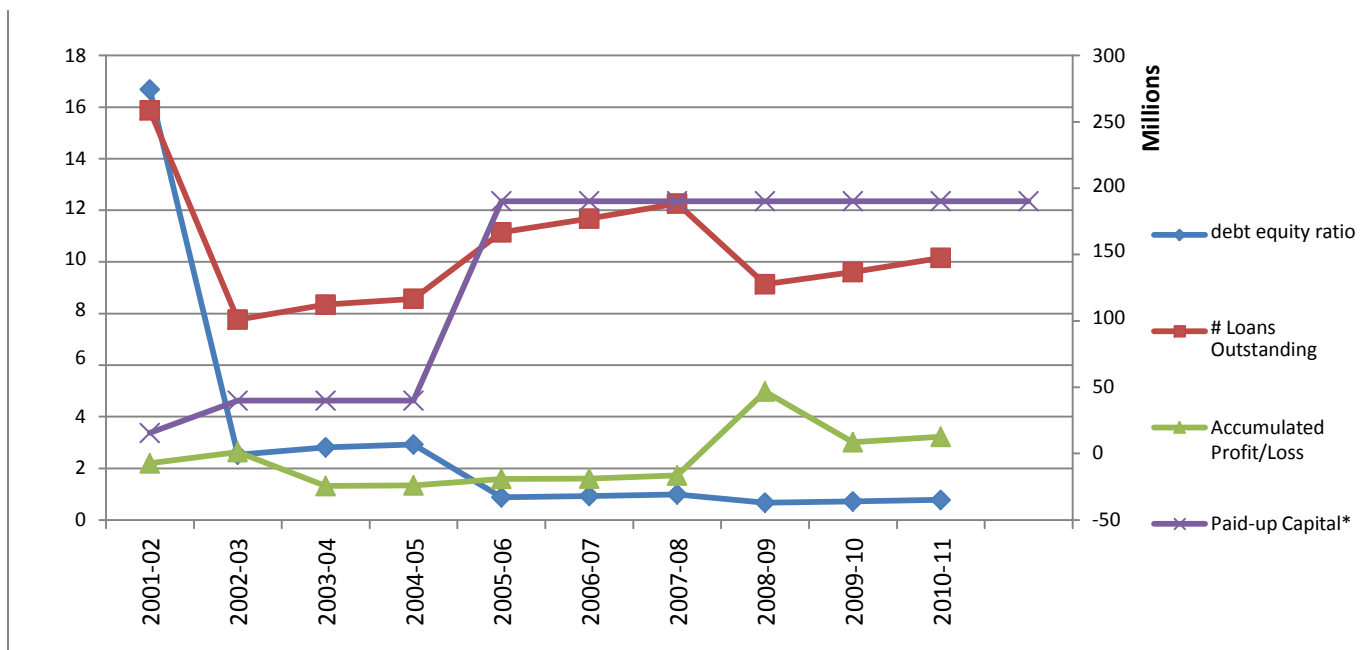
f. Info Tech Corporation of Goa Limited (ITCGL)



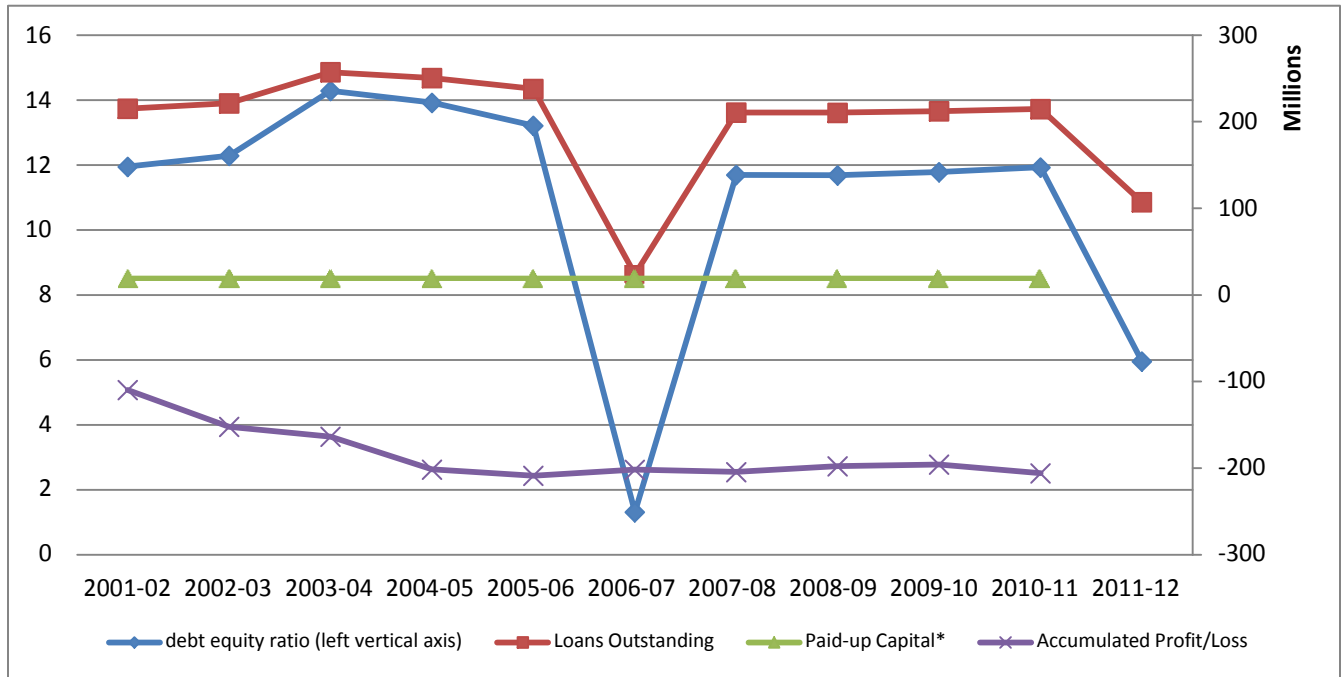
g. Goa Auto Accessories Limited



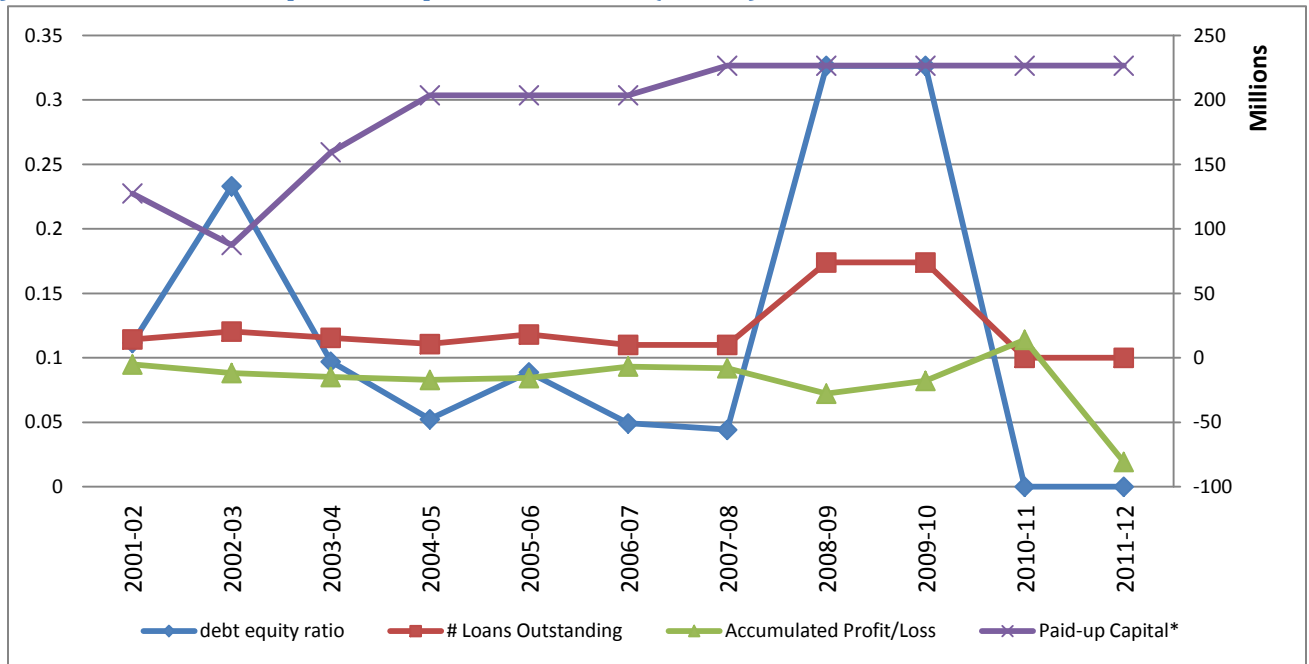
h. Goa Antibiotics and Pharmaceuticals Limited (GAPL)



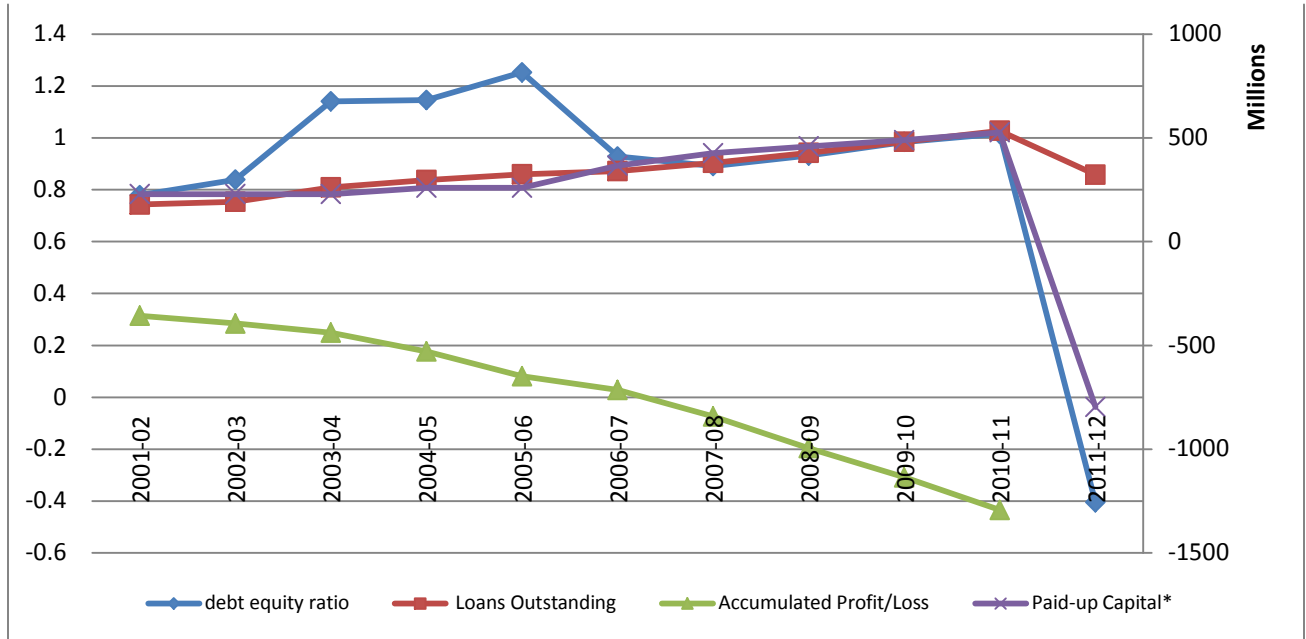
i. Goa Electronic Limited (GEL)



j. Goa Tourism Development Corporation Limited (GTDCL)



k. Kadamba Transport Corporation Ltd



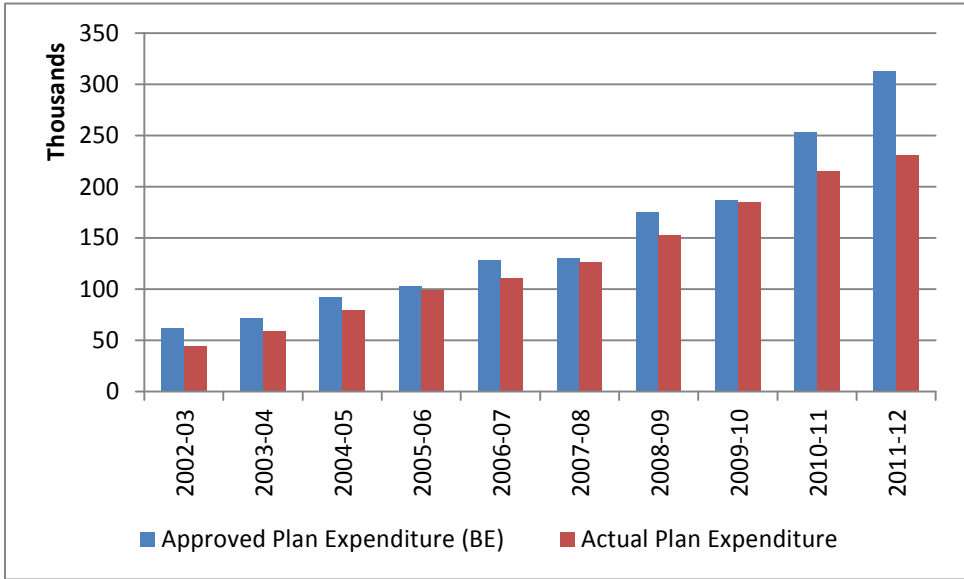
10. Public Expenditure

In this chapter we discuss the trends in Goa’s expenditures on revenue and capital accounts, focusing mainly on the revenue account starting with a discussion of the 11th plan outcomes.

10.1 Achievement under Plan Expenditure during 2002-3 to 2011-12

There has been a varying degree of success in meeting outlays during this period (see Table 49 and Figure 24). The average rate of achievement during this period was 86.4% (ratio of actual plan expenditure and budgeted plan expenditure) and Actual Plan Expenditure as a percentage of GSDP averaged at 6.3%.

Figure 24: Approved (Budget Estimates) and Actual Plan Expenditures during 2002-3 to 2011-12 (in Rs lakhs)



Source: GoG (Demand for Grants, Various Years)

10.2 Public Expenditure Ratio

Table 50 reveals that the public expenditure in Goa has been reduced around 1% from 2007-08 to 2012-13 whereas in neighbouring states Karnataka and Maharashtra it has slightly increased.

10.3 Social allocation ratio

Table 51 indicates the Social allocation ratio of Goa, Maharashtra and Karnataka. The social allocation ratio increased for Goa and Maharashtra from 2002-03 to 2011-12 but declined for Karnataka by 1.6% from 2010-11 (40%) to 2011-12 (38.4%). There are two broad categories of expenditure, namely, development and non-development expenditure. Non-development expenditure consist of expenditure under general services as major head of expenditure, which consist of expenditure on the organs of the states, fiscal services, interest payments and servicing of debt, administrative services, pensions and miscellaneous general services. Development expenditure includes expenditure of social and community services and expenditure on economic services as major heads of expenditure for social and economic development of the state. Social and community services include expenditure on education, family planning and public health, housing, labour employment, social security, welfare and natural calamities.

Expenditure on economic services consists of expenditure on agriculture, veterinary and co-operation, irrigation, electricity, rural and community development projects, civil works, industries and minerals, etc. Capital expenditures are incurred on building durable assets, like highways, multipurpose dams, irrigation projects, buying machinery and equipment. They are non recurring type of expenditures in the form of capital investments. Such expenditures are expected to improve the productive capacity and increase the assets of the economy.

10.4 Fiscal indicators

The Tax Revenue of Goa which consists of state's own tax revenue and share in central taxes has increased from Rs. 71682.27 lakhs in 2002-03 to Rs. 323160.93 lakhs during 2011-12 (see Table 52). Similarly there has been a significant increase in non-tax revenue, which includes state's own non-tax revenue and grants. Goa's own-non tax revenue rose from Rs 103916.5 lakhs to Rs 231353.54 lakhs in the assessment period. Total revenue receipts increased from Rs. 183301 lakhs in 2002-3 to Rs. 578072.78 lakhs in 2011-12. The non-debt capital receipts rose from Rs. 659.97 lakhs to Rs. 1559.37 lakhs in the same period.

Revenue expenditure: Revenue expenditure which include Plan and Non-plan expenditure increased from Rs. 202879.74 lakhs in 2002-3 to Rs. 449159.70 lakhs from in 2011-12.

Interest payments rose from Rs. 29185.83 lakhs to Rs. 73517 lakhs, while pension obligations have varied over the years. If we take the starting year and ending year it rose from Rs. 13789 lakhs to Rs. 41030 lakhs.

Capital expenditures which also consist of Plan and Non-plan expenditures also increased from Rs. 19019.03 lakhs to Rs. 123413.43 lakhs between 2002-3 to 2011-12. Loans and advances (Plan and non-plan together) have varied over this period. However, if we just consider the start and ending period, it rose from Rs. 1220.07 lakhs in 2002-3 to Rs. 1760 lakhs in 2011-12.

Total expenditure rose from Rs. 314429.1 lakhs to Rs. 706002.06 lakhs during the same period. The plan component increased from Rs 44,380.91 lakhs in 2002-3 to Rs 2,30,653.3 lakhs in 2011-12 while the non-plan component rose from Rs. 270048.19 lakhs in 2002-3 to Rs 475348.76 lakhs in 2011-12.

10.5 Revenue expenditure under major heads:

Table 53 shows the revenue expenditure under general services, social services and economic services from 2002-03 to 2011-12. The expenditure on general services was 45.57% during 2002-03 which has declined to 27.51% in 2011-12 as a proportion of revenue expenditures. The decline may be probably on account of the fact that the government has stopped running of lottery business. Regarding social services, it marginally increased from 27.49% in 2002-03 to 32.87% during 2011-12. Expenditure on economic services is also rose from 26.93% to 39.62% during the same period.

10.6 Expenditure under General Services

The Table 50 gives an account of the expenditure on various components of general services as a proportion of total expenditures under general services. During the period 2002-2003, higher share of revenue expenditure has been on pensions and Miscellaneous general services which includes lotteries. During 2003-04 onwards its share has significantly declined. But there has

been a major share of expenditure on interest payments and servicing of debts which rose from around 32.02% in 2002-03 to 56.88% in 2006-07 and slightly decreased to 45.02 in 2011-12. There has been a significant increase of spending for the administrative services, from 10.68% to 22.57% during the same period. Similarly, there is a significant increase in fiscal services, from 1.19% to 2.25%. However, there has been a slight rise in the revenue expenditure of organs of the state from 1.92% (2002-03) to 4.55% (2011-12).

10.7 Expenditure under Social and community services

The Table 51 shows that expenditure on education, sports and culture as percentage of total social and community services have been in the range of around 49% to 46% during 2002-03 to 2011-12, expenditure on health and family welfare, around 17-18 percent, expenditure on Water Supply, Sanitation, Housing and Urban Development has been in the range of around 20-22 percent. Spending on Social Welfare and Nutrition has been in the range of around 7-13%. These components cover more than 80% of total social expenditure.

10.8 Expenditure under economic services

More than 50% of the expenditure under economic services is under the sector 'Energy' as percentage of total economic services. However, it may be noted from

Table 54 that the share of expenditure under 'Energy' is showing a declining trend from 2002-03 to 2011-12. It has declined from 68.73% to 50.54% during this period. On the other hand, the share of expenditure under 'Transport' and 'Irrigation and Flood Control' has increased considerably during this period.

10.9 Expenditure under Consolidated fund of the State

The share of expenditure under different heads in the consolidated fund of the State from 2002-03 to 2011-12 is given in Table 53. The share of general services in the consolidated fund has declined from 29.12% in 2002-03 to 23.48% in 2011-12. However, the share of expenditure in social services has increased from 17.56% to 28.06% during the same period. Similarly, the share of economic services too has increased from 16.34% to 26.01%. The overall share of revenue expenditure has increased from 63.02% to 77.55%, which indicates that over the period of time, the share capital expenditure in the consolidated fund of the State has declined. As regards major component of expenditure, it may be noted the share of interest payment and servicing of debt has increased from 9.32% to 10.57%. Similarly, the share of pension and miscellaneous general services has increased from 3.62% in 2003-04 to 5.30% 2011-12. It is important to note that the share of revenue expenditure on education has increased from 8.87% in 2002-03 to 13.75% in 2011-12. The share of revenue expenditure under the Energy sector increased from 11.83% to 16.74%.

10.10 Financial Management

The Government of Goa has enacted Fiscal Responsibility and Budget Management Act setting goals to be achieved mainly for revenue deficit and fiscal deficit. It has also enacted Government Guarantee's Act limiting the extent of guarantees to be given for State Public Sector Undertakings Borrowing. In order to create a corpus towards future repayment of borrowings in the event of financial crises the Government of Goa has created a sinking fund contributing a fixed sum annually towards the fund.

Similarly, the Government has created a Guarantee Redemption Fund to take care of any default by the State Public Sector undertakings in their commitment of loan repayment. So far the Government has not defaulted even once in repayment of its annual repayment schedule of loans so also there has been no default by the State Public Sector Undertakings in its repayment of

loans schedule. Thus, the State has not taken recourse to access the sinking fund and guarantee redemption fund. On the other hand Goa has over 90% utilization record in plan outlay. More than 40% of the plan outlay is spent on social services.

Chapter 10. Appendix

Table 49: Achievement in Plan Outlays/Expenditure during 2002-03 to 2011-12

Year	Approved Plan Expenditure (BE)	Actual Plan Expenditure	Percentage achieved (Actual/Approved)	Plan Expenditure Achievement (Actual % GSDP)
2002-03	62110.78	44380.91	71.45	5.48
2003-04	71748.1	59235.17	82.56	6.37
2004-05	92886.09	79600.69	85.70	6.26
2005-06	103509.9	99706.7	96.33	6.96
2006-07	128108.6	111066.9	86.70	6.72
2007-08	130308.3	126205.9	96.85	6.45
2008-09	175075.1	152489.7	87.10	6.00
2009-10	187418.98	185198.5	98.82	6.36
2010-11	253482	215260.6	84.92	6.41
2011-12	312961.6	230653.3	73.70	6.42

Source: GoG (Demand for Grants, Various years)

Table 50: Public Expenditure in Goa and Neighbouring states

States	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Goa	14.45	14.35	15.43	14.69	13.1	13.28
Karnataka	17.29	16.84	17.57	17.06	17.37	-
Maharashtra	11.41	12.67	12.6	12.18	12.51	-

Note: * Public expenditure ratio= the percentage of public expenditure (plan + non-plan) to GSDP.

Source: Planning Commission

Table 51: Comparative Social Allocation Ratio of Goa and the neighbouring states

State	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
									(RE)	(BE)
Goa	26.1	28.4	31.4	30.9	31.8	31.6	32.2	32.5	35.4	35.8
Karnataka	31.4	28.4	28.5	33.4	32.7	36.7	37.8	39.9	40	38.4
Maharashtra	33.3	30.9	28.1	35.3	37.3	37	36.8	40.3	42.7	42.2
All States	32.6	28.4	29.6	33.7	33.9	35.3	37.6	38.7	40	40

The Social Allocation Ratio=the percentage of Public Expenditure(Plan + Non-Plan) earmarked for social service.

Source: Planning Commission

Table 52: Select Fiscal Indicators – Goa (in Rs Lakhs)

Sr. No.	Heads	2002-03 Actual	2003-04 Actual	2004-05 Actual	2005-06 Actual	2006-07 Actual	2007-08 Actual	2008-09 Actual	2009-10 Actual	2010-11 Actual	2011-12 Actual
1	Tax Revenue	71682.27	84583.93	101860.38	134119.06	160364.65	175263.72	210899.35	218975.98	272378.08	323160.93
1.a	State's own tax revenue	60303.27	71079.93	85653.38	109659.1	129161.7	135904.6	169369.4	176274	214002.3	255101.5
1.b.	Share in central taxes	11379	13504	16207	24460	31203	39359	41530	42702	58375.8	68059.39
2	Non Tax Revenue	111618.89	77728.62	80141.61	82767.78	100611.11	119126.54	141927.9	191051.21	271816.3	254911.85
2.a	State's own non-tax revenue	103916.5	72473.4	72925.53	76116.02	91762.33	104281.62	123615.55	173119.91	226859.73	231353.54
2.b.	Grants	7702.39	5255.22	7216.08	6651.76	8848.78	14844.92	18312.35	17931.3	44956.57	23558.31
3	Total Revenue Receipts	183301.16	162312.55	182001.99	216886.84	260975.76	294390.26	352827.25	410027.19	544194.38	578072.78
4	Non-debt capital receipts	659.97	654.73	558.37	633.06	578.49	617.81	976.79	1273.39	744.8	536.51
5	Total receipts	662081.45	657987.62	669198.77	1157141.47	1360778.62	1488641.96	1849188.84	1598066.13	619419.65	578483.18
6	Revenue Expenditure	202879.74	179178.45	196824.59	221783.93	249700.30	281534.59	347139.98	427264.41	484355.15	553816.89
6.a.	Plan	21851.31	28399.00	36518.68	41468.10	48381.11	56709.16	62089.34	76876.20	93302.77	111821.34
6.b.	Non-plan	181028.43	150779.45	160305.91	180315.83	201319.19	224825.43	285050.64	350388.21	391052.38	441995.55
	Revenue expenditure of which										
6.b.1.	Interest payment	29185.83	33435.57	34299.05	42036.32	44680.61	46686.28	53980.03	61261.64	68036	73517
6.b.2.	Pension	13789.05	11167.09	14189.4	15820.81	15019.75	14259.18	21708.15	34580.05	37381	41029.87
7	Capital Expenditure	19019.03	31063.38	43984.47	59575.94	64660.4	70989.66	93337.93	113268.6	126090.62	123413.43
7a.	Plan	18635.24	30109.1	42586.11	57906.36	62202.12	68371.81	89825.47	107956.09	121584.96	118280.89
7b.	Non-plan	383.79	954.28	1398.36	1669.58	2458.28	2617.85	3512.46	5312.48	4505.66	5132.54
8	Capital outlay	20639.41	30142.06	42599.87	58035.37	62634.45	68852.66	89706.74	108501.78	122118.70	118377

9	Loans & advances Disbursement	1220.07	982.91	764.04	705.03	814.17	2459.69	2866.56	3722.07	1592.36	942.30
9a	Plan	932.11	727.07	495.90	332.24	483.71	1124.93	574.86	366.19	372.82	551.07
9b	Non-Plan	287.96	255.84	250.14	372.79	330.46	1334.76	2291.70	3355.88	1219.54	391.23
10	Total Expenditure	314429.1	312216.95	318397.04	289125.31	322503.04	361814.04	459973.37	562043.87	632836.88	706002.06
10a	Plan	44380.91	59235.17	79600.69	99706.7	111066.94	126205.9	152489.67	185198.48	215260.55	230653.3
10b	Non-Plan	270048.19	252981.78	238796.35	189418.61	211436.1	235608.14	307483.7	376845.39	417576.33	475348.76

Source:

“Revenue Expenditure”, “Capital Expenditure”, “Total Expenditure (Plan and Non-Plan)” taken from GoG (Demand for Grants, Various Years)

“Loans & Advances Disbursements”, “Capital Outlay”, “Pension” taken from GoG (Annual Financial Statement, Various Years).

“State’s Own Tax revenue”, “Own-Non-Tax Revenue”, “Share in central taxes”, “Grants”, “Revenue Receipts” and “Capital Receipts” taken from GoG (Finance Accounts, Various Years)

“Non-debt Receipts” taken from GoG (Budget at a Glance, Various Years)

Table 53: Expenditure under General Services, Social Services and Economic Services as a percentage of Total Revenue Expenditure

Sr. No.	Year	General Services (%)	Social Services (%)	Economic Services (%)
1	2002-03	45.57	27.49	26.93
2	2003-04	32.98	31.99	35.02
3	2004-05	32.57	34.36	33.07
4	2005-06	33.91	33.65	32.44
5	2006-07	31.82	33.68	34.49
6	2007-08	30.14	33.50	36.37
7	2008-09	31.00	34.81	34.19
8	2009-10	31.96	35.18	32.87
9	2010-11	28.25	32.83	38.92
10	2011-12	27.51	32.87	39.62

Table 54: Expenditure under different General Services as percentage of Total General Services

General Services	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Organs of State	1.92	3.05	3.35	2.93	3.29	4.25	3.34	3.64	3.54	4.55
Fiscal Services	1.19	2.28	2.12	1.92	1.72	2.07	2.32	2.46	2.31	2.25
Interest Payments and Servicing of Debts	32.02	57.48	54.2	56.58	56.88	55.77	50.83	45.35	45.74	45.02
Administrative Services	10.68	17.99	17.91	17.91	18.99	20.88	23.06	22.95	23.03	22.57
Pension and Misc, General Services	54.18	19.2	22.42	21.29	19.12	17.03	20.44	25.6	25.38	25.61
Total	100	100	100	100	100	100	100	100	100	100

Source: (GoG (FA) Various Years) and Author's calculations

Table 55: Expenditure under different Social Services as percentage of Total Social and Community Services

Social Services	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Education, Sports, Arts and Culture	50.49	49.73	50.4	45.19	48.73	43.02	45.96	47.64	48.97	46.9
Health and Family Welfare	16.75	18.07	16.83	16.83	16.3	15.98	18.58	18.47	17.66	18.36
Water Supply, Sanitation, Housing and Urban Development	22.57	18.38	17.89	20.24	18.65	17.9	18.94	17.7	19.17	21.49
Information and Broadcasting	0.38	0.56	2.34	2.07	1.69	1.65	1.24	0.95	1.05	0.84
Welfare of SCs, STs and OBCs	0.13	0.16	0.32	0.19	0.37	0.32	0.24	1.34	1.39	1.4
Labour and Labour Welfare	1.91	2.05	1.8	1.78	1.76	1.65	1.72	1.81	1.53	1.55
Social Welfare and Nutrition	7.69	10.95	10.32	13.62	12.42	19.4	13.25	11.99	10.16	9.37
Others	0.09	0.09	0.11	0.08	0.08	0.07	0.08	0.1	0.07	0.08
Total	100	100	100	100	100	100	100	100	100	100

Source: (GoG (FA) Various Years) and Author's calculations

Table 56: Expenditure under Economic Services as percentage of Total Economic Services

Economic Services	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Agriculture and Allied Activities	6.76	7.19	7.35	9.34	8.2	7.84	9.09	9.09	7.13	8.73
Rural Development	5.08	4.38	5.32	5.89	5.36	4.06	5.02	5.39	3.66	3.47
Special Areas Programs	0.34	0.32	0.27	0.32	0.34	0.29	0.33	0.39	0.53	0.36
Irrigation and Flood Control	2.89	2.48	2.71	3.14	3.06	3.45	3.5	4.86	12.24	10.4
Energy	68.73	68.23	65.34	60.44	63.07	62.75	63.42	58.92	46.15	50.54
Industry and Minerals	2.7	2.58	3.21	2.14	3.24	5.62	4.09	5.34	3.43	2.8
Transport	9.3	9.31	10.31	13.45	12.44	12.26	11.24	12.3	23.26	19.87
Science, Technology and Environment	0.21	0.53	0.74	0.46	0.23	0.33	0.31	0.3	0.17	0.15
General Economic Services	4	4.97	4.75	4.82	4.06	3.38	3	3.42	3.43	3.68
Total	100	100	100	100	100	100	100	100	100	100

Source: (GoG (FA) Various Years) and Author's calculations

Table 57: Expenditure under different Heads of Revenue Account and Capital Account as a percentage of Expenditures under Consolidated Fund of Goa

Expenditure Heads (Revenue Account)	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
A - General Services										
Organs of State	0.56	0.58	0.67	0.77	0.81	0.96	0.79	0.89	0.85	1.07
Fiscal Services	0.35	0.43	0.43	0.5	0.43	0.46	0.54	0.6	0.55	0.53
Interest Payments and Servicing of Debts	9.32	10.84	10.91	14.76	14.07	12.52	11.95	11.09	10.95	10.57
Administrative Services	3.11	3.39	3.6	4.5	4.7	4.69	5.42	5.61	5.5	5.3
Pension and Miscellaneous General Services	15.78	3.62	4.51	5.55	4.73	3.82	4.81	6.26	6.06	6.01
Total A - General Services	29.12	18.86	20.12	26.08	24.73	22.45	23.51	24.44	23.88	23.48
B - Social Services										
Education, Sports, Arts and Culture	8.87	9.1	10.7	11.69	12.76	10.73	12.13	12.82	14.06	13.75
Health and Family Welfare	2.94	3.31	3.57	4.36	4.27	3.99	4.9	4.97	5.32	5.46
Water Supply, Sanitation, Housing and Urban Development	3.96	3.36	3.8	5.24	4.88	4.47	5	4.76	4.51	4.83
Information and Broadcasting	0.07	0.1	0.5	0.54	0.44	0.41	0.33	0.26	0.33	0.27
Welfare of SCs, STs and OBCs	0.02	0.03	0.07	0.05	0.1	0.08	0.06	0.36	0.36	0.31
Labour and Labour Welfare	0.33	0.38	0.38	0.46	0.46	0.41	0.45	0.49	0.48	0.49
Social Welfare and Nutrition	1.35	2	2.19	3.52	3.25	4.84	3.5	3.23	3.17	2.94
Others	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02
Total B - Social Services	17.56	18.29	21.23	25.88	26.18	24.95	26.4	26.91	28.26	28.06

C- Economic Services										
Agriculture and Allied Activities	1.16	1.44	1.5	2.33	2.2	2.12	2.36	2.29	2.3	2.91
Rural Development	0.87	0.88	1.09	1.47	1.44	1.1	1.3	1.35	1.36	1.29
Special Areas Programs	0.06	0.06	0.06	0.08	0.09	0.08	0.09	0.1	0.14	0.11
Irrigation and Flood Control	0.5	0.5	0.55	0.78	0.82	0.93	0.91	1.22	1.23	1.12
Energy	11.83	13.66	13.35	15.08	16.91	17	16.44	14.81	14.17	16.74
Industry and Minerals	0.46	0.52	0.66	0.53	0.87	1.52	1.06	1.34	1.27	1.06
Transport	1.6	1.86	2.11	3.36	3.34	3.32	2.91	3.09	2.99	2.98
Science, Technology and Environment	0.04	0.11	0.15	0.11	0.06	0.09	0.08	0.07	0.06	0.06
General Economic Services	0.69	1	0.97	1.2	1.09	0.92	0.78	0.86	0.91	1.03
Total, C- Economic Services	16.34	19.15	19.35	23.48	25.37	25.99	24.62	23.79	23.07	26.01
Total, Expenditure Heads (Revenue Account)	63.02	56.29	60.7	75.43	76.28	73.39	74.53	75.14	75.22	77.55
(2) Capital, Public Debt, Loans, etc										
Expenditure Heads (Capital Account)	6.59	9.77	13.54	0.04	0.03	0.03	0	0	0	0
E - Public Debts	28.49	32.74	24.43	20.37	19.72	18.46	19.86	19.62	19.61	17.02
F - Loans and Advances	0.39	0.32	0.24	2.48	2.31	1.83	3.68	3.22	3.34	4.05
G - Inter- State Settlement	0	0	0	0	0	0	0	0	0	0
H - Transfer to Contingency Funds	0.64	0	0	0	0	4.56	0	0	0	0
Total Consolidated Funds	100	100	100	100	100	100	100	100	100	100

Source: (GoG (FA) Various Years) and Author's calculations

11. Power

Prior to the liberation of Goa in 1961 only 7 municipal towns were electrified by means of diesel generating sets, which were owned and managed by either municipalities or private licensees with a total generating capacity of 5.5 MW. There were in all about 6000 consumers with a peak demand of just 2.2 MW, mainly limited to lighting load and a negligible industrial load. Since the per capita consumption of electricity was very low at that time the private companies found it uneconomical to extend the power network to rural areas.

The Electricity Department under Government of Goa was formed in 1963. Setting aside economic viability and primarily as a social commitment, its basic objective was to have an extensive distribution network covering the entire state of Goa and to build a transmission system to import cheap hydel power from the neighboring States to Goa so that the entire population of Goa could benefit from electrification and industries could be developed in the State.

In 1964 it took over the diesel generating station and distribution network from the municipalities and private licensees and in 1965 launched a massive electrification program. The Department did a commendable job of electrifying 100% of the villages in Goa by 1988, thereby being one of the first States in India to achieve this distinction. From a base of just 6000 consumers in 1961, the Department today services around 4.8 lakh consumers. The annual per capita consumption in the same period had grown from just 13 KWH to over 1400 KWH, while the peak demand recorded has spiraled from 2.2 MW to over 400 MW (GoG (Electric) Undated).

The Table 58 projects revenue and expenditure of power sector, revenue for power sector is increasing at the compound interest growth rate of 6.19 percent over a period of ten years. The expenditure for the power sector has shown compound interest growth rate of 11.88 percent over a period of ten years. Interestingly power sector has contributed to the exchequer of Government of Goa for the period under study except for 2011-12 where expenditure has exceeded revenue. The amount of excess expenditure over revenue for the year 2011-12 is Rs. 1703.39 lakhs.

Table 58 Revenue and expenditure of Power sector from 2002-03 to 2011-12 (Fig in Lakhs)

Year	Revenue	Expenditure	Subsidy
2002-03	54835	38349.78	-16485.2
2003-04	59215	43350.82	-15864.2
2004-05	58466	42762.83	-15703.2
2005-06	59491	43776.03	-15715
2006-07	68245	54534.71	-13710.3
2007-08	79626	64732.63	-14893.4
2008-09	98670	76062.88	-22607.1
2009-10	94130	83847.2	-10282.8
2010-11	96906	90267.4	-6638.6
2011-12	100049.3	117852.7	17803.39

Source: (GoG (FA) Various Years)

Figure 25: Revenue and expenditure of Power sector from 2002-03 to 2011-12

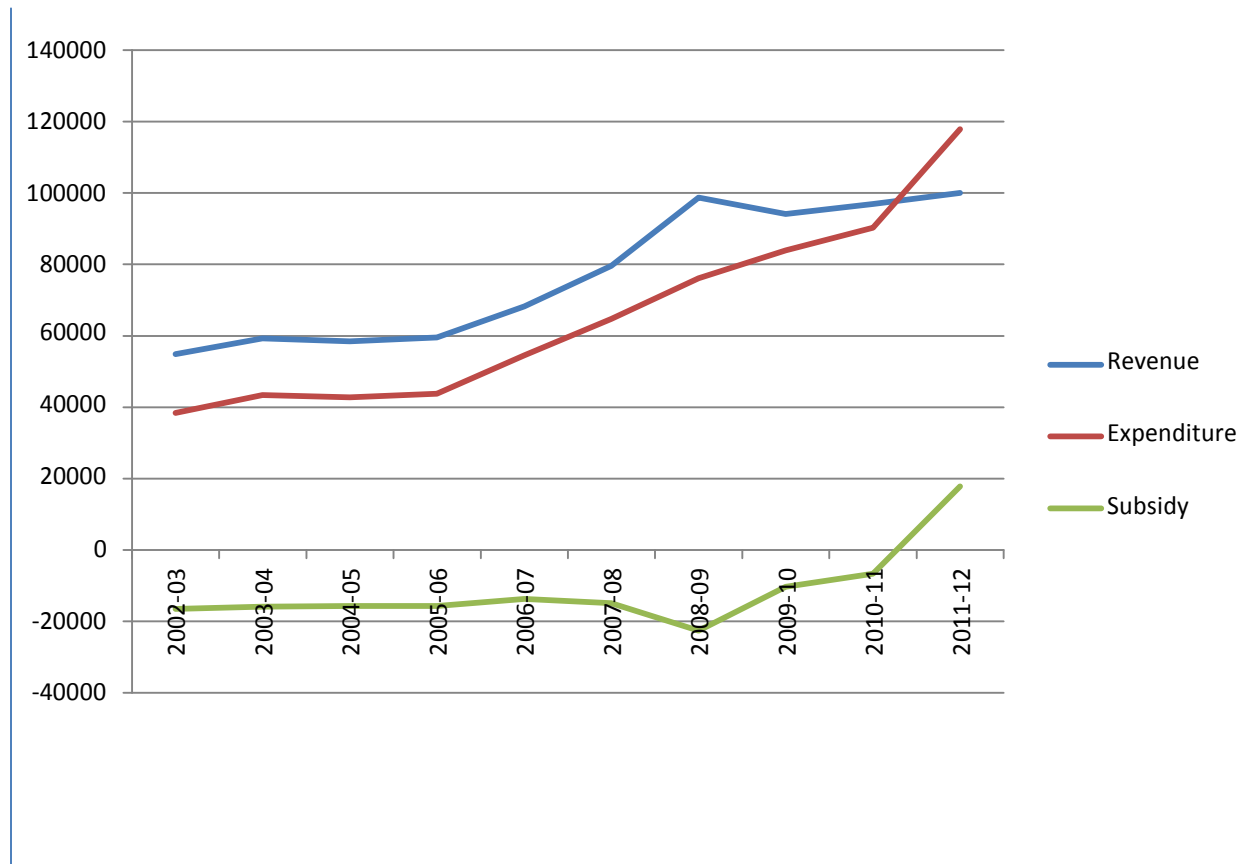


Table 59 Electricity purchased and sold in MKWH

Year	Purchased	Sold	Difference
2002-03	2662	1951	711
2003-04	2899	2364	535
2004-05	2716	2237	480
2005-06	2551	2102	449
2006-07	2847	2330	518
2007-08	3138	2615	523
2008-09	3238	2693	545
2009-10	3450	2877	573
2010-11	3649	3015	634
2011-12	4011	3306	705

Source: (GoG (SH) Various Years)

Figure 26 Electricity purchased and sold for 2002-03 to 2011-12

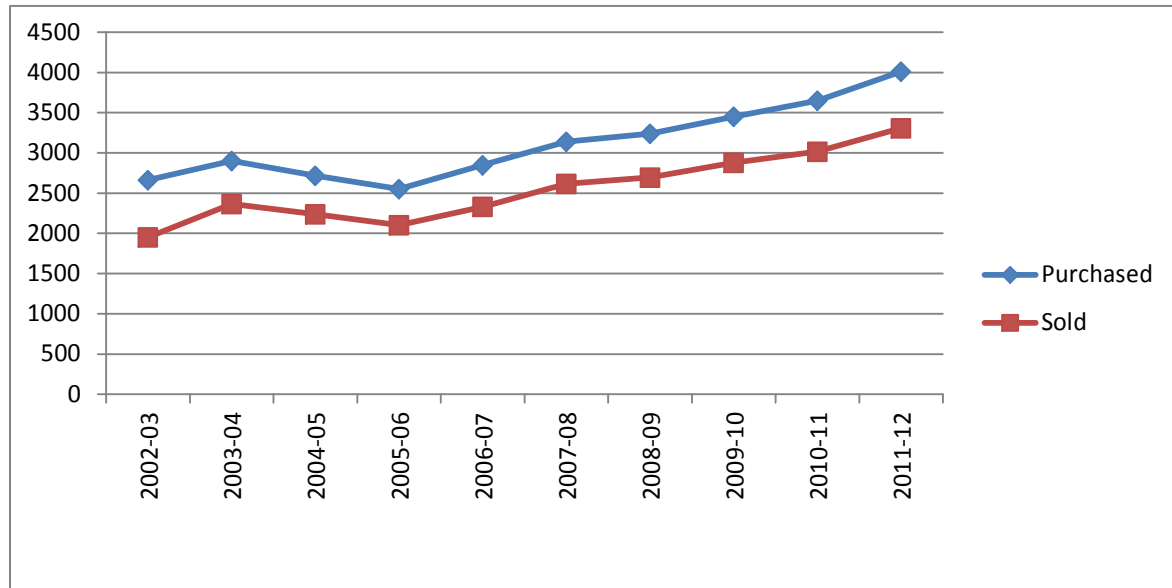


Table 60 Electricity consumption from 2005-06 to 2011-12 (Fig in Kwh)

Year	Electricity consumed	Per Capita consumption	Industrial power consumption
2005-06	19223	1427	11972
2006-07	21600	1603	12756
2007-08	22618	1631	13798
2008-09	21895	1467	12099
2009-10	24800	1644	14977
2010-11	27270	1872	13940
2011-12	27460	1883	13710

Source: (GoG (SH) Various Years)

Table 59 shows electricity purchased and sold, in the year 2002-03 electricity purchased was 2662 Mkwh and sold was 1952Mkwh. All the years there is difference between electricity purchased and sold difference for 2002-03 was 711 Mkwh which declined to 535 Mkwh in 2003-04. During 2011-12 the difference between purchased and sold is 705 Mkwh. The lowest difference between purchase and sold was in the year 449 Mkwh.

Table 60 also shows the electricity consumption from 2005-06 to 2011-12; electricity consumed has increased from 19223 Kwh in 2005-06 to 27460 Kwh in 2011-12. Electricity consumption has increased steadily from 2005-06 to 2011-12. Per capita consumption for 2005-06 was 1427 Kwh which increased to 1883 Kwh in 2011-12. Similar trend is shown in industrial power consumption; in 2005-06 electricity consumption by industrial sector was 11972 Kwh which increased to 13710 Kwh in 2011-12.

The Table 61 shows percentage of transmission and distributional loss from 2002-03 to 2008-09. In 2002-03 transmission and distributional loss was 40.26 percent of the total available electricity in the state, which further increased to 45 percent in 2003-04. The transmission and distributional loss declined to 17 percent in the year 2008-09.

Table 61: Percentage of Transmission and distributional loss and electricity available in state.

Year	Electricity Available in the state GWh	Percentage of T&D Loss
2002-03	3195.25	40.26
2003-04	2761.36	45.05
2004-05	2876.95	35.97
2005-06	2665.93	19.68
2006-07	2938.38	20.9
2007-08	3232.92	21.18
2008-09	3157.51	17.12

Source: (GoG (Electric) Undated)

12. Contingent Liabilities

Goa State Legislature vide Government Notification No. 7/10/2005/LA dated 1st March 2005 decided to fix the ceiling limit at Rs. 800 crores for giving guarantees on the security of the Consolidated Fund of the state. The Fund was set up for the purpose of meeting liabilities as and when guarantees given by the government are required to be invoked. The State of Goa after attaining statehood on 30th May, 1987 took over all the outstanding guarantees as on 29th May, 1987 of the erstwhile UT of Goa, Daman and Diu given by the Government of India under Article 292 of the Constitution.

Rise in the level of outstanding guarantees given by the state during the first phase of the period under consideration was a matter of concern. The outstanding amount skyrocketed by 138 percent from Rs 215.69 crores in 2002-03 to Rs 513.76 crores in 2003-04. However, there was a substantial reduction in 2007-08 and again in the consecutive year. During the last two years of the period under consideration, the amount outstanding seems to have remained stable. In terms of GSDP, the outstanding amount has fallen from a peak at 5.5 percent in 2003-04 to 0.5 percent in the recent years. The outstanding amount in terms of the alternate series (e.g., GSDP_A) is also shown in the table below.

Table 62: Outstanding Government Guarantees at the end of the financial year

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
In Rs lakhs	21569	51376	62105	63133	62399	31109	16566	14784	17002	17319
% of GSDP	2.66	5.52	4.89	4.41	3.78	1.59	0.65	0.51	0.51	0.48
% of GSDP_A	2.66	5.52	5.41	4.73	4.15	1.96	0.95	0.77	0.80	0.75

Source:(GoG (FA) Various Years)

The Government of Goa took some steps to arrest the rise and created a Guarantee Redemption Fund. There are essentially two main issues regarding the guarantees, the level and quality both of which have been addressed by the Government.

The State government constituted a Guarantee Redemption Fund during the year 2003-04 for the purpose of meeting the payment of obligations arising out of the guarantees issued by the state

government on behalf of the state level bodies. The opening balance was Rs 96.47 crores at the beginning of the financial year 2010-11. Rs 29.43 crores was transferred to the Fund during the year and as on 31 March 2011, Rs 125.90 was the closing balance of the Guarantees Redemption Fund. With Rs 17.63 crores being transferred during the 2011-12 to the Fund, the closing balance became Rs 143.53 crores as no amount was met from the Fund in 2010-11 and 2011-12.

13. Analysis of Subsidies in Goa

Subsidies and taxes are the two important fiscal instruments; taxes are used to generate public revenue, while subsidies increase public expenditure. In other words taxes are collected from public by government which generates revenue for the government and subsidies are received by public from government which increases public expenditure. If designed and governed efficiently, both can have significant distributional impact on income of people to achieve income equality and enhance welfare of the society. The present and future generation can obtain benefits well spread beyond the immediate recipients, through subsidies in health, education and environment.

13.1 Definitions

- Subsidies are used by economists in different context and carry different meaning. In a budgetary context, subsidies are taken as unrecovered costs of public provisions.
- Environmental economists define subsidies as uncompensated environmental damage arising from any flow of goods and services.
- The Oxford dictionary defines it as "money granted by state, public body, etc., to keep down the prices of commodities, etc."

It is difficult to precisely define the subsidies; meaning may differ depending on for what purpose subsidies is used. In current framework subsidies are treated as unrecovered costs of public provisions (revenue expenditure less non tax revenue on particular head, negative value signifies recovered cost of public provisions and positive value signifies subsidy). The Government of Goa actively participate in the provision of goods under the head of social, general and economic services, for each of these services subsidies are calculated. Budgetary subsidies arise when the budgetary cost of providing the good and service is more than the recovery made from the beneficiary of the service, the difference being financed by the taxpayer.

Table 63: Subsidies (both as “Unrecovered Cost” and as computed in Finance Accounts General and Economic services (Fig in Lakhs)

Years	Unrecovered Costs General Services	Subsidies computed in Finance Accounts General Services	Unrecovered Costs Economic Services⁴	Subsidies computed in Finance Accounts Economic Services
2005-06	25882	25	1591	326
2006-07	21209	16	5185	347
2007-08	22529	28	9311	331
2008-09	38451	17	2721	516
2009-10	30024	25	-988	523
2010-11	59908	317	-63585	6294
2011-12	65814	721	-29802	8984

Source: (GoG (FA) Various Years)

13.2 Trends in Subsidies

Table 63 shows unrecovered costs for general services and economic services and subsidies as computed by Government of Goa. There is a huge difference in the two subsidies, for 2011-12 economics services have recovered to the tune of Rs. 29801.69 lakhs. In same period Finance account computed subsidies for economic services as Rs. 8983.6 Lakhs.

Table 64 Subsidies as unrecovered cost and subsidies computed by finance accounts Social services (Fig in Lakhs)

Years	Unrecovered Costs Social services	Subsidies computed in Finance Accounts Social services	Unrecovered Costs total	Subsidies computed in Finance Accounts total
2005-06	64076	58	91549	4067
2006-07	73027	4	99420	367
2007-08	82985	4	114823	3623
2008-09	108796	18	149968	552
2009-10	134019	33	163055	581
2010-11	158979	591	155302	7202
2011-12	178713	555	214726	10259

Source (GoG (FA) Various Years)

⁴ Negative values indicate revenue expenditure is less than non tax revenue, it is treated as recovery.

Table 64 shows unrecovered costs for social services and total, and subsidies as computed by Government of Goa. The social service which is highly subsidised sector is shown as least subsidised under Subsidies computed by Government of Goa. The total subsidies comparison also shows huge difference between the two computed subsidy values.

Table 65 shows a time profile of subsidies for ten years. In 2002, subsidies were estimated to be 7.5 percent of GSDP next year it decreased to 6.8 percent of the GSDP. In 2005, subsidies was 6.4 percent of GSDP and from next year it continued to decline till 2010 . Subsidies as proportion of GSDP was minimum in 2010 because of recovery was highest for Economic Services and further in 2011 it increased to 6.0 percent because the major contributor Non furious Minerals and metals contribution has declined.

Table 65 Unrecovered cost from 2002 – 2011 (Fig in lakhs) and as a percentage of GSDP

Year	GSDP	Unrecovered Cost	Subsidy as Percentage of GSDP	Growth rate of subsidies	Growth rate of GSDP
2002	810000	60878.99	7.5		
2003	930100	62796.93	6.8	-10.2	14.8
2004	1271331	77222.48	6.1	-10.0	36.7
2005	1432659	91548.53	6.4	5.2	12.7
2006	1652283	99420.3	6.0	-5.8	15.3
2007	1956496	114822.55	5.9	-2.5	18.4
2008	2541383	149968.11	5.9	0.5	29.9
2009	2912554	163055.11	5.6	-5.1	14.6
2010	3356221	155301.94	4.6	-17.3	15.2
2011	3593218	214725.81	6.0	29.1	7.1

Source: (GoG (FA) Various Years)

Figure 27: GSDP and Unrecovered costs (subsidy) (GSDP on secondary axis)

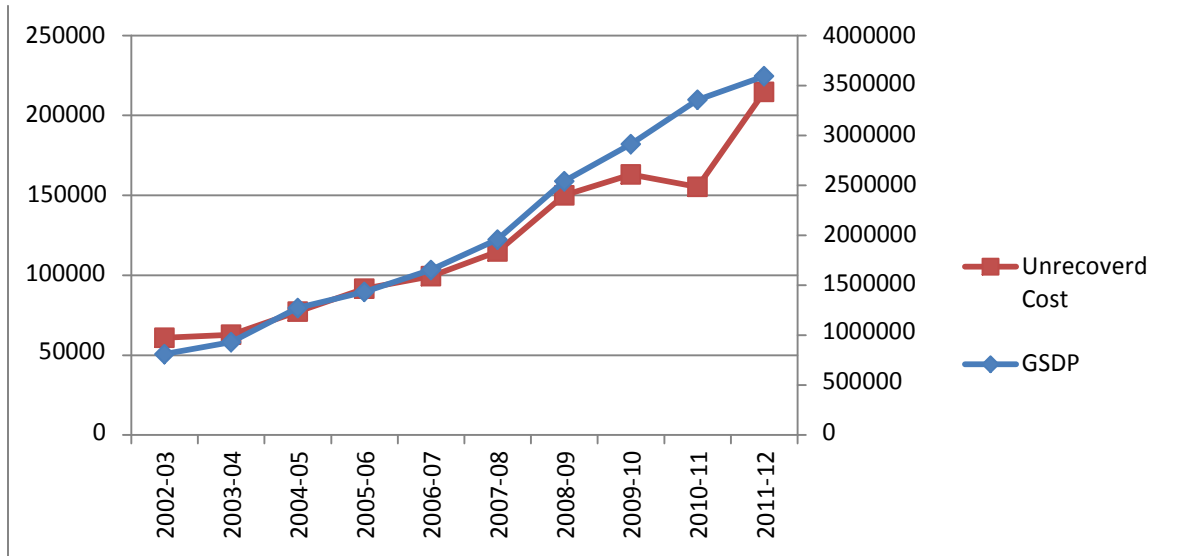


Figure 28: Subsidy according to various services

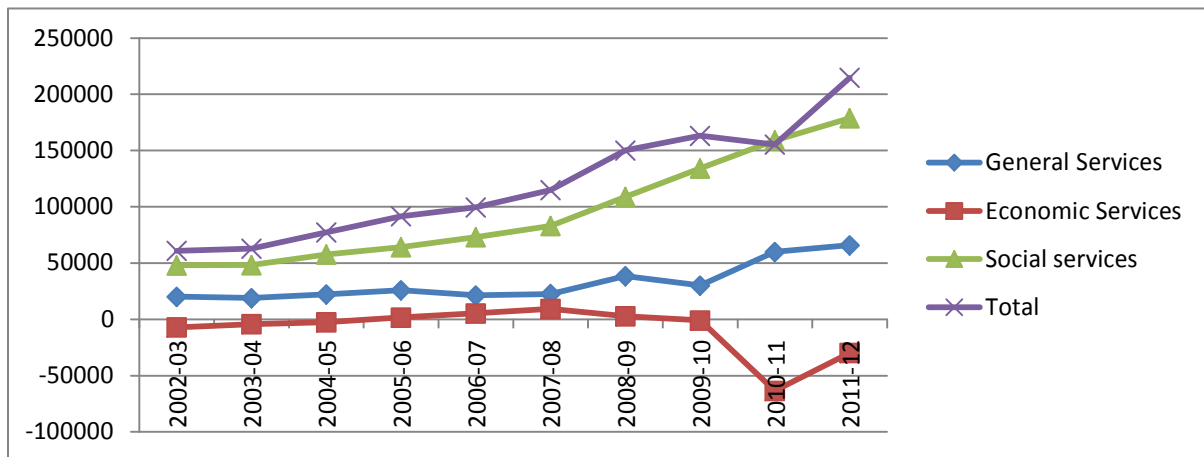


Table 66: Compound interest growth rate for General Services subsidies (Fig in Lakhs)

Subsidy	2002-03	2011-12	Compound interest growth rate
Public Service Commission	65.05	172.47	10.24
Police	4530.11	18999.66	15.42
Jails	230.48	720.9	12.08
Stationery and Printing	192.6	748.44	14.54
Public Works	2142.28	7805.48	13.80
General Services	20011.35	65814.29	12.64

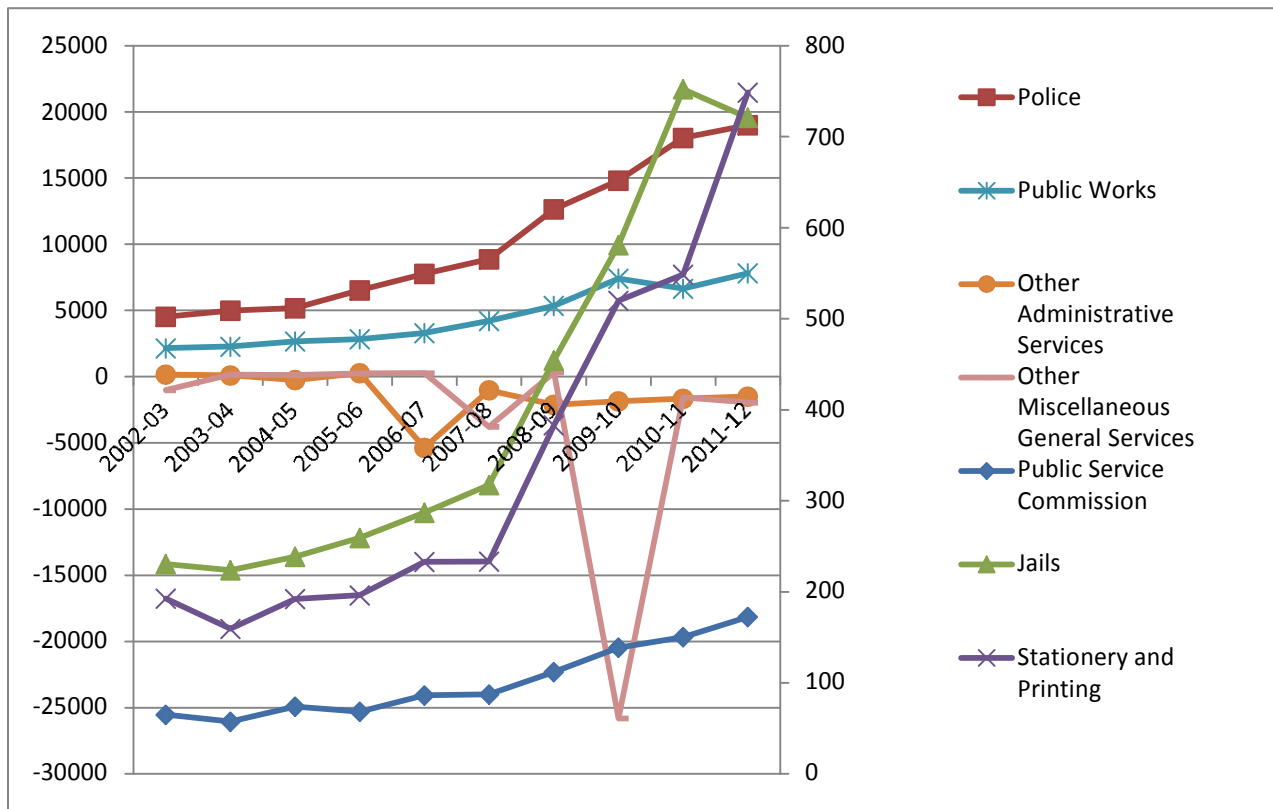
Source: (GoG (FA) Various Years)

In the Figure 27 Unrecovered cost and GSDP at nominal prices are plotted both show similar trend over the years. The composition of subsidies in GSDP for the state of Goa have declined though the actual subsidies are increasing. This is because of GSDP has increased more rapidly than the subsidies.

In Table 63 subsidies for different service is shown, Social services being highly subsidised and Economic services least subsidised. The social services and general services show high rate of growth from year 2008-09 onwards, this could have happened because of six pay commission which was implemented in Goa during that year. In economic services recover cost increased from 2009-10 went up further in 2010-11 and declined in 2011-12, reason for such recovery is because of mining sector contribution has increased from 2008-09 onwards. The compound interest rate of growth for total subsidy is 13.43% for ten years period. The break-up of general services is shown in Table 66.

Evidently police and public works are highly subsidized (Figure 29). On the secondary axis we have public Service commission, jails and stationary and printing which is least subsidised under general service. The other administrative services and other miscellaneous general services are the two subheads of general services which have shown recovery from 2006-07 onwards. In the year 2009-10 the recovery for other miscellaneous general services increased by 80% because of State Government has introduced lotteries which inflated the revenue figures of the state.

Figure 29 Subsidies under subheads of general services (Public Service Commission, Jails and Stationery and Printing are shown on secondary axis)



The Table 66 show subsidies for the year 2002-03 and 2011-12 under the various heads. The compound interest growth rates were calculated, for Police, growth rate was highest 15.42 and lowest 10.24 for Public service commission. Overall for general services the growth rate is 12.64 for ten year period. Pension and retirement benefits are highest in terms of absolute number but the growth rate is second lowest 11.53 above Public service commission.

The Figure 30 shows subheads of economic services, crop husbandry and other rural development programmes are highly subsidised which are shown on secondary axis. The minor irrigation and major and medium irrigation projects have shown recovery in 2002-03 and 2005-06 respectively. The least subsidised are other agricultural programmes and co-operation.

In the Figure 31 subsidies under subheads of economic services are shown. The roads and bridges Industries which are highly subsidised throughout the ten year period. The power sector is very interesting Goa state is not producing any electricity on its own and highly relies on the central transfer of electricity through neighbouring states. The power sector from 2002-03 to 2010-11 showed high recovery rate and in 2011-12 subsidies to this sector have increased tremendously.

Another extreme case is Non ferrous minerals and metals which is shown on secondary axis in Figure 31; it is the major revenue contributor for Government of Goa, recovery rate was there throughout the study period. In fact recovery from Non ferrous minerals and metals has shoot up in 2008-09 increased to maximum in 2010-11 and showed decline in 2011-12.

Since closer closure of mining activities in Goa state in mid 2012 it is anticipated that contribution of the Non ferrous minerals and metals is going to decline drastically and it may also increase the subsidies to this sector because of compensation package announced by the Government of Goa for truck owners and barge owners. The ports and lights houses are the other contributors to the exchequer of the government. The civil supplies and other general economic services are the least subsidised sectors under the subheads of economic services. In Table 67 Compound interest growth rate for economic services subsidies is shown, growth rate for industries was highest 41.76 followed by fisheries 28.03. The crop husbandry which is highest in terms of absolute figures Rs. 8104.81 lakhs, has growth rate of 22.42. The major and medium irrigation projects and roads and bridges has growth rate of 17.84 and 17.06 respectively. The growth rate for forestry and wildlife, co-operation and civil supplies is around 15 percent. The 10 percent growth rate was shown by animal husbandry, other rural development programmes, other agricultural programmes and tourism. The least growth rate of 2.08 percent was for village and small industries.

Figure 30: Subsidies under subheads of Economic services (Crop and husbandry and other Rural Development Programmes are on secondary axis)

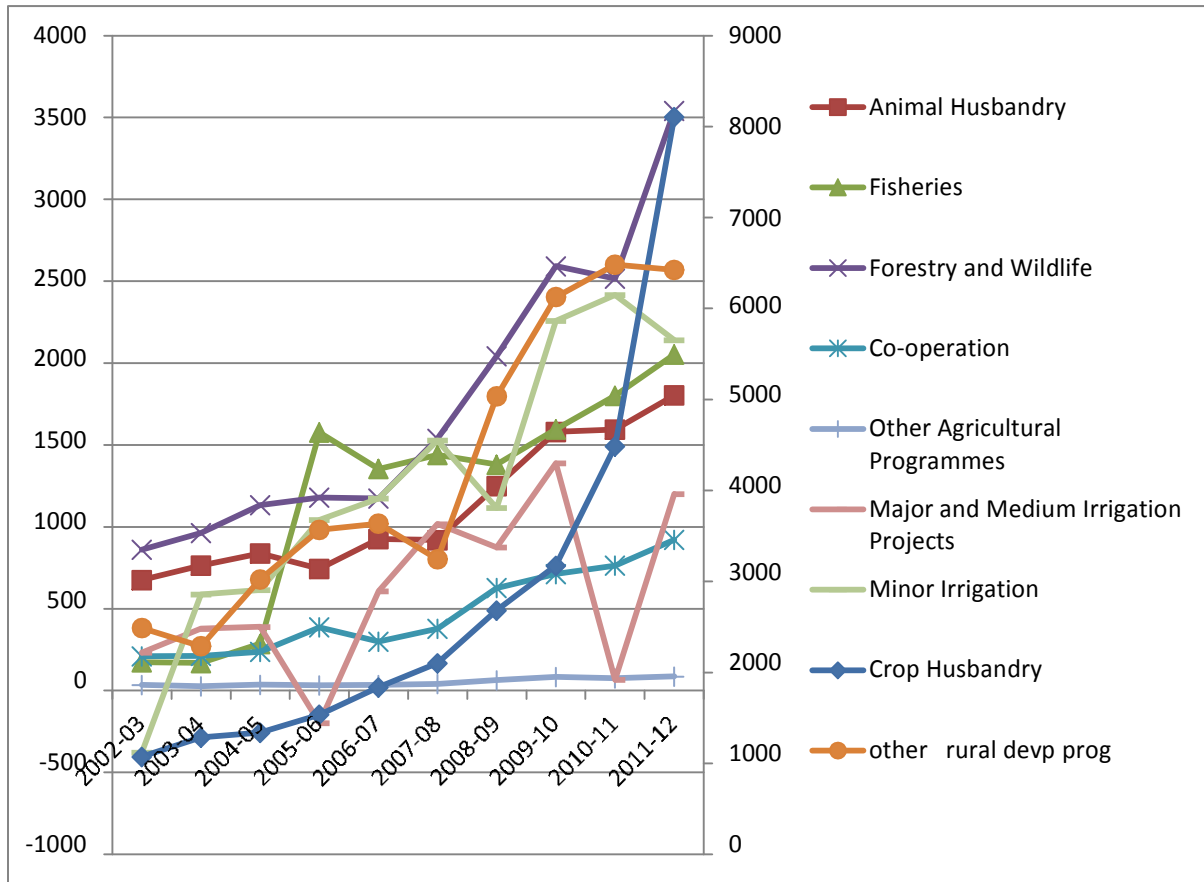


Figure 31: Subsidies under subheads of Economic services 2 (Non ferrous Minerals and Metals is on secondary axis)

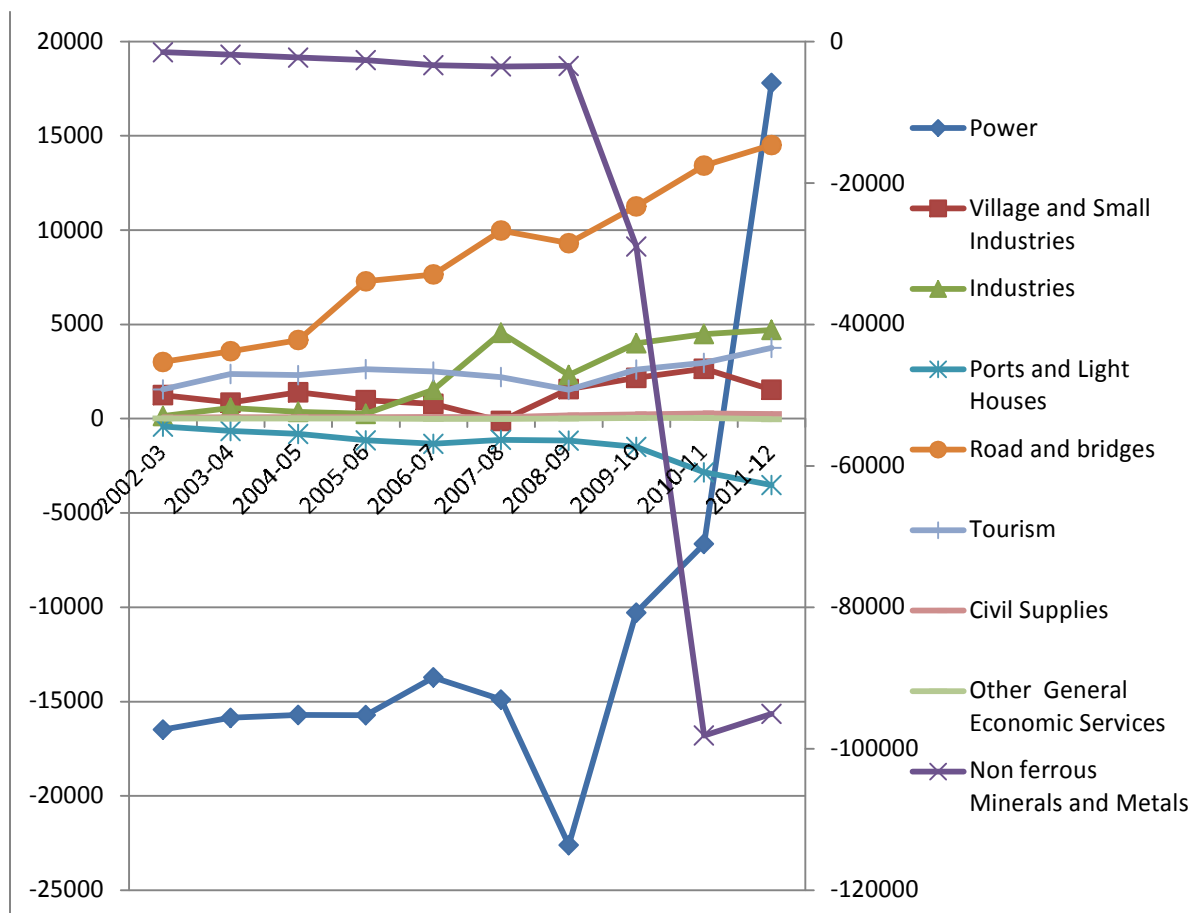
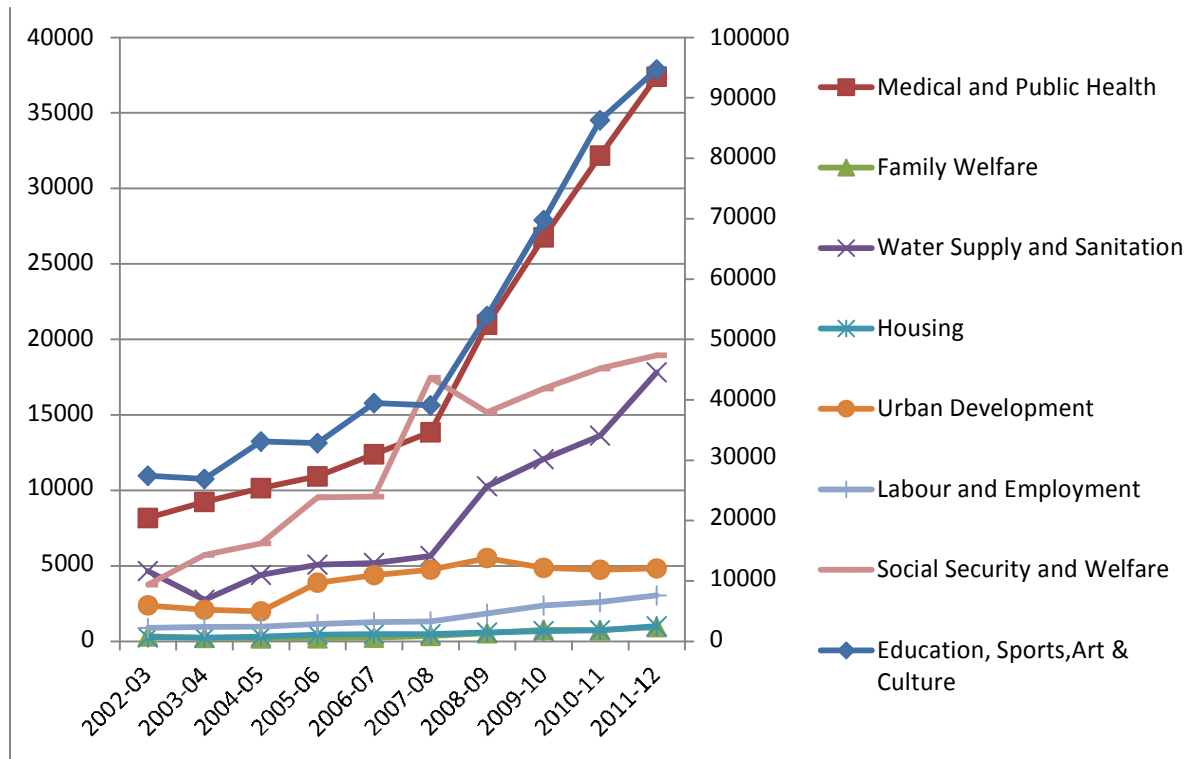


Table 67 Compound interest growth rate for Economics Services subsidies (Fig in Lakhs)

Subsidy	2002-03 (Rs Lakhs)	2011-12 (Rs Lakhs)	Compound growth rate (%)
Crop Husbandry	1071.86	8104.81	22.42
Animal Husbandry	675.1	1803.33	10.32
Fisheries	173.47	2052.77	28.03
Forestry and Wildlife	860.93	3540.7	15.19
Co-operation	209.19	921.28	15.98
Other rural Devpprog	2488.91	6424.79	9.95
Other Agricultural Programmes	34.2	85.98	9.66
Major and Medium Irrigation Projects	232.38	1200.33	17.84
Village and Small Industries	1248.52	1534.46	2.08
Industries	143.61	4705.71	41.76
Road and bridges	3002.52	14504	17.06
Tourism	1550.11	3752.92	9.24
Civil Supplies	65.76	247.04	14.15

Source: (GoG (FA) Various Years)

Figure 32 Subsidies under subheads of Social Services (Education, sports, arts & culture is on secondary axis)



The Figure 32 shows the subheads of social services, Education, sports, art & culture is highly subsidised sector which is shown on the secondary axis. The Medical and public health are second most subsidised under the subheads of social services. The state of Goa is one of the top states in India in terms of education and public health. The least subsidised are housing and family welfare.

Table 68 Compound interest growth rate for Social Services subsidies (Fig in Lakhs)

Subsidy	2002-03 (Rs Lakhs)	2011-12 (Rs Lakhs)	Compound growth rate (%)
Education, Sports, Art & Culture	27442.91	94707.36	13.19
Medical and Public Health	8177.84	37397.68	16.42
Family Welfare	336.41	950.29	10.94
Water Supply and Sanitation	4660.71	17829.5	14.36
Housing	265.38	1006.96	14.27
Urban Development	2382.46	4827.53	7.32
Labour and Employment	890.08	3043.84	13.08
Social Security and Welfare	3760.43	18950.05	17.55
Social services	47916.22	178713.2	14.07

Source (GoG (FA) Various Years)

The Table 68 shows compound interest growth rate for social services subsidies; highest growth rate was for social security and welfare 17.55 percent in absolute terms it is Rs. 18950.05 lakhs in 2011-12. The second highest growth rate was for the medical and public health 16.42 percent in absolute terms it is Rs. 37397.6 lakhs. The highest growth rate in these two heads under social services will improve the quality of life of population in state of Goa. Around 14 percent growth rate was shown by the water supply and sanitation and housing. The growth rate for labour and employment and education, sports, art and culture stood around 13 percent. The family welfare and urban development have shown growth rate of 10.94 percent and 7.32 percent respectively. Overall the social services have growth at the rate of 14.07 percent. In absolute figures education, sports, art and culture is the highest Rs. 94707.36 lakhs in 2011-12 and lowest subsidised was family welfare Rs. 950.29 Lakhs in same period.

Table 69 shows the percentage of recovery for the year 2002-03, recovery given as revenue divided by cost into hundred, recovery rate figure above hundred signify revenue is greater than the expenditure. The rate of recovery for the general services is 65.12 in the year 2002-03, Jails and Pension/ retirement benefits recovery percentage is less than one percent. Only other miscellaneous general services showed recovery figure 102.86 above 100 percent. In economic services for year 2002-03 the rate of recovery is 116.49 this is attributed to number of subheads which are above 100 percent mark. The Non ferrous minerals and metals have shown recovery of 3373.47 percent followed by ports and light house 283.41 percent. The power and minor irrigation also showed recovery rate of 142.99 and 150.21 percent respectively. The lowest recovery percentage was showed by other rural development programmes 0.09 percent. The recovery percentage for the social services is 12.43 percent; recovery was highest in case of water supply and sanitation 54.45 percent where government is changing some user charges. The lowest recovery rate was for family welfare, urban development and social security and welfare.

The Table 70 shows recovery percentage for various services for the year 2011-12, recovery percentage for the general services has declined from 65.12 percent in the year 2002-03 to 10.39 percent in 2011-12. The recovery percentage for other miscellaneous general services was highest 346.99 in 2011-12 which is increased over ten years from 102.86 percent in 2002-03. In

2011-12 other administrative services also showed increase from 102.86 percent in 2002-03 to 155.65 percent. The lowest recovery rate was for police, Jails and Pension / retirement benefits which stood less than one percent. For Economic services recovery rate has remained same 117.02 percent. The Non ferrous minerals and metals have shown recovery rate of 36713.02 percent in 2011-12 against the recovery rate of 3373.47 percent in 2002-03. The ports and light house recovery rate was 283.41 in 2002-03 which increased to 822.58 in 2011-12 percent. The power and minor irrigation also showed recovery rate of declined to 84.9 and 33.52 percent respectively in 2011-12. The lowest recovery percentage was showed by other rural development programmes 0.05 percent. The recovery percentage for the social services is 6.56 percent; recovery was highest in case of urban development 38.56 percent. The lowest recovery rate was for family welfare and social security and welfare.

Question of prioritisation amongst the sectors keeping in mind the need of the state is essential.

Table 69: Recovery percentage for various services and subheads for year 2002-03

Year 2002-03	Cost	Receipts	Subsidies	Recovery percentage
Public Service Commission	67.86	2.81	65.05	4.14
Police	4595.83	65.72	4530.11	1.43
Jails	230.78	0.3	230.48	0.13
Stationery and Printing	227.43	34.83	192.6	15.31
Public Works	2236.94	94.66	2142.28	4.23
Other Administrative Services	627.32	468.4	158.92	74.67
Pension/retirement benefits	13789.05	79.78	13709.27	0.58
Other Miscellaneous General Services	35598.05	36615.41	-1017.36	102.86
General Services	57373.26	37361.91	20011.35	65.12
Crop Husbandry	1164.86	93	1071.86	7.98
Animal Husbandry	736.1	61	675.1	8.29
Fisheries	237.47	64	173.47	26.95
Forestry and Wildlife	933.98	73.05	860.93	7.82
Cooperation	229.19	20	209.19	8.73
Other rural development programme	2491.25	2.34	2488.91	0.09
Other Agricultural Programmes	36.11	1.91	34.2	5.29
Major and Medium Irrigation Projects	658.38	426	232.38	64.70
Minor Irrigation	752.94	1131	-378.06	150.21
Power	38349.78	54835	-16485.22	142.99
Village and Small Industries	1263.52	15	1248.52	1.19

Industries	144.06	0.45	143.61	0.31
Non ferrous Minerals and Metals	46.78	1578.11	-1531.33	3373.47
Ports and Light Houses	230.41	653	-422.59	283.41
Road and bridges	3280.74	278.22	3002.52	8.48
Tourism	1620.11	70	1550.11	4.32
Civil Supplies	76.55	10.79	65.76	14.10
Other General Economic Services	59	46.94	12.06	79.56
Economic Services	52311.23	60938.36	-8627.13	116.49
Education, Sports, Art & Culture	27759.91	317	27442.91	1.14
Medical and Public Health	8871.84	694	8177.84	7.82
Family Welfare	336.41	0	336.41	0.00
Water Supply and Sanitation	10231.71	5571	4660.71	54.45
Housing	286.38	21	265.38	7.33
Urban Development	2391.46	9	2382.46	0.38
Labour and Employment	1048.08	158	890.08	15.08
Social Security and Welfare	3794.43	34	3760.43	0.90
Social services	54720.22	6804	47916.22	12.43

Source (GoG (FA) Various Years)

Table 70 Recovery percentage for various services and subheads for year 2011-12

Year 2011-12	Cost	Receipts	Subsidies	Recovery percentage
Public Service Commission	177.32	4.85	172.47	2.74
Police	19125.2	125.54	18999.66	0.66
Jails	721.7	0.8	720.9	0.11
Stationery and Printing	842.27	93.83	748.44	11.14
Public Works	8054.8	249.32	7805.48	3.10
Other Administrative Services	2704.28	4209.18	-1504.9	155.65
Pension/retirement benefits	41029.87	202.66	40827.21	0.49
Other Miscellaneous General Services	791.51	2746.48	-1954.97	346.99
General Services	73446.95	7632.66	65814.29	10.39
Crop Husbandry	8214.96	110.15	8104.81	1.34
Animal Husbandry	2010.94	207.61	1803.33	10.32
Fisheries	2247.27	194.5	2052.77	8.65
Forestry and Wildlife	3786.56	245.86	3540.7	6.49
Cooperation	972.52	51.24	921.28	5.27
Other rural development programme	6427.93	3.14	6424.79	0.05
Other Agricultural Programmes	90.91	4.93	85.98	5.42
Major and Medium Irrigation Projects	2670.25	1469.92	1200.33	55.05
Minor Irrigation	3219.15	1079.12	2140.03	33.52
Power	117852.71	100049.32	17803.39	84.89

Village and Small Industries	2213.91	679.45	1534.46	30.69
Industries	4774.71	69	4705.71	1.45
Non ferrous Minerals and Metals	259.66	95329.03	-95069.37	36713.02
Ports and Light Houses	487.05	4006.36	-3519.31	822.58
Road and bridges	15530.83	1026.83	14504	6.61
Tourism	3903.49	150.57	3752.92	3.86
Civil Supplies	261.6	14.56	247.04	5.57
Other General Economic Services	193.31	227.86	-34.55	117.87
Economic Services	175117.76	204919.45	-29801.69	117.02
Education, Sports, Art & Culture	95673.36	966	94707.36	1.01
Medical and Public Health	37996.68	599	37397.68	1.58
Family Welfare	950.29	0	950.29	0.00
Water Supply and Sanitation	25393.5	7564	17829.5	29.79
Housing	1034.96	28	1006.96	2.71
Urban Development	7857.53	3030	4827.53	38.56
Labour and Employment	3395.84	352	3043.84	10.37
Social Security and Welfare	18966.05	16	18950.05	0.08
Social services	191268.21	12555	178713.21	6.56

Source (GoG (FA) Various Years)

Table 71 Subsidies as unrecovered cost for period 2002-03 to 2011-12

Years	2002-03	2003-04	2004-05	2005-06	2006-07
Public Service Commission	65.05	57.43	73.95	68.37	86.28
Police	4530.11	4990.58	5175.04	6517.68	7770.07
Jails	230.48	223.76	238.59	259.18	286.89
Stationery and Printing	192.6	159.26	192.13	196.15	232.89
Public Works	2142.28	2264.9	2664.18	2830.18	3288.59
Other Administrative Services	158.92	92.2	-254.46	269.7	-5372.82
Pension/retirement benefits	13709.27	10949.47	13971.52	15503.34	14650.93
Other Miscellaneous General Services	-1017.36	156.72	111.78	236.96	265.58
General Services	20011.35	18894.32	22172.73	25881.56	21208.41
Crop Husbandry	1071.86	1283.85	1337.26	1535.94	1835.32
Animal Husbandry	675.1	763.63	837.89	743.21	925.58
Fisheries	173.47	168.84	285.29	1576.59	1354.02
Forestry and Wildlife	860.93	962.97	1132.84	1179.18	1173.67
Co-operation	209.19	212.43	237.04	386.56	299.23
Other rural development programme	2488.91	2288.39	3022.45	3567.62	3635.19
Other Agricultural Programmes	34.2	26.27	35.6	31.61	34.69
Major and Medium Irrigation Projects	232.38	377.26	388.93	-198.46	606.56
Minor Irrigation	-378.06	587.36	613.84	1042.58	1173.29

Power	-16485.2	-15864.2	-15703.2	-15715	-13710.3
Village and Small Industries	1248.52	847.27	1400.71	980.03	788.49
Industries	143.61	570.27	361	257.41	1535.73
Non ferrous Minerals and Metals	-1531.33	-1870.12	-2285.35	-2635.63	-3353.58
Ports and Light Houses	-422.59	-653.95	-810.81	-1149.97	-1336.99
Road and bridges	3002.52	3576.33	4163.17	7279.17	7645.53
Tourism	1550.11	2370.03	2306.28	2625.69	2499.11
Civil Supplies	65.76	69.98	79.44	82.58	91.94
Other General Economic Services	12.06	6.62	11.97	1.66	-12.47
Economic Services	-8627.13	-6215.46	-4950.85	-1124.1	1754.69
Education, Sports, Art & Culture	27442.91	26910.75	33097.26	32831.13	39457.04
Medical and Public Health	8177.84	9235.01	10151.28	10929.77	12392.34
Family Welfare	336.41	233.4	201.45	209.82	250.35
Water Supply and Sanitation	4660.71	2761.49	4402.8	5087.11	5202.12
Housing	265.38	253.1	322.61	453.44	486.22
Urban Development	2382.46	2090.39	1988.55	3880.17	4386.45
Labour and Employment	890.08	963.45	978.27	1143.75	1268.11
Social Security and Welfare	3760.43	5731.77	6493.15	9540.98	9584.24
Social services	47916.22	48179.36	57635.37	64076.17	73026.87

Source (GoG (FA) Various Years)

Table Continued

Years	2007-08	2008-09	2009-10	2010-11	2011-12
Public Service Commission	87.23	112.08	138.79	150.44	172.47
Police	8871.02	12639.5	14810.03	18028.19	18999.66
Jails	317.23	454.16	580.8	752.18	720.9
Stationery and Printing	233.36	382.93	519.85	548.42	748.44
Public Works	4206.74	5353.25	7403.36	6638.12	7805.48
Other Administrative Services	-1032.86	-2124.93	-1865.81	-1671.11	-1504.9
Pension/retirement benefits	13628.85	21313	34239.65	37026.17	40827.21
Other Miscellaneous General Services	-3784.73	320.73	-25803	-1564.86	-1954.97
General Services	22526.84	38450.72	30023.69	59907.55	65814.29
Crop Husbandry	2100.19	2680.65	3172.59	4485.77	8104.81
Animal Husbandry	918.71	1249.26	1579.49	1594.53	1803.33
Fisheries	1439.34	1379.62	1595.41	1800.49	2052.77
Forestry and Wildlife	1538.47	2042.55	2591.15	2516.5	3540.7
Co-operation	377.75	627.06	711.81	763.52	921.28
Other rural development programme	3244.52	5034.76	6126.11	6482.3	6424.79
Other Agricultural Programmes	40.96	62.96	82.88	74.69	85.98

Major and Medium Irrigation Projects	1016.43	874.73	1388.02	66.14	1200.33
Minor Irrigation	1527.58	1115.3	2257.89	2415.98	2140.03
Power	-14893.4	-22607.1	-10282.8	-6638.6	17803.39
Village and Small Industries	-122.78	1571.17	2160.63	2644.87	1534.46
Industries	4555.69	2312.37	4001	4489.08	4705.71
Non ferrous Minerals and Metals	-3533.15	-3464.85	-28996.7	-98128.9	-95069.4
Ports and Light Houses	-1124.8	-1168.38	-1501.17	-2851.36	-3519.31
Road and bridges	9967.45	9299.86	11252.51	13415.86	14504
Tourism	2202.8	1530.68	2601.79	2955.07	3752.92
Civil Supplies	71.59	169.5	231.05	285.72	247.04
Other General Economic Services	-16.67	11	40.36	43.75	-34.55
Economic Services	5670.3	-913.63	-30212.5	-161958	-29801.7
Education, Sports,Art & Culture	39088.46	53882.54	69753.81	86286.5	94707.36
Medical and Public Health	13849.67	20982.05	26758.63	32178.13	37397.68
Family Welfare	368.34	546.55	757.14	739.88	950.29
Water Supply and Sanitation	5658.65	10277.7	12071.99	13630.05	17829.5
Housing	485.14	587.5	682.7	737.25	1006.96
Urban Development	4751.12	5518.09	4869.45	4741.79	4827.53
Labour and Employment	1319.47	1838.52	2378.59	2596.82	3043.84
Social Security and Welfare	17464.15	15163.32	16747.07	18068.56	18950.05
Social services	82985	108796.3	134019.4	158979	178713.2

Source (GoG (FA) Various Years)

14. Devolution of funds by Finance Commission to Goa

There are three main channels that govern the transfer of funds from Centre to State they are the Finance Commission, Planning Commission and Central Sector Schemes and Centrally Sponsored schemes. The main function of the Finance Commission is to recommend to the Union Government the allocation of the share of taxes and grants-in -aid to the States out of the Consolidated Fund of India. The Finance Commission is also required to suggest measures to augment the resources of the State and suggest ways to supplement and augment the resources of Panchayats and Municipalities. While the Planning Commission has the responsibility of making recommendations regarding the magnitude of grants and loans to be provided to the States for financing their expenditure on the targeted interventions for socio-economic development. That is the Planning Commission has to make an evaluation of all resources of the nation, augmenting deficient resources, formulating Plans for the most effective and balanced utilization of resources and determining priorities. Central Sector schemes and Centrally

Sponsored Schemes (CSSs) are designed by different Central Government Ministries in consultation with the Planning Commission, wherein, the Central funds are transferred to the states implementing the schemes.

The general intent of intergovernmental transfers is to improve the vertical fiscal balance by providing general-purpose funding at the sub-national level and to improve the horizontal fiscal balance by compensating for fiscal disparities across regions. The past few Finance Commissions (FCs) have focused mainly on two criteria while determining the inter-se share of states in the devolution of taxes to states. The two criteria are equity and efficiency. The equity criteria address the problem of differences in fiscal capacity and cost disabilities in providing a standard level of goods and services. While efficiency is meant to incentivize states to exploit their resource base and manage the expenditure in an efficient manner (FC Various Years). In this Chapter we try to assess the pattern of transfer of funds to Goa by various Finance Commissions (Ninth Finance Commission 1990-95 to the Twelfth Finance Commission 2005-2010). The funds transferred to the State mainly comprise of the share in Central taxes and Non Plan grants to State.

14.1 Finance commission and Goa's share

Goa attained the status of a State in the Indian Union on 30th May 1987 and hence the transfer of funds from the Finance Commission to Goa as a State commenced from 1987 onwards that is the last two years of the Eight Finance Commission. The total transfers over various Finance Commissions have been increasing in absolute terms for Goa. The Total transfers increased from Rs.5,03,055 lakh in the Ninth Finance Commission to Rs. 1,62,482 lakh in the Twelfth Finance Commission (

Figure 33). The annual devolution of funds is also presented in Table 72 which shows that the amount devolved annually especially for Non-Plan grants differ greatly within each Finance Commission. Central Taxes comprise of a significant proportion of the total transfers to Goa by

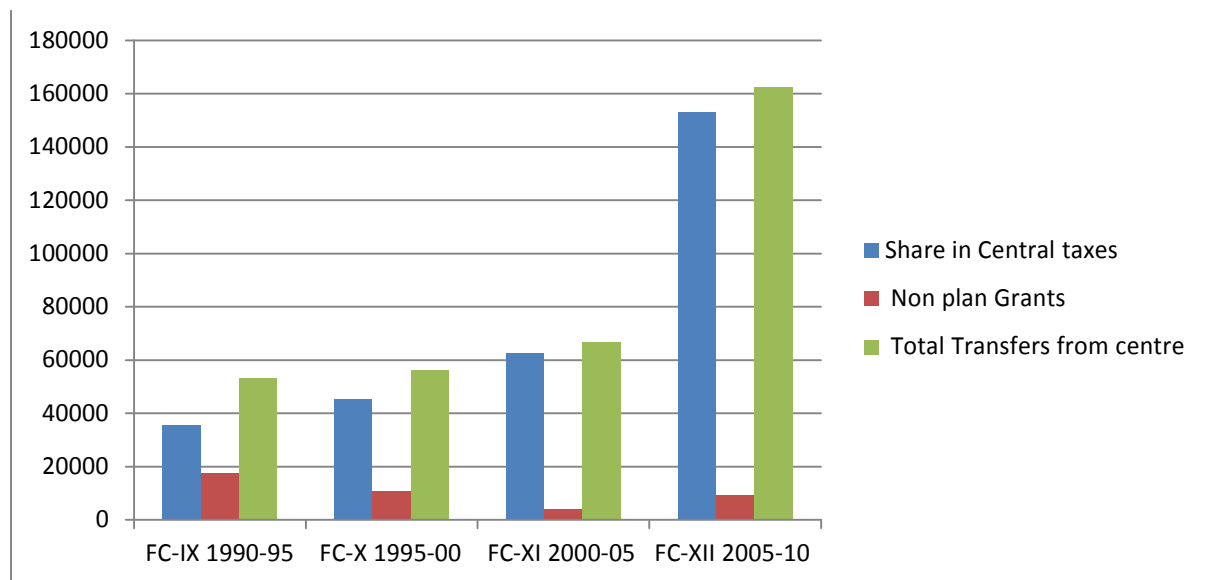
various Finance Commissions. The percentage of Goa's share of central taxes to the total central transfers devolved to Goa increased from 67 percent in the Ninth Finance Commission to around 94 percent during both the Eleventh and Twelfth Finance Commissions.

Table 72: Annual data on the devolution of funds to Goa by various Finance Commissions (Rs Lakh)

Year	Finance Commissions	Share in Central taxes for Goa	Goa's Non plan Grants	Total Transfers from Finance Commissions to Goa
1987-88	FC-VIII 1984-89	2800		
1988-89		3700		
1989-90	FC-IX 1989-90	2600		
1990-91	FC-IX 1990-95	5300	3529	8829
1991-92		6300	3503	9803
1992-93		7500	3447	10947
1993-94		7800	3415	11215
1994-95		8700	3561	12261
		Total	35600	17455
1995-96	FC-X 1995-2000	7100	4080	11180
1996-97		9100	3146	12246
1997-98		9700	2550	12250
1998-99		9700	730	10430
1999-00		9600	383	9983
		Total	45200	10889
2000-01	FC-XI 2000-05	10500	1482	11982
2001-02		10800	1194	11994
2002-03		11500	708	12208
2003-04		13600	519	14119
2004-05		16200	148	16348
		Total	62600	4051
2005-06	FC-XII 2005-10	24500	684	25184
2006-07		31200	2083	33283
2007-08		39400	2214	41614
2008-09		41544	1802	43346
2009-10		16405	2650	19055
		Total	153049	9433
2010-11	FC-XIII 2010-15	58423	1366	59789
2011-12		68059	1005	69064

Source: (RBI Various Years)

Figure 33: Goa's transfer of funds by various Finance Commissions (Rs lakh)



Source: (RBI Various Years)

14.2 Sharable Central taxes

Goa's Central taxes increased by 27 percent in the Tenth Finance Commission and by 38 percent in the Eleventh Finance Commission over the previous Finance Commissions, while Goa's Non Plan grants declined sharply by 38 percent in the Tenth Finance Commission and dropped further by 63 percent during the same time period. However there was a huge increase in both Goa's share of Central taxes (144 percent) and Goa's Non Plan grants (133 percent) in the Twelfth Finance Commission over the previous Finance Commission (

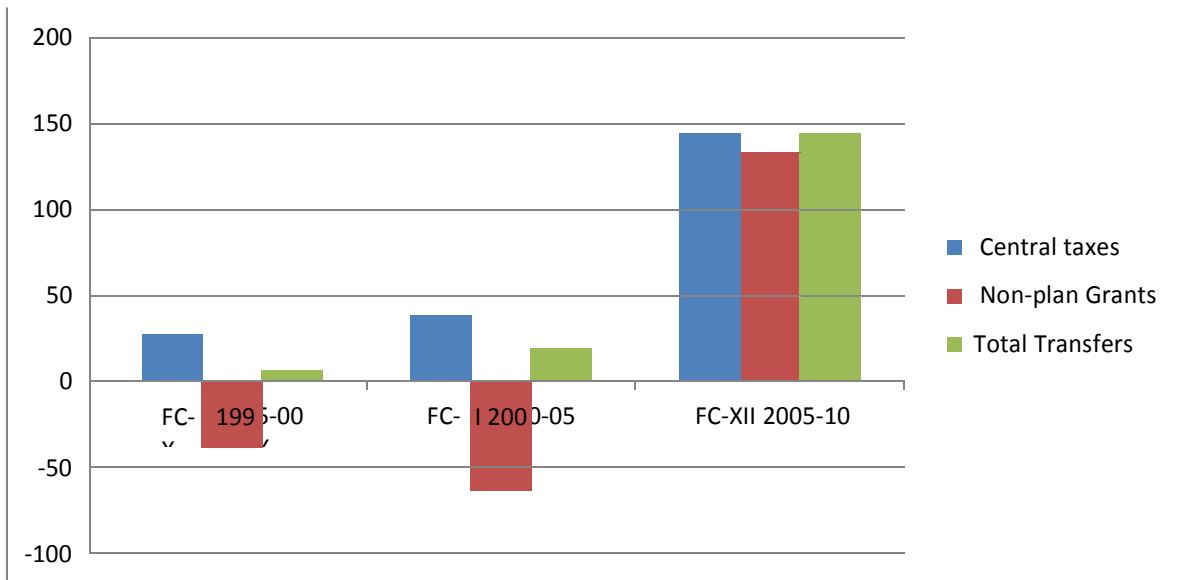
Figure 34).

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Figure 35 shows that the percentage share of non-plan grants were higher compared to the percentage share of central taxes during the Ninth and Tenth Finance Commissions and then later fell below the percentage share of central taxes during the Eleventh and Twelfth Finance

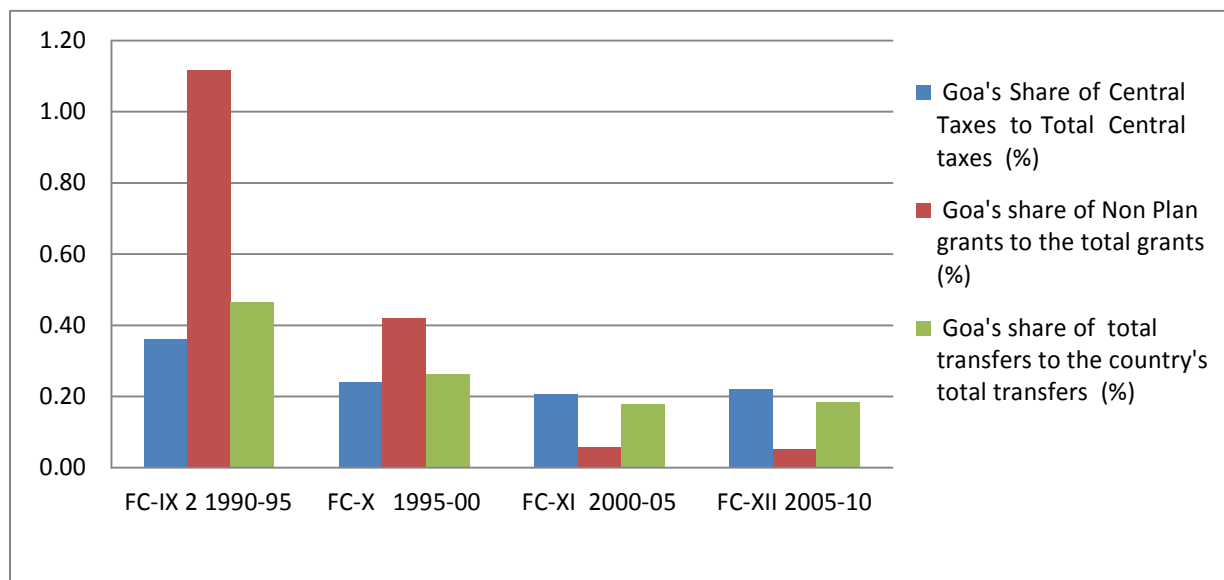
Commissions. The percentage share of central taxes and non-plan grants declined from Ninth to the Eleventh Finance Commissions and then increased marginally during the Twelfth Finance Commission. During the Twelfth Finance Commission the share of central taxes was 0.22 percent, the share of non-plan grants was 0.05 percent and the share of total transfers to the state was 0.19 percent. The average share of Goa's Total transfers to the Centre's Total from the Ninth to the Twelfth Finance Commission was 0.3 percent.

Figure 34: Percentage Change in the devolution of funds to Goa over previous Finance Commissions



Source: (RBI Various Years)

Figure 35: Share of Goa to the total devolution of funds by various Finance Commissions



Source: (RBI Various Years)

The share of Goa in the devolution of funds from the Centre can be seen in

Table 74 and

Table 75. The shares are a result of different criteria used by various Finance Commissions. Over the past few Finance Commissions (Ninth to Thirteenth) the distributive criteria have converged towards the following. Among the need factors population and income distance have gained acceptance among cost disability factors area and infrastructure index have tended to be preferred indicators and among fiscal efficiency factors tax effort and fiscal discipline are regarded as appropriate.

Moreover the sharing of taxes differs for the Ninth and Tenth Finance Commission. For the Ninth Commission the sharing was 85 percent income tax to be shared to the states and 45 percent of Union Excise and for the Tenth Finance Commission the sharing was 77.5 percent for the income tax and 47.5 percent for the Union Excise duties and hence the shares are difficult to compare with the later Finance Commissions. As can be seen in Table 73 and

Table 76: Goa's share of Central Taxes to Goa's Total Tax Revenue

Finance Commissions	Percentage share of Goa's share of Central Taxes in Goa's Tax Revenue
FC-IX 1990-95	32
FC-X 1995-00	20
FC-XI 2000-05	16
FC-XII 2005-10	17

Source: (RBI Various Years)

Figure 36 though the percentage share of Goa increased from the Tenth (0.206%) to Eleventh (0.259%) Finance Commission, the percentage share of Central Taxes of Goa in the total share decreased marginally from 0.24 percent to 0.21 percent.

Table 73: Goa's share of Central Taxes to Goa's Total Tax Revenue

Finance Commissions	Percentage share of Goa's share of Central Taxes in Goa's Tax Revenue
FC-IX 1990-95	32
FC-X 1995-00	20
FC-XI 2000-05	16
FC-XII 2005-10	17

Source: (RBI Various Years)

Goa has requested the Fourteenth Finance Commission to increase the share in the pool of taxes from the current 0.266 percent to 0.48 percent ((ToI 2014). Some of the additional criteria that were suggested by Goa to the Finance Commission were high density of Goa's population which is currently 490 per sqm compared to India's 390 sqm, inter generation equity, human development index, smallness of geographical area and the large influx of tourists (ToI 2014).

Table 74: Inter se Share of Goa in the devolution of Central Taxes and Central Grants from the Eleventh to the Thirteenth Finance Commissions

	Inter se Shares of Goa in net proceeds of Central Taxes excluding Service tax (%)	Inter se Shares of Goa in Service Tax (%)
FC XIII (2010-2015)	0.266	0.27
FC XII(2005-2010)	0.259	0.262
FC XI (2000-2005)	0.206	0.209

Source: (FC 2009)

Table 75: Inter se Share of Goa in the devolution of Central Taxes and Central Grants by the Ninth and Tenth Finance Commissions

Components	FC IX (1990-95) % share	FC X (1995-00) % share
Share of Goa from Income Tax	0.11	0.18
Share of Goa from Additional Excise duties in lieu of Sales Tax	0.228	Nil
Share of Goa from Grant in lieu of Tax on Railway Passenger Fares	0.133	Nil
Share of States from Union Excise duties	0.523	0.18

Source: FC (Various Years)

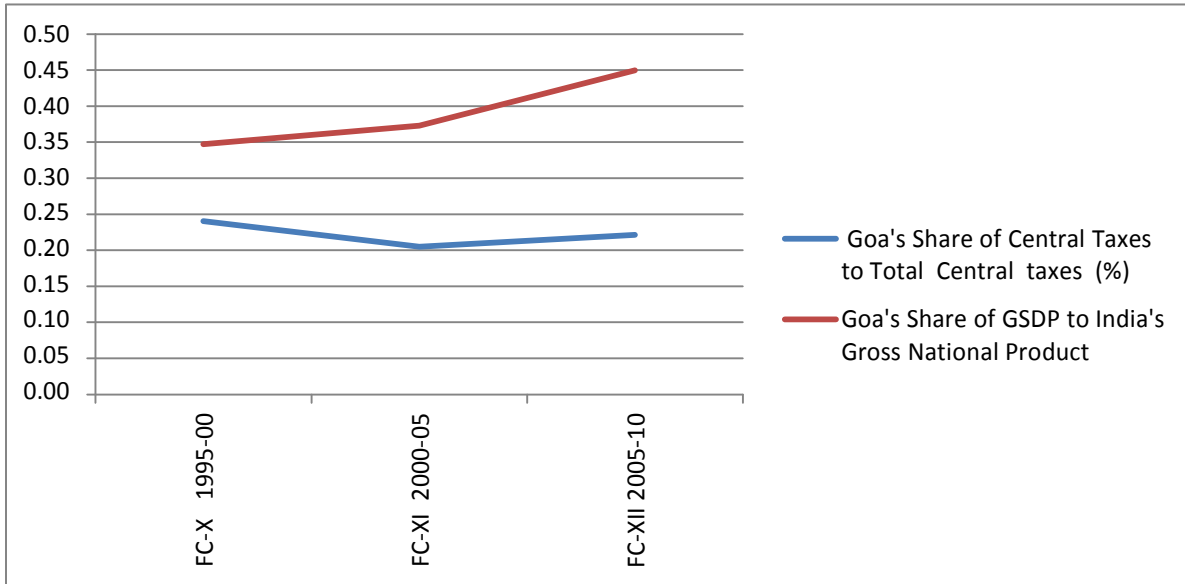
As can be seen in Fig 4 the percentage of Goa's Central Taxes to the total Central taxes was 0.24 percent, 0.21 percent and 0.22 percent during the Tenth, the Eleventh and Twelfth Finance Commission respectively. While Goa's share of Gross State Domestic Product (GSDP) to the National Gross Domestic Product (GDP) was 0.35 percent, 0.37 percent and 0.45 percent respectively during the same time period. It also seems that while Goa contributes a greater percentage share to the national GDP, it receives a smaller proportion of the total share of Central taxes. This is also supported by Table 4 wherein the percentage share of Goa's central taxes in its total tax revenue has continuously declined over various Finance Commissions. It was 32 percent in the Ninth Finance Commission and declined to 17 % in the Twelfth Finance Commission.

Table 76: Goa's share of Central Taxes to Goa's Total Tax Revenue

Finance Commissions	Percentage share of Goa's share of Central Taxes in Goa's Tax Revenue
FC-IX 1990-95	32
FC-X 1995-00	20
FC-XI 2000-05	16
FC-XII 2005-10	17

Source: (RBI Various Years)

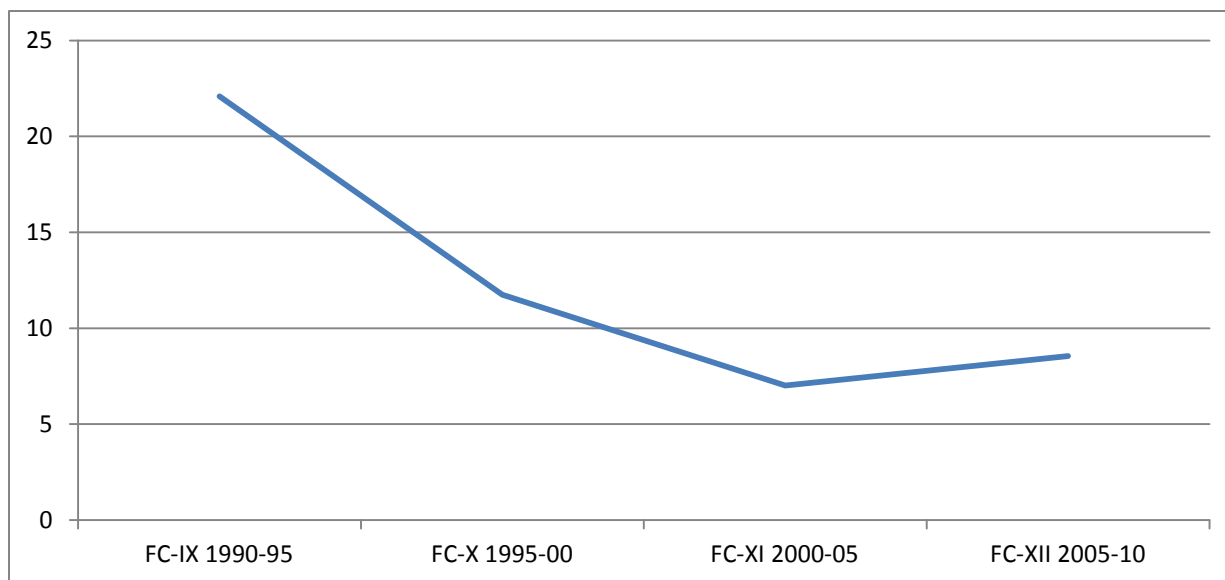
Figure 36: Percentage share of Goa's Central Taxes to total and Goa's GSDP to National GDP



Note: Original data for GSDP and GDP data are at factor cost at current prices.
 Source: (Mospi Various Years)

Further as can be seen in Table 76 Goa's share of total transfers (Central taxes plus non plan grants) as a percentage of Goa's Total expenditure declined considerably from 22 percent during the Ninth Finance Commission to 7 percent in the Eleventh Finance Commission and increased marginally to 9 percent of the total expenditure in the Twelfth Finance Commission. Goa though a small and relatively developed State has its own set of challenges and requirements in terms of expenditure. Some of the areas that the Goa Government will need additional funds for in the near future is for the upgradation of tourism infrastructure to attract high quality tourists, solid waste management, sewerage network, underground electrical cabling, state-wide surveillance system, creation of sports infrastructure, film festival complex and compensation for mining loss which is in addition to the normal expenditure. (ToI 2014).

Figure 37: Goa's Share of total transfers over various Finance Commissions as a percentage of Goa's total expenditure



Note: Total expenditure excluding lotteries + Capital Outlay + net lending
 Source: (RBI Various Years)

14.3 Conclusion

While in absolute terms the devolution of funds to Goa by various Finance Commissions has increased (Ninth to the Twelfth FC), however Goa's share of the total transfers (All India) of the Finance Commissions has come down. It also seems that Goa's contributes a greater percentage to the National GDP than its share from the pool of central taxes that are devolved. The share of central taxes in Goa's total tax revenue has declined considerably from the Ninth to the Twelfth Finance Commission. Further there has been a decline in the contribution of total transfers from the Finance Commissions in Goa's Total expenditure.

References

- Babu, M.D. 2009. "Fiscal Empowerment of Panchayats in India: Real or Rhetoric?" Institute for Social and Economic Change, Bangalore.
- Bandyopadhyay, R. 2006. *NATIONAL SURVEY ON STATE LEVEL PUBLIC ENTERPRISES*. New Delhi: DEPARTMENT OF PUBLIC ENTERPRISES MINISTRY OF HEAVY INDUSTRIES AND PUBLIC ENTERPRISES GOVERNMENT OF INDIA.
- Bhalla, S.S. 2010. "India on the Growth Turnpike." In *India on the Growth Turnpike: Essays in Honour of Vijay L. Kelkar*, edited by Sameer Kochhar, 155–74. New Delhi, India: Academic Foundation.
- Bird, Richard M. 2013. "Taxation and Development: What Have We Learned from Fifty Years of Research?" *IDS Working Papers* 2013 (427): 1–19. doi:10.1111/j.2040-0209.2013.00427.x.
- CAG Report. 2011. *Government Commercial And Trading Activities . Overview of Government Companies and Statutory Corporation*. New Delhi: Comptroller and Auditor General of India.
- Chelliah, Raja, and Narain Sinha. 1982. *State Finances of India: The Measurement of Tax Effort of State Governments, 1973-1976*. 53. Working Paper. Washington, D.C: World Bank.
- Das-Gupta, Arindam, Shanto Ghosh, and Dilip Mookherjee. 2004. "Tax Administration Reform and Taxpayer Compliance in India." *International Tax and Public Finance* 11 (5): 575–600. doi:10.1023/B:ITAX.0000036692.95048.00.
- Das-Gupta, Arindam, Radhika Lahiri, and Dilip Mookherjee. 1995. "Income Tax Compliance in India: An Empirical Analysis." *World Development* 23 (12): 2051–64. doi:10.1016/0305-750X(95)00098-W.
- FC. 2009. *Thirteenth Finance Commission 2010-2015 Volume I*. New Delhi: Finance Commission of India.
- Frey, Bruno S. 1997. *Not Just for the Money: An Economic Theory of Personal Motivation*. Cheltenham, UK ; Brookfield, Vt: Edward Elgar Pub.
- GoG. 2009. *Medium Term Fiscal Policy for Goa*. Finance (Debt Management) Division.
- GoG (Electric). Undated. "CITIZEN'S CHARTER FOR ELECTRICITY DEPARTMENT." <https://www.goa.gov.in/pdf/ElectricityDeptCharter.pdf>.
- GoG (FA), Finance. Various Years. "Finance Accounts of Goa". Government of Goa.
- GoG (FC). 2007. *Report of the Second State Finance Commission*. Panaji: Government of Goa.
- GoG (ReceiptEst). Various Years. "Estimates of Receipts". Government of Goa.
- GoG (SH). Various Years. "Statistical Handbook of Goa". Directorate of Planning and Statistics, Government of Goa, Government Printing Press, Panaji.
- Haughton Jonathan. 1998. "ESTIMATING TAX BUOYANCY, ELASTICITY AND STABILITY". EAGER/PSGE - EXCISE PROJECT METHODOLOGICAL NOTE 1. pdf.usaid.gov/pdf_docs/PNACE024.pdf.
- Jothi Sivagnanam K., and Naganathan M. 2000. "Federal Transfers and the Tax Efforts of the States in India." *Indian Economic Journal*, no. 4: 101–10.
- Kaldor, Nicholas. 2008. "Taxation for Economic Development." *The Journal of Modern African Studies* 1 (01): 7. doi:10.1017/S0022278X00000689.
- Leuthold, Jane H, and N Guessan Tchetcher. 1986. "Tax Buoyancy vs Elasticity in a Developing Economy". FACULTY WORKING PAPER NO. 1272 College of Commerce and

- Business Administration University of Illinois at Urbana-Champaign.
<http://www.archive.org/details/taxbuoyancyvsel1272leut>.
- Majumdar, Amita, Chiranjib Neogi, Dipankar Coondoo, and Robin Mukerjee. 2001. "Relative Tax Performances." *Economic and Political Weekly* XXXVI (40).
- Mospi. Various Years. "NSDP Release". Ministry of Statistics and Programme Implementation.
http://mospi.nic.in/Mospi_New/upload/nad_nsdp_realsector.pdf?status=1&menu_id=84.
- PC. 2002. "*Study Group on Reforms in State Public Sector Undertakings*" *Final Report*. New Delhi: Planning Commission, Government of India.
planningcommission.nic.in/aboutus/committee/psu_vol2.pdf.
- Purohit, Mahesh C. 2006. "Tax Efforts and Taxable Capacity of Central and State Governments." *Economic and Political Weekly* XLI (8): 747–54.
- Purohit, Mahesh, and Vishnu Kanta Purohit. 2009. "Mobilizing Resources through Reform of State Non-Tax Sources for Plan Development". Foundation for Public Economics and Policy Research New Delhi.
planningcommission.nic.in/reports/sereport/ser/rep_mob.pdf.
- RBI. Various Years. "State Finances: A Study of Budgets". Reserve Bank of India.
<http://www.rbi.org.in/scripts/AnnualPublications.aspx?head=State%20Finances%20:%20A%20Study%20of%20Budgets>.
- Sen, Tapas K. 1997. *Relative Tax Effort by Indian States*. Working Paper. New Delhi: National Institute of Public Finance and Policy.
<http://www.nipfp.org.in/media/medialibrary/2013/04/tapas%20may%201997.pdf>.
- ToI. 2014. "Raise Goa's Share of Central Taxes, Chief Minister Urges Finance Commission." *Times of India*, January 30. <http://www.latestnews-headlines.com/raise-go-a-s-share-of-central-taxes-chief-minister-urges-finance-commission>.