Study Report

EVALUATING THE FINANCES OF MAHARASHTRA

(Study Commissioned by 14th Finance Commission)

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List of People we met (order is department-wise and not by hierarchy):

Finance Department:

(1) Mr.Shrivastava (Prinicipal Secretary, Finance)
(2) Mr.Shivji (Expenditure Secretary)
(3) Mr. A.N. Bhosle (Joint Secretary)
(4) Mr.Ambilpure (Under Secretary)
(5) Mr.Tondale
(6) Mr.Zalte
(7) Mr.Mutyal
(8) Mrs.Shinde

Planning Department:

(9) Mr.Bakshi (Additional Chief Secretary, Planning)

Rural Development Department:

(10) Mr. More (Joint Secretary)
(11) Ms. Pratibha Patil (Desk Officer)

Urban Development Department

(12) Mr.Shrikant Singh (Principal Secretary)

(13) Mrs. Dumdhere (Joint Secretary)

JNNURM

(14) UIDSSMT: Mr. Mulye (Deputy Director, DMA)
(15) UIG: Mr. Unhale (OSD, SLNA for JNNURM)
(16) Housing: Mr. Badgeri (Under Secretary, Housing)

Power Sector

(17) Mr.Naqvi (Director Finance, Mahagenco)
(18) Mr.Waval (Director Finance, Mahadiscom)
(19) Mr.Mohite (Director Finance, Mahatransco)
(20) Mr.Labde: Mahagenco
(21) Mr.Manjewar: Mahagenco
(22) Mr.Bhoyer: Mahadiscom
(23) Mr.Shiroorkar: Mahadiscom
(24) Mr.Rangdale: Mahadiscom
(25) Mr.Ambekar: Mahatransco
(26) Mr.Saurabh Gupta: MERC

Water Sector

(27) Water Regulatory Commission: Mr.Sodal (Secretary)

Auditor General's Office

Accounts Department

(28) Mr. Venkatramani (Senior Accounts Officer)
(29) Ms. Lata (Assistant Accounts Officer)

Audit Departments

Audit I

(30) Mr. Desai (DAG, Audit I)
(31) Mr. Ranjit (Senior Audit Officer, Audit I)

Audit III

(32) Mr. Venkatramanan (DAG, Audit III)
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Introduction

We have been invited by the Finance Commission to carry out a detailed study to evaluate the finances of the Government of Maharashtra. This is being done in preparation of the Report of Fourteenth Finance Commission. This evaluation study is expected to critically analyse the overall finances of the State of Maharashtra over ten years spanning the period 2002-03 to 2012-13. Suggestions for improvement financial performance have also been sought by the Commission.

The Terms of Reference for our study are as under:

1. Estimation of revenue capacities of State and Measures to improve the tax-GSDP ratio during last five years.

   Suggestions for enhancing the revenue productivity of the tax system in the State.
2. Analysis of the state's own non-tax revenues and suggestions to enhance revenues from user charges and profits from departmental enterprises and dividends from non-departmental commercial enterprises.
3. Expenditure pattern and trends separately for Non-Plan and Plan, Revenue and Capital, and major components of expenditure thereunder. Measures to enhance allocative and technical efficiency in expenditures during the last 5 years. Suggestions for improving efficiency in public spending.
4. Analysis of Deficits – Fiscal and Revenue along with Balance of Current Revenues for Plan financing.
5. The level of Debt: GSDP ratio and the use of debt (i.e whether it has been used for capital expenditure or otherwise). Composition of the state's debt in terms of market borrowing, Central government debt (including those from bilateral/multilateral lending agencies routed through the Central government), liabilities in public account (small savings, provident funds etc) and borrowings from agencies such as NABARD, LIC etc. 6.

Implementation of FRBM Act and commitment towards targets. Analysis of MTFP of various departments and aggregate.

7. Analysis of the state's transfers to urban and rural local bodies in the state. Major decentralisation initiatives. Reforms undertaken under JNNURM conditionalities.
8. Impact of State Public Enterprises finances on the States' financial health and measures taken to improve their performance and/or alternatives of closure, disinvestment etc.
9. Public Expenditure and Financial Management (PEFM) Reforms implemented in the State.
10. Impact of Power Sector Reforms on States' fiscal health. In case reforms have not been implemented, the likely outcome on the States' fiscal health.
11. Analysis of contingent liabilities of the state.
12. Subsidies given by the States (Other than Central subsidies), its targeting and evaluation.

The period of our analysis is 2002-03 to 2013-14(RE), which has been adhered to in most cases. However, in some instances we have had to stop short or start at a later date based on the availability of data.

It is for the first time that a Finance Commission has asked research institutes, universities and independent researchers to do independent analysis of the finances of each state. The idea in itself a great one *per se*. However, as one such researcher undertaking this study on behalf of Mumbai University the task has been rather difficult. It has been difficult to convince the government officials that they must share the necessary information with us and that it is in their interest that our report is a good one! The experience at data collection has been very mixed. The experience ranged from being very pleasant to one when one was asked to leave the cabin!

High level of specialisation and super-specialisation meant that we have had to visit a large number of desks and meet with a large number of people (34 to be precise as is seen from the list of people we met). At each of these desks we have had to explain from scratch about what we were doing and why and what we wanted from them. At each of these desks we have had to make 2-3 rounds in order to collect the information that we have been able to put together in this report. Clearly the task was an uphill one!

Based on our experience, our recommendation to future Finance Commissions would be that the idea of independent evaluation is indeed a good one and practice could be retained. However, as regards the logistics of how this study should be conducted we would like to recommend that the Finance Commission should solicit the information from every State (which it does anyways) and then hand over the data provided by the States to independent researchers for an independent evaluation. We believe that the purpose of such studies is to get an independent evaluation and not a verification of data (which is to come from the same source i.e. the state government). Once the data is made available it is even possible to commission studies which span a duration of less than 6 months because the researcher is expected to analyse the data and bring to bear his/ her professional expertise to comment on the story that emerges from the data. Clearly the time of the independent researchers would be more productively used and the analysis would be of greater help to the Finance Commission.

TOR1: Estimation of revenue capacities of State and Measures to improve the tax-GSDP ratio during last five years. Suggestions for enhancing the revenue productivity of the tax system in the State.

This section will take a detailed look at the receipts pattern for the state of Maharashtra and estimate revenue capacity and tax effort of the state following the methodology suggested in Purohit (2006) using a combination of regression approach and the representative tax system approach. We will start off with a broad overview of total receipts and its major components taking a detailed look at tax revenues.

Total Receipts and Major Components:

Total receipts are broadly categorised into Revenue receipts and Capital receipts. Revenue receipts comprise tax revenue, non-tax revenue, share in central government taxes and grants-in-aid from the centre. Capital receipts comprise public debt, loans from central government, recovery of loans by state government and public account.

The entire period under consideration 2002-03 to 2012-13(RE) has been also been considered as three sub-periods, spanning three different Finance Commissions 11th FC (2002-03 to 2004-05); 12th FC (2005-06 to 2009-10) and 13th FC (2010-11 to 2012-13(RE)).

Table 1.1
Total Receipts: Revenue and Capital Receipts

(Rs. Crore)

	Year	Total Receipts	Revenue Receipts	Capital Receipts
11TH FINANCE COMMISSION	2002-03	61210.13	31103.048 (50.81)	30107.09 (49.19)
	2003-04	70166.64	34370.521 (48.98)	35796.12 (51.02)
	2004-05	76328.68	41013.33 (53.73)	35315.35 (46.27)
12TH FINANCE COMMISSION	2005-06	72614.46	48438.30 (66.71)	24176.16 (33.29)
	2006-07	78493.32	62195.38 (79.24)	16297.94 (20.76)
	2007-08	81301.53	79583.15 (97.89)	1718.38 (2.11)
	2008-09	100336.39	81270.68 (81.00)	19065.70 (19.00)
	2009-10	117293.40	86910.25 (74.10)	30383.16 (25.90)
13TH FINANCE COMMISSION	2010-11	129606.92	105867.82 (81.68)	23739.10 (18.32)
	2011-12	149622.53	121286.15 (81.06)	28336.39 (18.94)
	2012-13(RE)	172179.52	144622.70 (84.00)	27556.83 (16.00)
	2013-14(BE)	194235.31	155986.95 (80.31)	38248.36 (19.69)

Note: Figures in parentheses indicate per cent of total

At the start of the sample period revenue and capital receipts constituted 50% each. However, by the end of our sample period we find the share to have changed dramatically to

80% and 20% respectively. *Thus, indicating that the significance of capital receipts in the total receipts has witnessed a declining trend. Broadly speaking capital receipts are borrowings thus a reduction in its share is a positive trend (Table 1.1).*

We trace the performance of the state on the receipts front by using three indicators (a) the summary statistics i.e. mean and coefficient of variation over each of the Finance Commission (FC) periods. Using the mean over the FC period we also compute the per cent change in the mean between the FCs (b) growth rates computed as *ln(Receipts)=a+b(Trend).* Here the 'b' coefficient provides us with the growth rate and (c) to gauge how the receipts have grown with an increase in income we have also computed elasticity as *ln(Receipt) = a + b(lnSDP)*, where the 'b' coefficient gives the elasticity.

We first take a look at the summary statistics for total receipts and its two major constituents i.e. revenue receipts and capital receipts in Table 1.2.

TABLE 1.2
Total Receipts and its Components: Summary

(Rs. Crore)

	2002-03 - 2012-13		**11th FC**		**12th FC**		**13th FC**	
Item	**Mean**	**C.V**	**Mean**	**C.V**	**Mean**	**C.V**	**Mean**	**C.V**
Total Receipts	100832.10	0.36	69235.15	0.11	90007.82	0.21	150469.70	0.14
Total Revenue Receipts	76060.12 (75.43)	0.49	35495.63 (51.27)	0.14	71679.55 (79.64)	0.22	123925.50 (82.36)	0.16
Total Capital Receipts	24772.02 (24.57)	0.39	33739.52 (48.73)	0.09	18328.27 (20.36)	0.59	26544.10 (17.64)	0.09
Note: Figures in brackets represent percentage of total receipts								

We notice a declining trend in the share of capital receipts in total receipts over the full sample period since 2002-03 (Table 1.1), when we consider the average share of revenue and capital receipts for the FC periods, average capital receipts show a declining trend while the average revenue receipts show an increasing trend. Next we take a look at the total receipts and it constituents as per cent of GSDP (Table 1.3). This provides us with a rough measure of the size of government.

Table 1.3
Total Receipts and Major Components: As % of GSDP

	2003-03 - 2012-13 (RE)	11th FC	12th FC	13th FC
Total Receipts	14.664	18.843	13.447	12.513
Total Revenue Receipts	10.267	9.637	10.630	10.292
Total Capital Receipts	4.397	9.206	2.817	2.221

As per cent of GSDP, total receipts constitute 14.6% for the period 2002-03 to 2012-13(RE). We find that total receipts as per cent of GSDP has declined from 18.8% in the 11th FC to 12.5% in the 13th FC (Table 1.3). A component-wise scrutiny shows that the share of capital receipts declined significantly from 9% in the 11th FC period to 2.22% in the 13th FC period. *Thus we detect a declining trend in the share of capital receipts in GSDP over the FC periods, with a fairly sharp dip from the 11thFC to the 12thFC period. A marginal fall is further noticed in the 13th FC period. The share of revenue receipts shows an improvement of one percentage point in the 12th FC but a slip by 0.5 percentage point in the 13th FC period. Thus no significant improvement or deterioration is noted here. There seems to be no significant increase in relation to GSDP.*

The growth rate during each of the FC periods (Table 1.4) serves as yet another indicator of the trend in receipts and the major components.

Table 1.4
Total Receipts and Major Components: Growth Rate

	2003-03 - 2012-13 (RE)	11th FC	12th FC	13th FC
Total Receipts	0.0999***	0.110	0.120**	0.142**
Total Revenue Receipts	0.155***	0.138	0.144*	0.156*
Total Capital Receipts	-0.0178	0.0798	0.0614	0.0746

Total receipts have shown a growth of 9.99% for the entire period from 2002-03 to 2012-13(RE). Revenue receipts show a small but steady increase in the growth rate over the three FC periods. Capital receipts recorded a negative growth rate for the period as a whole (-0.178%) with a decline in the growth rate in the 12th FC period by 0.01 percentage point and an increase by the same extent in the 13th FC period. *Thus while growth rate in revenue receipts continue to remain in the 13%-15% range, capital receipts remain in the 6% to 7% range of growth rate.*

Our final indicator to track the progress in receipts is the coefficient of income elasticity. This gives the percentage change in tax receipts that accompanies a 1 per cent change in income. Table 1.5 gives these elasticity coefficients for the major components of receipts.

Table 1.5
Total Receipts and Major Components: Income Elasticity Coefficient

	2003-03 - 2012-13 (RE)	**11th FC**	**12th FC**	**13th FC**
Total Receipts	0.678***	0.868	0.833*	1.006*
Total Revenue Receipts	1.058***	1.085	1.068**	1.102
Total Capital Receipts	-0.170	0.629	-0.101	0.539

Capital receipts show a negative elasticity for the sample period as a whole on account of 12th FC period. It subsequently picked up to 0.54 in the 13th FC period. The elasticity coefficient of revenue receipts exceeds 1 in each of the FC periods.

Revenue Receipts

Table 1.6 below traces broad components of revenue receipts viz., own tax revenues, non-tax revenues, share in central taxes and grants-in-aid, over the sample period and their share in total revenue receipts. As in the earlier part of the analysis, the sample period is split into three sub-periods pertaining to the three FCs.

Table 1.6
Revenue Receipts and its Components

(Rs. Crore)

		Total Revenue Receipts	State's own Tax Revenue	Non Tax Revenue	Share in Central Taxes	Grants-in-Aid from Central Government
11TH FINANCE COMMISSION	**2002-03**	31103.05	22814.44 (73.35)	4517.47 (14.52)	2264.98 (7.28)	1506.15 (4.84)
	2003-04	34370.52	25181.23 (73.26)	3548.94 (10.33)	3370.42 (9.81)	2269.93 (6.60)
	2004-05	41013.33	30604.67 (73.26)	4118.83 (10.33)	3596.11 (9.81)	2693.72 (6.60)
12TH FINANCE COMMISSION	**2005-06**	48438.30	33539.43 (74.62)	5935.05 (10.04)	4982.81 (8.77)	3981.00 (6.57)
	2006-07	62195.38	40098.38 (69.24)	7518.25 (12.25)	6023.62 (10.29)	8555.13 (8.22)
	2007-08	79583.15	47527.95 (64.47)	16947.97 (12.09)	7597.68 (9.69)	7509.55 (13.76)
	2008-09	81270.68	52031.05 (59.72)	9789.94 (21.30)	8017.30 (9.55)	11432.40 (9.44)
	2009-10	86910.25	59106.38 (64.02)	8352.57 (12.05)	8248.07 (9.86)	11203.23 (14.07)
13TH FINANCE COMMISSION	**2010-11**	105867.82	75027.63 (68.01)	8225.04 (9.61)	11419.25 (9.49)	11195.89 (12.89)
	2011-12	121286.14	87647.62 (70.87)	8167.70 (7.77)	13304.18 (10.79)	12166.64 (10.58)
	2012-13(RE)	144622.70	100582.93 (72.27)	11069.07 (6.73)	15191.96 (10.97)	17778.73 (10.03)
	2013-14(BE)	155986.95	107285.35 (69.55)	11993.66 (7.65)	18086.00 (10.50)	18621.94 (12.29)

Note: Figures in parentheses indicate per cent of total

Own tax revenues constituted as much as 73% during the 11th FC period. The 12th FC period started with own tax revenues comprising as much as 74% but ended with it at 64%. During this period its share declined to reach a minimum of 59% in 2008-09. The 13th FC period saw a steadily increasing share from 68% to 72%.

Non-tax revenues constituted merely 14.5% at the start of the 11th FC period but saw a decline in its share to reach 10% at the end of the tenure of the 11th FC. The 12th FC period started with its share at 10%. This increased to 12% in the next two years but a sudden increase to 21% was recorded in 2008-09. This, however, seems to be an aberration as the very next year it again stood at 12% and since then a declining trend is noticed right through the 13th FC period.

Share in central taxes showed an increase from 7% to 9.8% in the 11th FC period. Its highest share was recorded in 2006-07 when it crossed 10%. Since then it slipped to just under

10%. It is only since 2011-12 (the second year of the 13th FC) that once again the 10% mark has been crossed.

Grant-in-Aid too showed an increase in its share from 4.8% to 6.6% in the 11th FC period. In the 12th FC period it reached a maximum of 14%. The 13th FC period shows a declining share.

The above analysis seems to suggest that the share of the state in central taxes in total revenue receipts shows an increasing trend in 13th FC period while the share of grants-in-aid in total revenue receipts show a declining trend. This, we believe is a trend in the right direction as a reduction in the dependence on grants and an increase in the share in central taxes would add to the revenues of the States and enhance the revenue base and autonomy of States, as grants are inherently fixed and mostly tied.

The summary stats of revenue receipts and it components over the full sample and the three FC periods is tabulated in Table 1.7 below.

Table 1.7
Revenue Receipts: Summary

(Rs. Crore)

	2002-03 - 2012-13		**11th FC**		**12th FC**		**13th FC**	
	Mean	**C.V**	**mean**	**C.V**	**Mean**	**C.V**	**Mean**	**C.V**
Total Revenue Receipts	76060.12	0.49	35495.63	0.14	71679.55	0.22	123925.50	0.16
State's own Tax Revenue	52196.52	0.50	26200.11	0.15	46460.64	0.22	87752.73	0.15
Non Tax Revenue	8017.35	0.47	4061.75	0.12	9708.76	0.44	9153.94	0.18
Share in Central Taxes	7637.85	0.55	3077.17	0.23	6973.90	0.20	13305.13	0.14
Grants-in-Aid from Central Government	8208.40	0.63	2156.60	0.28	8536.26	0.36	13713.76	0.26

The share of each of these components of revenue receipts in GSDP is tabulated in Table 1.8 below.

Table 1.8
Revenue Receipts: As % of GSDP

	2003-03 -2012-13 (RE)	11th FC	12th FC	13th FC
Total Revenue Receipts	10.267	9.637	10.630	10.292
State's own Tax Revenue	7.064	7.108	6.900	7.294
Non Tax Revenue	1.173	1.121	1.451	0.761
Share in Central Taxes	1.000	0.830	1.038	1.106
Grants-in-Aid from Central Government	1.030	0.579	1.241	1.130

Own tax revenues have been more or less constant around 7% of GSDP while non-tax revenues show a fall from 1.12% in the 11th FC period to 0.76% in the 13th FC period. Share in central taxes as per cent of GSDP show a steady increase over the Finance Commissions while the share of grants-in-aid in GSDP show some reduction in the 13th FC vis-a-vis the 12th FC although it is double that of the 11th FC. *The message here seems to corroborate the finding in Table 1.1 i.e. the share in central taxes show an upward trend over the three FC periods but the share of grants-in-aid seems to have been pulled back slightly in the 13th FC period. It is also important to note that the share of non-tax revenues has declined during the 13th FC.*
Table 1.9 lists the growth rate of revenue receipts and its components.

Table 1.9
Revenue Receipts: Growth Rate

	2003-03 - 2012-13 (RE)	11th FC	12th FC	13th FC
Total Revenue Receipts	0.155***	0.138	0.144*	0.156*
State's own Tax Revenue	0.150***	0.147	0.139***	0.147*
Non Tax Revenue	0.0985*	-0.0462	0.0947	0.148
Share in Central Taxes	0.180***	0.231	0.129*	0.143*
Grants-in-Aid from Central Government	0.234***	0.291	0.236	0.231

The highest growth rate during the period was registered for Grants-in-aid (23%) which was followed by share in central taxes (18%). Own tax revenues lagged behind at under 15% (Table 1.4). When we consider the sub-periods of the different Finance Commissions, we find the non-tax revenues showed a negative growth during the 11th FC period (-4.06%) but has since then shown an improvement and recorded a growth rate of over 14% in the 13th FC period. Part of this high growth rate in non-tax revenues can be attributed to the low base. *Thus for the full sample period and for each of the sub-samples growth rates are highest for grants-*

in-aid followed by share in central taxes. This would suggest that the dependence of the state on centre is high and growing. The growth rate in own tax revenues has remained more or less constant.

Table 1.10
Revenue Receipts: Elasticity

	2003-03 - 2012-13 (RE)	**11th FC**	**12th FC**	**13th FC**
Total Revenue Receipts	1.058***	1.085	1.068**	1.102
State's own Tax Revenue	1.023***	1.153	1.008***	1.039**
Non Tax Revenue	0.687*	-0.368	0.844	1.035
Share in Central Taxes	1.229***	1.821	0.956**	1.012**
Grants-in-Aid from Central Government	1.594***	2.287	1.737*	1.622

The highest elasticity 1.594 is recorded for Grants-in-Aid followed by share in central taxes at 1.229. Own tax revenues record a relatively lower elasticity of 1.023 for the entire period. The lowest was recorded for the 12th FC but picked up for the 13th FC. Non-tax revenues show a much lower elasticity of only 0.687 for the entire period. The sub-period wise analysis however shows that there has been an improvement from -0.368 in the 11th FC period to 0.844 in the 12th FC period and 1.034 in the 13th FC period. *As in the case of growth rates we find the income elasticity to be the highest for Grants-in-aid followed by share in central taxes.*

Own Tax Revenues

Having taken a broad overview of the progress made in the major components of receipts, we now proceed to some specific categories. To begin with we look at the own tax revenue and specific taxes in table 1.11 below.

TABLE 1.11
State's Own Tax Revenue

(Rs. Crore)

	2002-03 - 2012-13 (RE)		11th FC		12th FC		13th FC	
	Mean	**C.V**	**mean**	**C.V**	**Mean**	**C.V**	**Mean**	**C.V**
State's own Tax Revenue	52196.52	0.50	26200.11	0.15	46460.64 (77.33)	0.22	87752.73 (88.88)	0.15
1. Sales Tax	30366.87	0.49	15877.01	0.17	26783.36 (68.69)	0.19	50829.24 (89.78)	0.17
2. Stamps and Registration Fees	8545.45	0.55	3431.22	0.19	7858.49 (129.03)	0.27	14804.61 (89.39)	0.10
3. State Excise Duty	4561.57	0.56	2160.66	0.09	3915.60 (81.22)	0.23	8039.11 (105.31)	0.23
4. Taxes and Duties on Electricity	2725.74	0.59	1150.89	0.45	2322.02 (101.76)	0.31	4973.45 (114.19)	0.07
5. Other Taxes on Income and Expenditure	1416.31	0.23	1042.56	0.03	1413.11 (35.54)	0.14	1795.38 (27.05)	0.05
6. Taxes on Vehicles	2336.41	0.53	1108.12	0.13	2039.16 (84.02)	0.25	4060.11 (99.11)	0.12
7. Other Taxes and Duties on Commodities and Services	1069.79	0.32	758.89	0.06	994.58 (31.06)	0.23	1506.02 (51.42)	0.11
8. Taxes on Goods and Passengers	545.04	0.52	301.56	0.36	597.19 (98.03)	0.54	701.62 (17.49)	0.28
9. Land Revenue	629.35	0.45	369.21	0.04	537.12 (45.48)	0.20	1043.20 (94.22)	0.07

The average States' own tax revenues show a larger increase in the 13th FC over the 12th FC. Major components like Sales tax, State excise duty, Electricity duty, taxes on vehicles, land revenue all record a larger increase in the 13th FC period over the 12th FC period as compared to the increase in 12th FC over the 11th FC (Table 1.7). *This is most certainly progress in the right direction.*

States' own tax revenues constitute 7% of GSDP for the entire period (Table 1.12). This slipped marginally in the 12th FC period but again picked up to cross 7% in the 13th FC period. The largest component is the Sales tax which constitutes over 4% of GSDP. Its share dipped marginally to just under 4% in the 12th FC period but again crossed the 4% mark in the 13th FC period. Stamps and registration fees is the only other constituent over the 1% mark.

TABLE 1.12
State's Own Tax Revenue: Mean (as a % of GSDP)

	2003-03 - 2012-13 (RE)	11th FC	12th FC	13th FC
State's own Tax Revenue	7.064	7.108	6.900	7.294
1. Sales Tax	4.138	4.300	3.993	4.217
2. Stamps and Registration Fees	1.116	0.928	1.157	1.236
3. State Excise Duty	0.606	0.590	0.580	0.663
4. Taxes and Duties on Electricity	0.353	0.311	0.341	0.417
5. Other Taxes on Income and Expenditure	0.216	0.286	0.213	0.151
6. Taxes on Vehicles	0.311	0.302	0.301	0.338
7. Other Taxes and Duties on Commodities & Services	0.159	0.209	0.148	0.127
8. Taxes on Goods and Passengers	0.077	0.081	0.086	0.058
9. Land Revenue	0.088	0.102	0.080	0.088
10. Taxes on Agricultural Income	0.000	0.000	0.000	0.000

It is true that there has been no major slip up in the share of own tax revenues in GSDP, however the fact that there has been no major improvement either suggests that either no significant effort has been made on the part of the state government to boost its performance or that there is no further scope given the existing provisions.

Table 1.13 below tabulates growth rates of own tax revenue and specific taxes over the full sample period and the three FC periods.

Table 1.13
State's Own Tax Revenue: Growth Rate

	2003-03 -2012-13	11th FC	12th FC	13th FC
State's own Tax Revenue	0.150***	0.147	0.139***	0.147*
1. Sales Tax	0.144***	0.166	0.125**	0.168*
2. Stamps and Registration Fees	0.181***	0.189*	0.169**	0.0995
3. State Excise Duty	0.160***	0.0675	0.146***	0.236
4. Taxes and Duties on Electricity	0.189***	0.188	0.178*	0.0624
5. Other Taxes on Income and Expenditure	0.0686***	0.0210	0.0888**	0.0517
6. Taxes on Vehicles	0.161***	0.112	0.162*	0.122
7. Other Taxes and Duties on Commodities and Services	0.0860***	-0.0476	0.139*	-0.0104
8. Taxes on Goods and Passengers	0.127**	0.279	0.270	0.220
9. Land Revenue	0.123***	-0.0344	0.114*	-0.0112
10. Taxes on Agricultural Income	-0.136		-2.391	2.015

Growth rate recorded for own tax revenues was 15% for the full sample period. Sales tax and electricity duties both showed a growth rate of over 18%. State excise duties and taxes

on vehicles followed with 16%. The growth rate of sales tax and state excise duties was the highest in the 13th FC period, but growth rate for electricity duties fell to a mere 06% from 18.8% in the 11th FC period. Taxes on vehicles and taxes on goods and passengers also showed a slip in the 13th FC period. *Thus while own tax revenues have shown a fairly stable growth rate in the three FC periods, specific taxes have shown variation.*

Finally we take a look at trends in own tax revenues from the point of view of income buoyancy in Table 1.14. Buoyancy is computed as the coefficient of a double log regression model which regresses log of tax on log of GSDP. Buoyancy is taken to be a measure of productivity of the tax system (Kwadwo Kusi, 1998; Ariyo, 1997).

Table 1.14
State's Own Tax Revenue: Buoyancy

	2003-03 -2012-13	11th FC	12th FC	13th FC
State's own Tax Revenue	1.023***	1.153	1.008***	1.039**
1. Sales Tax	0.986***	1.307	0.909***	1.188***
2. Stamps and Registration Fees	1.236***	1.481*	1.231**	0.700
3. State Excise Duty	1.095***	0.533	1.050***	1.682
4. Taxes and Duties on Electricity	1.287***	1.455	1.284*	0.437
5. Other Taxes on Income and Expenditure	0.469***	0.164	0.647**	0.369
6. Taxes on Vehicles	1.100***	0.882	1.195**	0.868
7. Other Taxes and Duties on Commodities and Services	0.589***	-0.376	1.010**	-0.0539
8. Taxes on Goods and Passengers	0.843**	2.179	1.732	1.527
9. Land Revenue	0.839***	-0.271	0.802*	-0.0914
10. Taxes on Agricultural Income	-0.742		-21.46	13.66

Buoyancy of aggregate own tax revenue is 1.023 with the maximum of 1.153 being recorded for the 11th FC period. The highest elasticity for the full sample period is recorded for electricity duty (1.287). The maximum, however, was recorded in the 11th FC period (1.455) and a sharp dip was noticed in the 13th FC period (0.437). A buoyancy or productivity of less than unity in the 13th FC period is recorded for Stamps and Registration fees, taxes and duties on electricity, other taxes on income and expenditure, other taxes and duties and commodities, land revenue. Thus, additional revenue mobilisation requires us to focus on these specific taxes which have recorded low and falling tax buoyancy.

Under-recovery of electricity duty from licensees as reported in the audit reports led to reduced revenues as per the audit report of 2012 (http://saiindia.gov.in/english/home/Our_Products/Audit_Report/Government_Wise/state_audit

/recent_reports/Maharashtra/2012/Report_1/Chap_6.pdf). A standard recommendation for improvement in revenues is an improvement on the administration front which would include simplification of procedures. However, we find that from August 2013 the procedure for obtaining exemption of electricity duty has been simplified (see http://www.mahadiscom.in/consumer/Comm_Cir_204.pdf). While simplification of procedure is undoubtedly a best practice, the practice of granting exemptions *per se* must be re-considered as it is a sure shot way of introducing distortions and opens up scope for malpractices in addition to reducing revenues. Thus streamlining the exemptions is one possible way to improve the productivity of electricity duty.

As regards Stamps and Registration fees, the audit report of 2012 points out instances of short levy, non-levy and under-recovery and recommends improvement in the software; minimising variation in the annual system of rates and (http://saiindia.gov.in/english/home/Our_Products/Audit_Report/Government_Wise/state_audit/recent_reports/Maharashtra/2012/Report_1/Chap_3.pdf).

On land revenue, the audit report of 2012 points out that there have been several instances of short levy, under recovery, loss in revenue due to non-adherence of government norm of registering agreement (http://saiindia.gov.in/english/home/Our_Products/Audit_Report/Government_Wise/state_audit/recent_reports/Maharashtra/2012/Report_1/Chap_4.pdf).

Thus, from the above it is fairly evident that productivity of the tax system would in general improve if technology is made use of to make sure that under-recoveries and irregularities are minimised; government norms are adhered to and exemptions are streamlined.

Tax Capacity and Tax Effort

Tax effort is defined as ratio of actual tax collection to its taxable capacity. Generally, it is computed with reference to GSDP of the state. This measure involves the implicit assumption that the total income of a state is an appropriate indicator of taxable capacity. This assumption ignores other factors which have a bearing on capacity i.e. size of population, administrative capability, degree of monetisation, availability of tax handles etc. (Purohit, 2006).

In general there are two major approaches to computing tax effort (a) Regression Approach where potential tax bases in general such as share of agriculture, degree of urbanisation etc. are considered as independent variables and (b) Representative tax system

where an attempt is made to select potential tax bases for individual taxes. This study follows Purohit (2006) in combining both these approaches. Regressions of the following kind are estimated for specific taxes viz, land revenue and agricultural income tax

$Ln (LRAIT_{it}) = ln (A_{it})$ ...(1)

$Ln (SDRF_{it}) = ln (Y_{it})$ ...(2)

$Ln (ST_{it}) = ln (Y_{it})$ ...(3)

$Ln (VT_{it}) = ln (MV)$ ...(4)

$Ln (ET_{it}) = ln (EC)$ ...(5)

$Ln (SED_{it}) = ln (LC)$ ...(6)

Where,

LRAIT = land revenue and agricultural income tax

SDRF = stamp duty and registration fees

ST = sales tax

VT = vehicle tax

ET = Electricity tax

SED = State excise duty

A = GSDP from Agriculture

Y = GSDP (current prices)

EC = Electricity Consumption

MV = number of motor vehicles in operation in Maharashtra

LC = Liquor Consumption (i.e sale of country liquor, IMFL, Beer)

Predicted values of the six specific taxes, which proxy taxable capacity, were obtained from regressions (1) to (6). These were juxtaposed against the actual revenue collected and the per cent of actual to the predicted (i.e. potential) gives us a measure of tax effort for each of the individual taxes. These actual and predicted values were then added together for each of the individual taxes to give a sum of actual and a sum of predicted. A ratio of the two gives us the overall tax effort.

We report below the tax effort obtained for each of the individual taxes and the overall tax effort.

Table 1.15

Tax Effort

YEAR	Land Revenue and Agricultural Income	Stamps and Registration Fees	Sales Tax	Vehicle Tax	Electricity Tax	State Excise Duty	TOTAL
2002-03	115.53	95.44	99.18	104.53	120.79	99.64	100.18
2003-04	95.90	96.20	99.60	113.89	58.73	114.45	99.10
2004-05	96.60	100.53	108.36	93.63	131.62	99.59	106.67
2005-06	102.02	105.05	97.33	83.16	110.49	88.68	97.66
2006-07	94.56	101.31	100.13	103.63	92.78	95.99	99.71
2007-08	82.58	110.28	95.35	102.77	115.53	95.62	99.16
2008-09	94.59	94.54	99.70	92.24	91.49	95.26	97.53
2009-10	109.73	104.54	94.03	96.54	101.29	93.59	96.60
2010-11	120.33	102.85	101.84	107.95	111.78	89.09	101.94
2011-12	93.91	90.81	105.28	105.37	87.30	136.19	103.48

From the table above it would seem that *tax effort is close to 100%. But as the literature in this context says: tax effort close to 100% only shows that the country/state cannot do any more with existing tax bases. If even with 100% tax effort, Maharashtra faces fiscal problems then it means that there is a mis-match between its revenue assignment and expenditure responsibilities or it can this be an argument for more central funding.*

The broad story that seems to emerge from this section which looks at receipts and tax efforts is the following:

Significance of capital receipts in the total receipts has witnessed a declining trend. The share of the 'state in central taxes' in total revenue receipts shows an increasing trend in 13th FC period while the share of grants-in-aid in total revenue receipts show a declining trend.

For the full sample period and for each of the sub-samples growth rates are highest for grants-in-aid followed by share in central taxes. This would suggest that the dependence of the state on centre is high and growing. The growth rate in own tax revenues has remained more or less constant.

No major slip up in the share of own tax revenues in GSDP, however no major improvement either.

Additional revenue mobilisation requires us to focus on these specific taxes which have recorded low and falling tax buoyancy (or productivity).

Generally speaking productivity of the tax system would in general improve if technology is made use of to make sure that under-recoveries and irregularities are minimised; government norms are adhered to and exemptions are streamlined

Tax effort is close to 100% for most of the important taxes. This suggests that the country/state cannot do any more with existing tax bases.

TOR2: Analysis of the state's own non-tax revenues and suggestions to enhance revenues from user charges and profits from departmental enterprises and dividends from non-departmental commercial enterprises.

Non-tax revenues include payments made to the government that are (i) compulsory and requited or (ii) voluntary and requited or (iii) voluntary and unrequited (Dasgupta, 2004). The major categories of non-tax revenue fall into group (iii) i.e. they are voluntary and unrequited. These payments can be further sub-divided into (a) revenue from assets – this common property resources of which the government acts as a custodian and charges *fees*, renewable natural resources from where the government receives *royalties* and assets created from earlier investments like PSUs, irrigation, roads, loans from where the government receives *dividends* and *interest* (b) revenue from sale of goods and services provided directly by the government which yield revenue in the form of *user charges* and (c) revenue from sale of licenses and permits for regulated activities such as permits for vehicles etc.

An accurate estimate of non-tax revenue is difficult in the existing budgetary classification as revenues from lotteries are not accurately provided in case of state budgets. Also, some of the receipts are notional (Dasgupta, 2005). However, keeping these caveats in mind we took a look at the performance of Maharashtra on the non-tax revenue front. Non-tax revenues net of lottery expenditure is a more meaningful measure, as expenditure on lotteries are incurred purely for revenue raising purposes. In Table 2.1 we give key indicators for gross non-tax revenues. In Table 2.2 we net out lottery expenditure and interest receipts.

Table 2.1
Gross Non Tax Revenue

(Rs. Crore)

		Summary Stats	As % of GSDP	Growth Rate	Elasticity
2002-03 - 2012-13	Mean	8017.35	1.173	0.0985	0.687
	C.V	0.47			
11th FC	mean	4061.75	1.121	-0.0462	-0.368
	C.V	0.12			
12th FC	Mean	9708.76	1.451	0.0947	0.844
	C.V	0.44			
13th FC	mean	9153.94	0.761	0.148	1.035
	C.V	0.18			

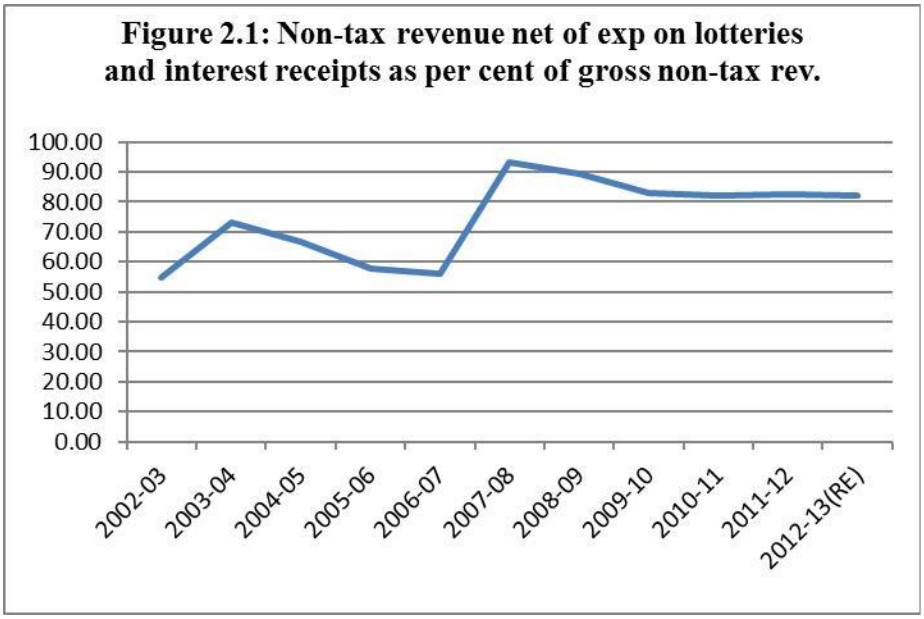
Table 2.1 shows that the mean Gross Non-Tax revenue was at a low of Rs. 4061 crores in the 11th FC period but it more than doubled in the 12th FC period. In the 13th FC period the average fell by Rs. 500 crores. The growth rate and elasticity were both negative in the 11th FC

period. Since then they turned positive in the subsequent time periods. The growth rate of non-tax revenues registered in the 13th FC period has, however, taken a hit as compared to the 12th FC period.

Table 2.2 which nets out lotteries and interest receipts from own non-tax revenues shows a progressive increase in the Non-Tax revenues net of lottery expenditure and interest receipts. This is indeed a positive find and to the credit of the state.

Table 2.2
Own Non-Tax Revenue Net of Lotteries and Interest Receipts
As Per Cent of Gross Non-Tax Revenue

FC period	Average	Time	Non-Tax Revenue (NET)
11th FC	64.86	2002-03	54.66
		2003-04	73.19
		2004-05	66.72
12th FC	75. 74	2005-06	57.80
		2006-07	55.84
		2007-08	93.00
		2008-09	89.21
		2009-10	82.87
13th FC	82.15	2010-11	81.95
		2011-12	82.55
		2012-13(RE)	81.95



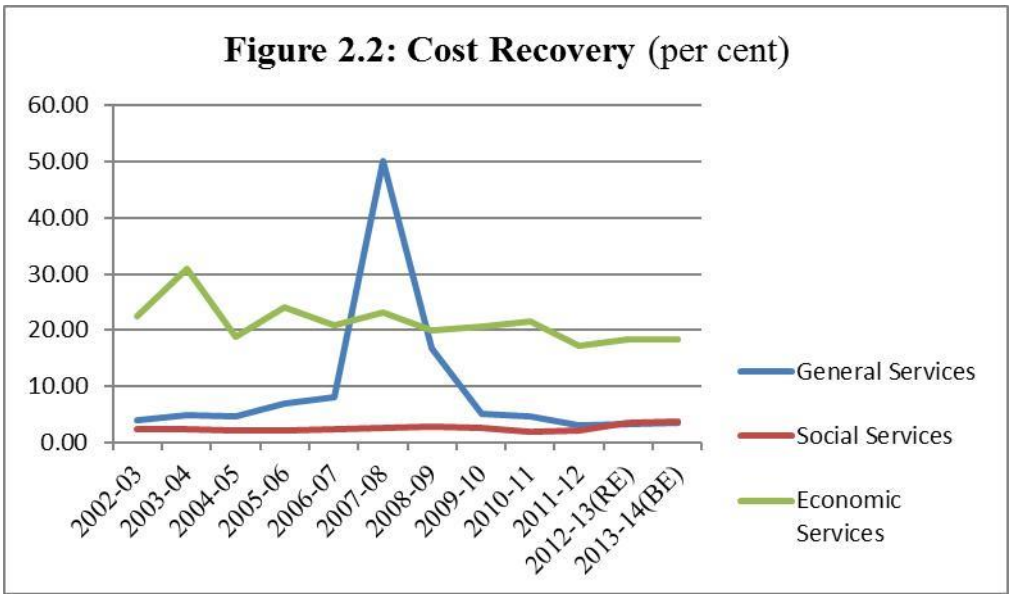
Thus the broad message that seems to emerge from the above analysis of non-tax revenue collection as a whole is that there has been a steady improvement in this direction of aggregate non-tax revenue collections. We now turn to some specifics and evaluate the performance of the state.

To begin with we look at the broad categories of General Services, Economic Services and Social Services. More specifically we evaluate the cost recovery from provision of certain services which is computed as receipts as proportion of expenditure. *On the criteria of cost recovery, however, we find a deterioration in the State's performance over the three FC periods as is evident from Table 2.3 and Figure 2.2.*

Table 2.3
Cost Recovery

(per cent)

	11th FC	12th FC	13th FC
General Services	4.45	17.39	3.61
Social Services	2.30	2.49	2.49
Economic Services	24.04	21.73	19.05



User Charges

Local governments provide services which are in the nature of private goods (like water) to its customers -- local residents. Financing such services through user fees or charges not only provides resources for efficiently supplying such services but also provides invaluable information on which services should be provided, in what quantity and quality, and to whom.

User charges have numerous extremely desirable political, economic and administrative implications:

(1) There being a direct quid pro quo for the service offered, on the one hand, there is a willingness to pay; on the other hand, the non-beneficiaries are not required to pay unnecessarily, thereby enhancing the political acceptability of this means of local finance

(2) Since failures to pay can be followed by termination of service, collections are facilitated and cash flows can be better managed

(3) Since services are rationed out economically, wastages are eliminated

(4) Administrations have to be more responsive to the consumer problems, and more responsible for monitoring the cost effectiveness of the organizations involved, and of the efficiency of the service delivery

(5) Institutional financing from non-budgetary sources becomes easier, and

(6) These charges do not run the risk of pre-emption by higher levels of government.

Levy of user charges would require the exact consumption to be measured. Metering of water would be an essential requisite. Proper metering would help enhance revenues of municipal governments. In case of electricity, theft and Transmission and Distribution losses lead to considerable losses. Reduction in these losses would help improve the revenues of the state government.

As regards user charges in the state of Maharashtra we were informed by the government officials that it is not clear from the budgets as to which sub-component of non-tax revenues could be categorised as user charges. However, since recovery is important with respect to economic services more than social services, we chose to evaluate Maharashtra's performance with respect to **two specific user charges** which are in existence viz.,

(1) Water charges
(2) Toll Charges

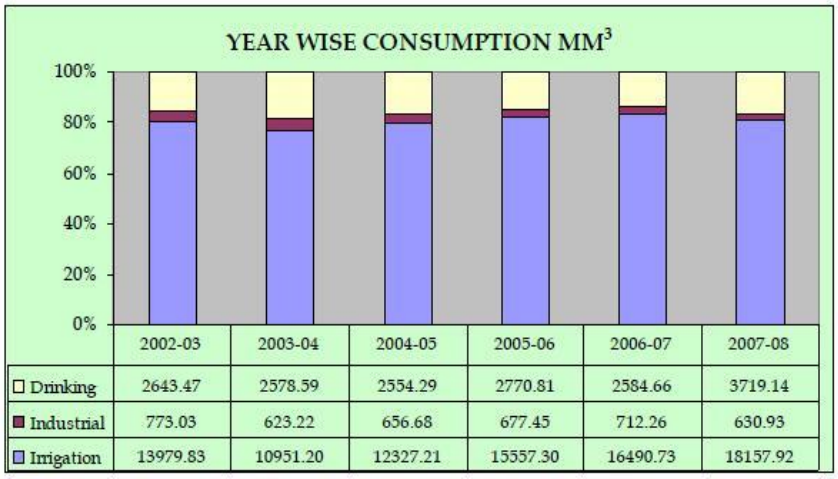
Water Charges

Supply of water for irrigation and non-irrigation purposes is mainly from the reservoirs, tanks, flowing canals of the irrigation projects or from any part of the rivers including its tributaries, streams, lakes, natural collection of water, lift irrigation works or from wells under the command of irrigation projects as notified by Government. The water rates for irrigation purpose are levied on the basis of seasonal cropping pattern per hectare except water supplied

to users association which is on volumetric basis. For non-irrigation purposes, the rates are based on the quantity of water supplied to the user and the location of the source for lifting the water. The water for non-irrigation purposes is supplied mainly to industries and for drinking to water supply schemes. Water charges are levied and recovered at prescribed rates from time to time.
http://saiindia.gov.in/english/home/Our_Products/Audit_report/Government_Wise/state_audit/recent_reports/Maharashtra/rep_2003/rev_chap6.pdf

The water consumption by different users clearly shows irrigation to be the largest consumer about 80%. Domestic consumers take away about 15% and the rest is consumed by the industrial sector (Source: http://www.mwrra.org/AP%20VOL%201%20ENG.pdf)

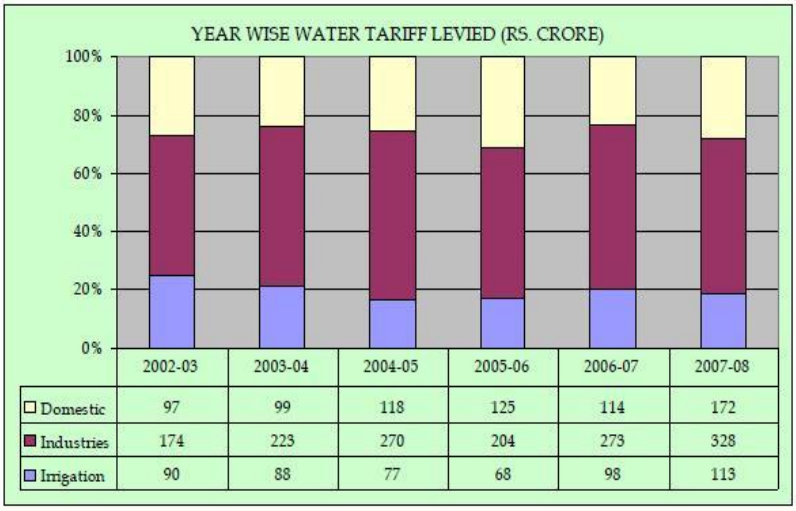
Figure 2.3



	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Drinking	2643.47	2578.59	2554.29	2770.81	2584.66	3719.14
Industrial	773.03	623.22	656.68	677.45	712.26	630.93
Irrigation	13979.83	10951.20	12327.21	15557.30	16490.73	18157.92

In stark contrast to the above when we consider the tariff levied on different sectors (Figure 2.4) we notice that industrial water consumption constitutes less than 5% of the total water consumption but has a share in tariff levied which is approximately 54%. Irrigation sector, which consumes more than 80% of the water including transit losses, constitutes a share of only 20% in tariff levied. Drinking water sector consumes nearly 16% of the total water consumption and it constitutes nearly 26% of the total tariff levied. Thus the cross-subsidisation of the agriculture sector is very clear. Clearly problems of ***cross-subsidisation*** seem to be endemic.

Figure 2.4



To add to the problem of cross-subsidisation presented above there is the added problem of ***arrears*** in recovery of water charges**.**

Table 2.4

Recovery Performance vis-à-vis Arrears of Water Charges

	Recovery Due in Current Year			**Total Recovery Due**			**Actual Recovery**			*Arears*	**% short -fall**
	Irrig	***Non-irrig***	***Total***	***Irrig***	***Non-irrig***	***Total***	***Irrig***	***Non-irrig***	***Total***		
2007-08	110.35	563.89	674.24	544.17	831.74	1375.91	70.47	556.54	627.01	748.9	54.43
2008-09	112.95	695.37	808.32	602.15	1075.62	1677.77	71.05	602.11	673.16	1004.6	59.88
2009-10	95	715.11	810.11	631.71	1199.07	1830.78	69.94	732.69	802.63	1028.1	66.16
2010-11	96.24	670.46	766.70	658.31	1135.49	1793.8	79.03	666.87	745.90	1047.9	58.42
2011-12	102.67	508.90	611.57	680.93	970.72	1651.65	78.94	553.71	632.65	1019.0	61.70
2012-13	82.98	670.12	753.10	681.89	1099.57	1781.46	63.10	443.05	506.15	1275.3	71.59

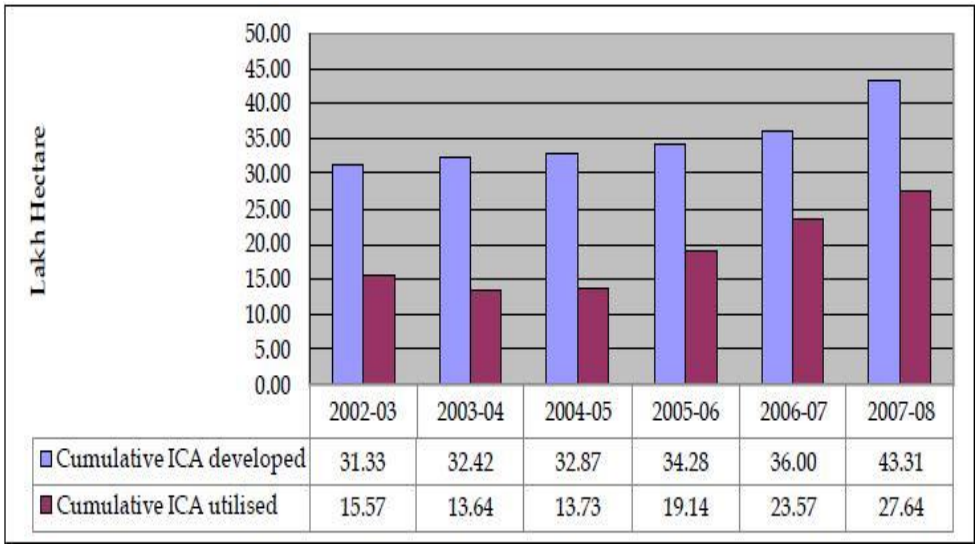
Source: CAG Report on Management of Irrigation Projects, 2014

The arrears of water charges increased from Rs. 748.9 crores in 2007-08 to Rs. 1275 crores in 2012-13 i.e. an increase of 70.29%. The arrears as per cent of total recovery due have risen from 54% in 2007-08 to 71.59% in 2012-13.

Further, there is a high amount of capital cost involved in developing the command area and its full utilisation is equally essential. High percentage of ***unutilised command area*** results in locking up of investments without any returns, and also increases the tariff burden on

existing users in the command area as ultimately somebody has to pay for the maintenance works of the canal and associated infrastructure that is developed but not utilised. From the following Figure 2.5 the cumulative irrigated command area developed has steadily increased from 31 lakh hectares in 2002-03 to 43.31 lakh hectares in 2007-08, while irrigated command area utilised has been around 50% of developed command area.

Figure 2.5
Irrigated Command Area Developed Vs. Utilisation (in Lakh ha)



As per section 11(d) of the The Maharashtra Water Resources Regulatory Authority (MWRRA) Act 2005, the water charges shall reflect the full recovery of cost of irrigation management, administration, administration, operation and maintenance. Optimal percentage of command area utilisation is necessary in sharing the Operation and Maintenance (O&M) expenses of the infrastructure developed.

Table 2.5
Water Charges/Fees

(Rs. Crore)

	Recovery of Water charges (irrigation and non-irrigation - current & arrears)	Recovery of Water charges (irrigation and non-irrigation - current only)	O & M expenses	% of O&M charge met from Recovery of water charges (current and arrears)	% of O&M charge met from Recovery of water charges (current)
2002-03	377	218	370	102	59
2003-04	378	281	333	114	84
2004-05	448	350	376	119	93
2005-06	413	329	453	91	73
2006-07	494	403	416	119	97
2007-08	627	548	466	135	118
2008-09	673	603	555	121	109
2009-10	803	638	709	113	90
2010-11	746	572	745	100	77

Source: Irrigation Handbook

The above table clearly shows a steady improvement in meeting the O&M expenses from water charges. In 2007-08 and 2008-09, in fact, it even crossed the 100% mark. In 2010-11 once again it slackened and only 70% of the O&M expenses were met from water charges.

Fixing of water charges is the responsibility of MWRRA. The MWRRA was set up in August 2005 under the MWRRA Act. Its main function is to regulate the water resources of the State. It is required to ensure that the management of these resources and the allocation and utilisation of water from them is done in a, judicious, equitable and sustainable manner and to fix the rates for use of water for agriculture, industrial, drinking and other purposes keeping these parameters in mind. Thus fixing bulk water tariffs for the three main user categories is one of the important functions of the Authority. The Authority is required to carry out the following functions:

(a) To fix the criteria for water charges at sub-basin, river basin and state level after ascertaining the views of the beneficiary public based on the principle that water charges shall reflect the full recovery of the cost of the irrigation management, administration, operation & maintenance of water resources projects (section 11(d)),

(b) To address the issue of cross subsidy between categories of use, if any, and government subsidy (Section 11 (r)) and

(c) To review and revise the water charges after every 3 years (Section 11 (u)).

It has now been recognized all over the world that involvement of user community especially that in agriculture sector is crucial for sociable, economic and judicious use of water. Many states are now giving high emphasis on creation of agencies to promote community participation in water management. Maharashtra has enacted Maharashtra Management of Irrigation Systems by Farmers Act 2005 (MMISF Act 2005) to create Water User Associations (WUA) of agricultural consumers. As on March 2008, 1155 WUAs had taken over operation and maintenance of the minors (minors range in capacity from 0.04 to 0.5 m3/sec. Operation and maintenance of minors is a subject of considerable concern in irrigation system design) in the area of their operation. The water bill to WUA is issued on the basis of actual quantity of water supplied, instead of old practice of charging on crop area basis.

Given that the ultimate aim of irrigation is to help improve the productivity of agriculture, ***an impact study of irrigation on agriculture is important***. The agriculture department of the government of Maharashtra in a report on water sector improvement project (http://www.mahaagri.gov.in/level3PdfDisp.aspx?Id=5&subid=4&sub2id=2&FileName=mwsip.pdf) points out that whenever a given district/area experiences scarcity of rainfall, with a

consequent low volume in irrigation reservoirs, there is a distinct change in cropping patterns of command areas. In the rabi season farmers tend to switch from high water requirement crops (wheat) to crops with lower water requirement (rabi sorghum). The report goes on to point out that in general, the irrigation efficiency in most command areas is very low. This may be attributed to large conveyance losses due to poor maintenance and management of the canal system, inadequate distribution and misuse of irrigation water by farmers at the head of canals, and low rate of adoption of improved soil and crop management practices. This has led to degradation of irrigation schemes as well as land resources.

It has been noticed that in some irrigation schemes where water shortage is less acute, large areas of land have been degraded due to water logging and salinization, arising from inadequate drainage and poor management of irrigation. Cropping systems have shifted in such schemes as a result of problems caused by poor water management. In water scarce schemes, there is distinct change in the cropping patterns from head to tail reaches. At the head, farmers take a major share of water by allocating maximum area to high water requiring crops (rice, wheat) as compared to tail reach farmers, who can only plant crops that are relatively less water requiring, but also less profitable (sorghum, gram).

In order to improve the efficiency of the existing irrigation schemes, the GoM report makes the following suggestions:

(1) Lining of canals in vulnerable reaches may help reduce conveyance losses.
(2) Efficient irrigation schedules in terms of volumes and time of application, optimization of designs for irrigation methods, and better crop planning.

Some of the steps which could be considered by the government to enhance government revenues from water charges:
(http://saiindia.gov.in/english/home/Our_Products/Audit_report/Government_Wise/state_audit/recent_reports/Maharashtra/rep_2003/rev_chap6.pdf and improve collection):

(1) Take steps to tap the potential of water so as to enhance receipts of the Department.

(2) Ensure that arrears in collection of water charges are liquidated at the earliest, correct tariffs are applied for determination of water charges and conditions of grant of concessions in water charges to industrial users are duly complied with. (Report of CAG on Management of irrigation projects 2014).

Toll Receipts

Toll charges or toll taxes are user charges upholding the concept of the "user-pays". Tolls are paid only when a particular facility is used and the tolls paid cover operating and maintenance costs as well as debt retirement of the facility. It is a form of pay-as-you use (http://planningcommission.nic.in/reports/sereport/ser/ser_ruti.pdf , Purohit, 2010).

Traditionally questions were raised on the imposition of a toll. However, for commercial traffic and cars plying between two cities, improved services for a small fee can hardly be questioned if such a fee is earmarked for servicing the investment on augmentation and upkeep of the respective highway. It is only through the levy of toll (user) charges that the Government will be able to develop the national highways on a sustainable basis, and attract the requisite private investment for this purpose.

The passengers and goods tax is levied on passengers and goods carried by road or by inland waterways. Both the motor vehicles tax and passengers and goods tax are similar in nature. In fact, these are treated as user charges or charge for construction and maintenance of roads.

Public Works Department (PWD) of the Government of Maharashtra is responsible for construction of Government buildings, roads and bridges and their maintenance in the entire http://saiindia.gov.in/english/home/Our_Products/Audit_report/Government_Wise/state_audit/recent_reports/Maharashtra/2005/Revenue/rev_chap_6.pdf

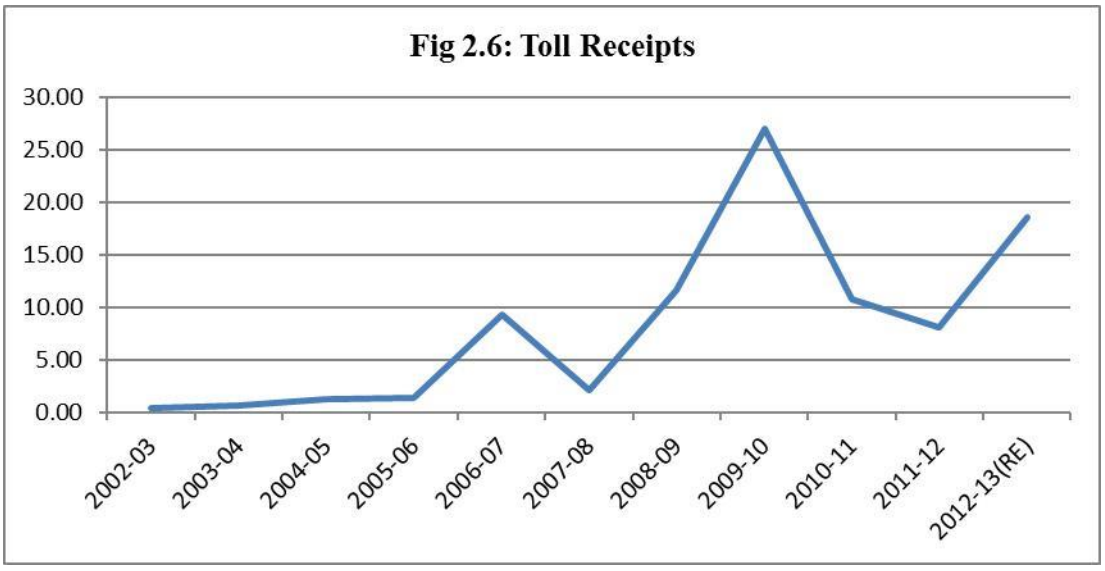
The toll receipts since 2002-03 are tabulated in Table 2.8 below and graphically depicted in figure 2.6. While the general trend is in the upward direction, there have been sudden sharp increases such as in 2006-07 and sudden dip (such as 2007-08). This pattern seems to suggest that loss of revenue on account of certain lapses, as has been pointed out in the audit reports (discussed above), could be possible explanations.

Table 2.6
Toll Receipts

(Rs. Crore)

YEAR	Toll Receipts
2002-03	0.38
2003-04	0.64
2004-05	1.26
2005-06	1.40
2006-07	9.33
2007-08	2.07
2008-09	11.57
2009-10	26.95
2010-11	10.72
2011-12	8.09
2012-13(RE)	18.54

Source: Finance Accounts



Problems with Toll Collection

The BMVT Act prescribes the procedure for levy and collection of toll for use of a bridge/tunnel and its approach road/any section of a road/bye pass, declared in the official gazette by Government. The toll can be levied only after the issue of Government notification and is collected either Departmentally or through an agent. The period of levy of toll and rates of toll to be levied on different categories of vehicles was required to be specified in the notification.

As per Section 20 of the BMVT Act, the State Government may recover the full amount of capital outlay on roads and bridges by levy of toll by issue of notification. Further, the rates and period of recovery should be specified in Government notification.

Some of the issues raised in this connection are listed out in the audit report of 2005 (http://saiindia.gov.in/english/home/Our_Products/Audit_report/Government_Wise/state_audit/recent_reports/Maharashtra/2005/Revenue/rev_chap_6.pdf) are:

Illegal collection of toll: recovery should be specified in Government notification. In Parbhani PW division also collected toll tax amounting to Rs 0.28 crore for the period from September 2002 to December 2002 which was not covered by Government notification. The division also collected toll tax on Aurangabad Jalna Road (major State highway-6) amounting to Rs 0.36 crore without notification for the period from April 2003 to August 2003.

In Chandrapur PW division, toll tax amounting to Rs 0.32 crore was collected on the bridge across Bhikeshwar nalla during January 1997 to August 1998 which was not covered by Government notification. Thus, toll of Rs 0.96 crore was illegally collected.

Non realisation of toll on works: Executive engineer of the concerned division is required to send the proposals for levy of toll, six months before the completion of work and obtain Government notification before opening these works to traffic. Further, in case the proposal for levy of toll is not feasible, then prior approval for non-levy of toll should be obtained before opening the road/ bridge to traffic. Non submission of proposals by 11 Executive Engineers and SE, Ratnagiri resulted in loss of Rs 48.81 crore in 12 cases. In two other cases, though proposals for levy of toll tax were furnished by SE during October 2000 and January 2002, approval of Government was not received. Consequently, no toll tax could be collected, which resulted in loss of Rs 4.51 crore.

State Bridges

Discontinuance of toll collection, before recovery of entire cost of bridges: The BMVT Act provides for levy and collection of toll on a bridge/tunnel and its approach road/any section of a road/by pass, declared in the official gazette by Government. As per Government resolution of July 1988, the entire project cost including expenditure on maintenance and toll collection is recoverable through the levy of toll tax and toll tax collected is required to be remitted into Government account by PWD.

Audit scrutiny in respect of 4 bridge works in 4 divisions, revealed that toll of Rs 1.77 crore was collected against the capital outlay of Rs 4.08 crore. Thereafter, toll collection was stopped. Discontinuance of the collection of toll resulted in non-realisation of revenue amounting to Rs 2.31 crore.

Failure/Short realisation of hire charges: As per GR of 8 March 1989, PW divisions should earn as hire charges an amount equal to 80 per cent of the annual expenditure incurred on maintenance and repairs of construction machinery.

Audit scrutiny of 36 PW divisions revealed that hire charges of Rs 33.35 crore was payable to mechanical division of Irrigation Department by PW divisions for the period from April 1999 to March 2005. The charges were not paid/adjusted. However, PWD continued to sanction expenditure on maintenance and repairs to departmental machinery during April 1999 to March 2005 which is contrary to Government instructions. Further, no control register was maintained by Government for monitoring non adjustment of hire charges for want of funds or otherwise. It was also observed in 43 PW divisions that a short realisation of Rs 21.88 crore during April 1999 to March 2005.

Loss of revenue due to incorrect fixation of upset price: According to para 4 of GR of Government of Maharashtra, PWD dated 19 July 1988, the upset price for levy of toll on roads and bridges for the first year will be total collection of toll on the basis of traffic across the bridge/road during the year. For subsequent years, it will be 90 per cent of the previous years total toll collection. Government vide GR dated 6 June 1996, modified the condition and directed that the highest offer accepted during the previous year, should be treated as upset price. In July 1999, the Department devised a new formula for fixation of upset price based on traffic intensity, growth of traffic, rates of toll and expenditure incurred on maintenance and cost of collection. The traffic intensity was based on the data collected by the Department on each national and State highway during May and December of each year.

In three PW divisions10 it was noticed that the EEs had not adopted the method to fix the upset price for floating tender for collection of toll based on traffic census and other factors as directed by Government in July 1999. The upset price fixed on the bids received which were far less as compared to upset price worked out on the basis of traffic census resulted in loss of revenue of Rs 10.94 crore.

Non-recovery of maintenance and toll collection charges from MSRDC: The roads constructed from State Government funds were transferred to Maharashtra State Road Development Corporation (MSRDC) in June 1998. As per Government resolution of October 1998, claim for maintenance and toll collection charges of toll works was to be made by the divisions at the beginning of each year from MSRDC and credited into government account. Tolls were being

collected by PWD and remitted to MSRDC. A quarterly report showing the amount collected on account of toll was required to be submitted by divisions to the PWD.

In seven PW divisions12, it was observed that maintenance and toll collection charges amounting to Rs 2.33 crore for the period from April 1999 to March 2004 were not claimed from MSRDC. There was nothing on record to show that the EEs had ever been advised/directed by the higher authority to recoup the amount. This resulted in non realisation of Rs 2.33 crore.

The problems in toll collection as listed out above seem to suggest that clearly there is potential for the state government to enhance revenues from this source.

In case of toll charges the audit report makes the following two broad observations: (http://saiindia.gov.in/english/home/Our_Products/Audit_report/Government_Wise/state_audit/recent_reports/Maharashtra/2005/Revenue/rev_chap_6.pdf):

(i) The Department needs further strengthening of control mechanism to monitor the assessment, levy and collection of tolls on roads constructed out of budget fund and its remittance to Government account.

(ii) Non implementation of Government instructions about levy of centage charges and doubling the cost of blank tender forms led to short realisation of revenue.

Thus, it would appear that administrative reforms in the sense of better monitoring and assessment of the levy and implementation of instructions of the government about levy of centage charges would lead to enhancement of revenues from toll charges.

Dividends from PSUs

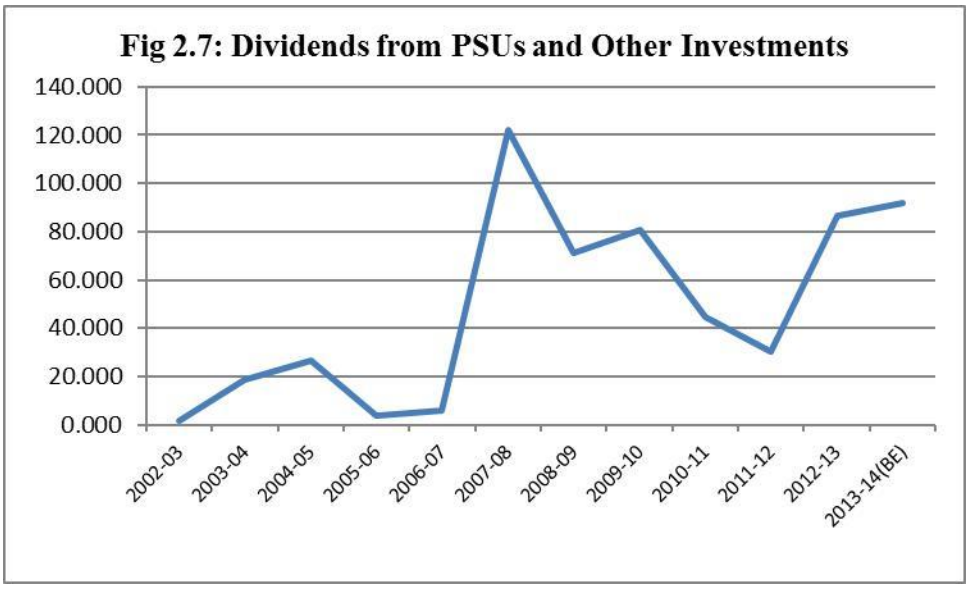
The State Public Sector Undertakings (PSUs) consist of State Government companies and Statutory Corporations. The State PSUs are established to carry out activities of commercial nature while keeping in view the welfare of people. In Maharashtra, the State PSUs occupy an important place in the State economy. Major activities of Maharashtra State PSUs are concentrated in power and infrastructure sectors. Dividends from PSUs and other investments of the government are tabulated in Table 2.9 below:

Table 2.9

Dividends From PSUs and other Investments

(Rs. Crore)

2002-03	1.864
2003-04	18.925
2004-05	26.729
2005-06	3.665
2006-07	6.162
2007-08	122.001
2008-09	71.161
2009-10	80.877
2010-11	44.823
2011-12	30.195
2012-13	86.654
2013-14(BE)	91.853

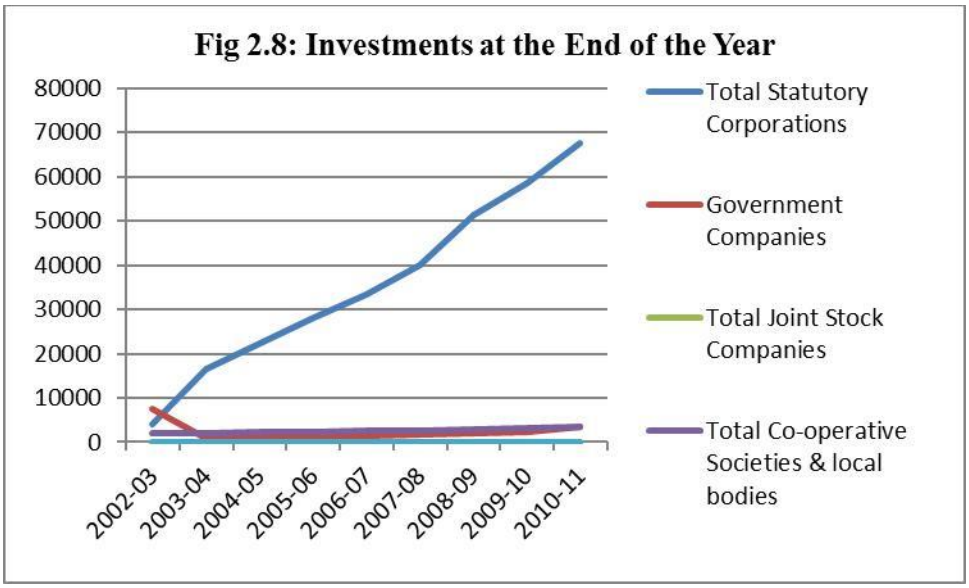


The aggregate dividends of PSUs and other investments of the government tabulated above comprise investments in Statutory Corporations; Government Companies; Joint Stock Companies; Co-operative Societies and local bodies. The investment at the end of the year in each of these categories is tabulated in Table 2.10 and graphed in Figure 2.8. The graph clearly depicts that investment in statutory corporations has shown a steady increase and it has more than doubled during the period 2002-03 to 2010-11. Investments in all other categories have declined (Government Companies) or shown a small increase.

Table 2.10
Investment at the End of the Year in PSUs

(Rs. Crore)

	Total Statutory Corporations	Government Companies	Total Joint Stock Companies	Total Co-operative Societies & local bodies	Total Concerns under Liquidation	TOTAL
2002-03	3974.608572	7591.7224	15.08405	2023.268	0.3310869	13605.01
2003-04	16673.3909	972.4441	15.084	2129.638	0.3311	19790.89
2004-05	22460.5777	1095.9644	15.084	2257.782	0.3311	25829.74
2005-06	28169.1617	1401.5004	15.084	2331.545	0.003311	31917.62
2006-07	33428.322	1509.0042	15.084	2578.752	0.3311	37531.49
2007-08	39897.6575	1627.8568	15.0847	2715.332	0.3311	44256.26
2008-09	51235.5679	2124.6813	26.921	2998.879	0.3311	56386.38
2009-10	58601.705	2361.923	26.1595	3202.579	0.3174	64192.68
2010-11	67531.3423	3444.2584	36.0007	3379.474	0.3174	74391.39

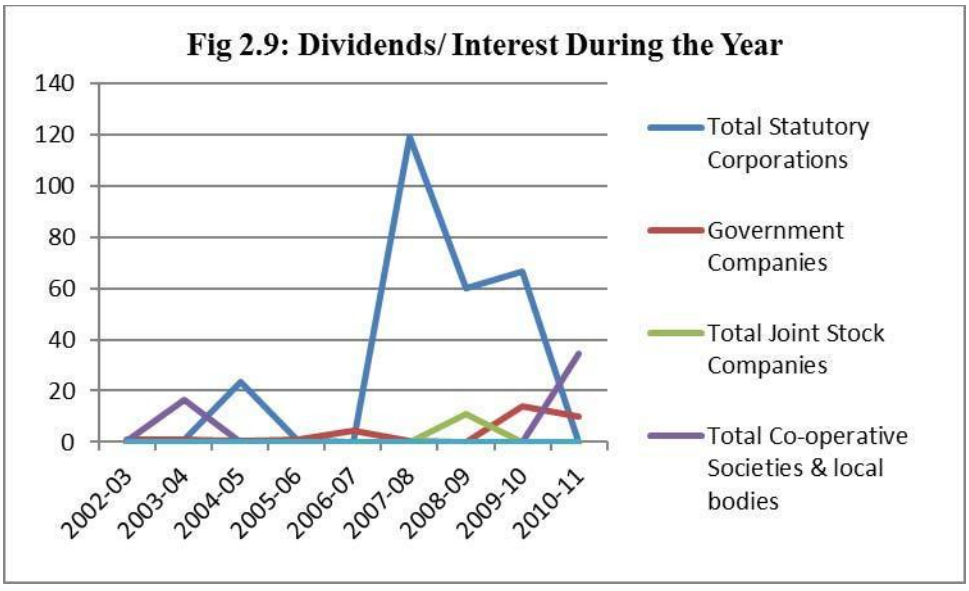


Turning to dividends from the various categories of PSUs, it is noticed that dividends from Statutory Corporations is undoubtedly the maximum from among the various categories but the pattern is nowhere near that of a steady increase as was noticed in case of investments. Dividends from Statutory Corporations were very low to begin with. There is a sudden spurt in 2007-08. In the very next year, however, it declined to half the amount. A steady increase in investments in statutory corporation is not seen in case of dividends from statutory corporations.

Table 2.11
Dividend/ Interest Received During the Year from PSUs

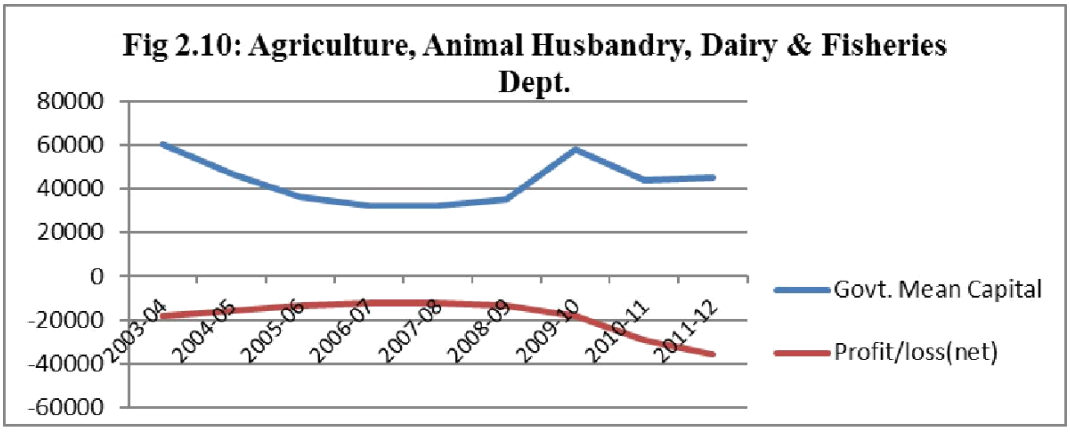
(Rs. Crore)

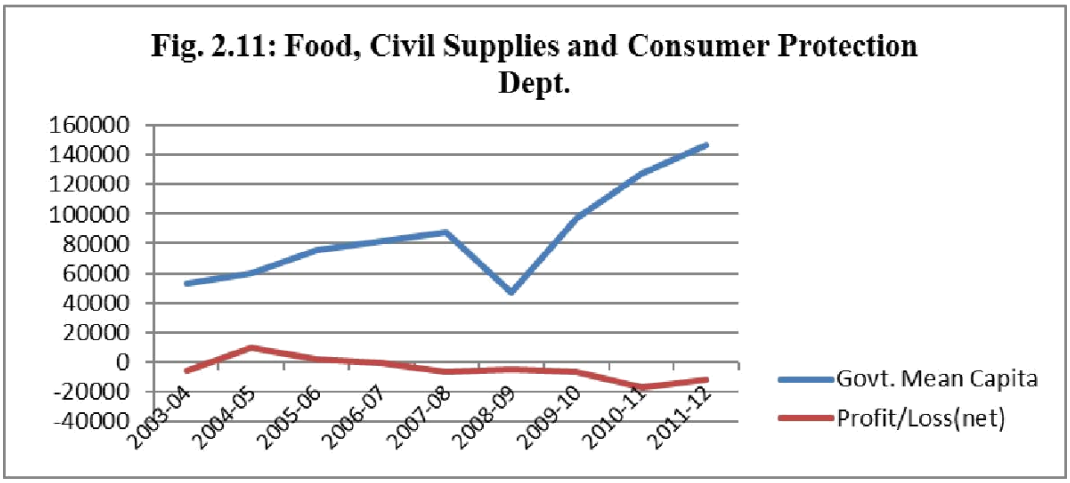
	Total Statutory Corporations	Government Companies	Total Joint Stock Companies	Total Co-operative Societies & local bodies	Total Concerns under Liquidation	TOTAL
2002-03	0.006139	0.8189219	0.070504	0.678651	0	1.864082
2003-04	0.8731	0.7999	0.0395	16.6121	0	18.9254
2004-05	23.6345	0.444	0.0513	0.0751	0	26.7292
2005-06	0.8711	0.8855	0.0019	0.0295	0	3.6647
2006-07	0.0026	4.2924	0.0183	0.0335	0	6.1619
2007-08	119.2589	0.5515	0.0252	0.0272	0	122.0008
2008-09	59.9512	0.0015	11.1998	0.0082	0	71.1607
2009-10	66.7008	14.1456	0.0101	0.0202	0	80.8767
2010-11	0	10.1429	0.0185	34.3613	0	44.8227

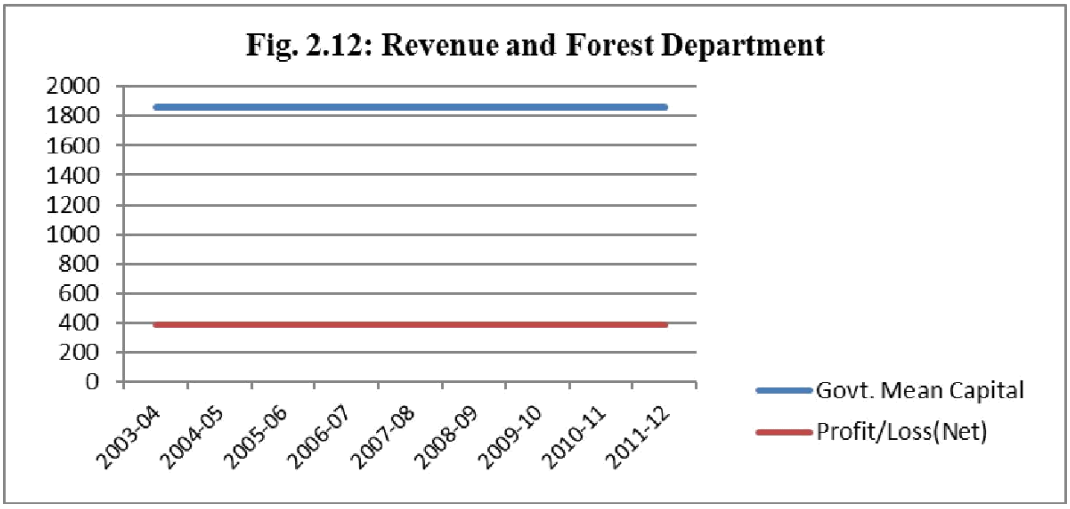


Departmentally Managed Commercial Undertakings

Activities of quasi-commercial nature are performed by the departmental undertakings of certain Government departments. Figures 2.10, 2.11 and 2.12 graph the Govt. Mean Capital and the net profit and loss of the undertakings in the three Departments. Government mean capital shows a rising trend especially in the Food, Civil Supplies Department, but these undertakings continue to be largely loss making. Greater details about number of loss making units etc. are provided in table 2.11 below.







Clearly the graphs show that Undertakings in the Agriculture sector have recorded losses in all the years. The Undertakings in Food and Civil Supplies too recorded losses in all the years barring two years. In Revenue and Forest Department alone the government mean capital and profits recorded have been constant in all the years since 2003-04.

These Undertakings are required to prepare annually pro forma accounts in prescribed format showing the results of financial operation so that Government can assess the results of

their working. The Comptroller and Auditor General of India, has repeatedly commented about the *arrears in preparation of accounts*. This clearly indicates an *inefficiency in the administration* of these Departmentally Managed Undertakings. This share of units with arrears in accounts has continued to grow. In case of the Agriculture Department its share has risen from 30% to 100%. In case of the other two departments, it has stayed at 100% right through the period.

Table 2.12

Departmentally Managed Commercial Undertakings

	Total nos.	No. Of Profit Making Concerns	No. of Units with arrears in accounts	Govt. Capital (Mean) (Rs. lakhs)	Turnover (Rs. lakhs)	Net Profit (+) / Net Loss (-) (Rs. lakhs)
AGRICULTURE, ANIMAL HUSBANDRY, DAIRY DEVELOPMENT & FISHERIES						
2003-04	47	2	14	60223.48	67970	-18398.2
2004-05	46	4	18	46428.26	69128.8	-15867.52
2005-06	46	5	34	36098.43	66995.7	-13486.55
2006-07	46	5	29	31934.45	61232.2	-12461.45
2007-08	46	4	37	32359.79	60225.5	-12286.96
2008-09	46	5	35	34824.81	52664.9	-13451.23
2009-10	46	5	44	57721.22	42520.1	-17882.44
2010-11	46	3	46	43875.44	41498.1	-29472.34
2011-12	46	5	46	44841.22	31461.8	-35892.7
FOOD, CIVIL SUPPLIES AND CONSUMER PROTECTION DEPARTMENT						
2003-04	2	0	2	53151.53	95719.2	-5790.69
2004-05	2	1	2	59993.7	102221	9686.73
2005-06	2	1	2	75741.49	117177	1961.38
2006-07	2	1	2	81347.05	114571	-646.06
2007-08	2	1	2	88187.45	116408	-6617.81
2008-09	2	1	2	47103.41	99799.2	-4317.83
2009-10	2	1	2	96969.72	154060	-6538.53
2010-11	2	0	2	127564.92	128775	-16422.46
2011-12	2	1	2	146635.78	253217	-12035.16
REVENUE AND FORESTS DEPARTMENT						
2003-04	1	0	1	1857.85	826.24	383.32
2004-05	1	1	1	1857.85	826.24	383.32
2005-06	1	1	1	1857.85	826.24	383.32
2006-07	1	1	1	1857.85	826.24	383.32
2007-08	1	1	1	1857.85	826.24	383.32
2008-09	1	1	1	1857.85	826.24	383.32
2009-10	1	1	1	1857.85	826.24	383.32
2010-11	1	0	1	1857.85	826.24	383.32
2011-12	1	1	1	1857.85	826.24	383.32