Final Report on Restructuring State and Local Finances for Rajasthan

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List of participants at the presentation of draft report on 15 and16 September 2005:

Name	Designation	Department
Shri Surendra Kumar	Chairman	RSRTC
Shri C S Rajan	Pr. Secretary	P W D
Shri Shimat Pandey	CMD	RVPN & DISCOMS
Shri D B Gupta	Secretary	Finance I
Shri Yaduvendra Mathur	Secretary	Energy
Shri P S Mehra	Commissioner	Commercial Taxes
Shri Manjeet Singh	Secretary	Local Self Government
Shri R G Gupta	M D	JVVNL
Shri Subir Kumar	D S	Finance (Tax)
Shri K K Pathak	D S	Finance (Exp. I)
Shri H S Bhati	Secretary	J D A
Shri Ratan Singh	C E	PHED
Smt. Shashi Mathur	FA & CAO	RSRTC
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Shri Niskam Diwakar	Addl. IG	Reg.& Stamp
Shri H M Bairwa	Addl. Comm.	Transport
Shri Hans Kumar	Dy. Comm.	Transport
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Shri R N Meena	D S	Finance (Exp.II)
Shri A K Gupta	D S	Finance (Exp.III)
Shri Manoj Kumar	D S	Finance (Exp.IV)
Shri Dinesh Javalia	D S	Finance (W&M)
Shri Mukund Sohoni	D S	Finance (Revenue)
Shri K K Gadiok	D S	Finance (E A D)
Shri K R Meena	CAO	D L B
Shri Ramesh Tripathi	Sr. AO	JMC
Shri Ramavtar Sharma	Sr. AO	DLB

Rajasthan: Socio-economic Profile

Parameters	Rajasthan	India
Area (in sq.km)	3,42,239	32,87,263
Net sown area as % of total area (1998-99)	46.96	43.38
Net irrigated area as % of net sown area (1997-98)	33.73	38.26
Population: 2001 Census (million)	56.47	1027.02
Sex ratio (females per 1000 males): 2001	922	933
Infant mortality rate per 1000: 1997-99	83.1	70.5
Literacy: 2001 Census	61.03	65.38
Male	76.46	75.85
Female	44.34	54.16
Per capita Net State Domestic Product at market prices: 2000-2001 (Rs.)	12433.33	16602.44
Food grain production (in '000 tonne): 2000-01		
Cereals	9,308	1,85,249
Pulses	728	10,665
Per capita gross electricity consumption (in Kwh.): 1998-99	604.30	369.14
Road density: Road length in km. per '000 sq.km. of area): 1997	238	749

Source: Statistical Abstract, 2001, Directorate of Economics and Statistics, Rajasthan, Jaipur. Infant mortality rate from e-CENSUSIndia: Issue no. 13, August 2002 available at http://www.censusindia.net/results/eci13_page1.html.

Executive Summary

The Fiscal Responsibility and Budget Management (FRBM) Act:

The Twelfth Finance Commission (TFC) provision for an interest rate concession on, and consolidation of, state debt owed to the Centre, is conditional on legislation of an FRBM Act with certain minimum features. The first part of this study involved the design of an FRBM Act for Rajasthan, with accompanying Rules. The Rajasthan FRBM Act was finalized and enacted in May 2005, after the TFC Report was made public, and is therefore fully compatible with the minimum requirements stipulated for the interest rate concession. Rajasthan is bracketed by the TFC along with West Bengal, Punjab, Orissa, Uttar Pradesh, Kerala and Bihar, among the highest interest paying states. Outstanding debt stood at 55.74 percent of GSDP at the end of 2004-05, of which approximately 45 percent was high-interest debt owed to the Centre. The interest rate concession enabled by the FRBM will contribute in a major way towards reducing the stress on Rajasthan government finances.

The TFC stipulates an independent set of conditionalities for the write-off of repayments of principal on state debt owed to the Centre. These conditionalities focus on the required absolute revenue deficit (RD) reduction in each year, but also include a requirement that the absolute fiscal deficit (FD) should be capped at the level reached in fiscal year 2004-05.

The study defines three options open to the state:

Scenario I: The state strictly follows the enacted FRBM:

- Zero RD by the year 2008-09, with an average annual reduction by 3 percent of revenue receipts upto 2008-09;
- FD target of 3 percent of GSDP in an unspecified year, with a path commitment of an average annual reduction of 0.4 percent of the FD (perfectly compatible with the TFC conditionalities, which permit a targeted FD of 3 percent of GSDP in an unspecified year).

The guidelines issued by the Central government under which absolute limits on annual additional net borrowings by states, and hence their annual FD, are set under Article 293(3) of the Constitution, will most likely be amended so as to give states the option of exceeding the 2004-05 FD cap, at the cost of losing the annual debt write-off in part or in full.

The tangled TFC conditionalities however permit a full debt write-off with retrospective effect in the terminal year 2009-10 if the RD has been reduced to zero by 2008-09.

Scenario II: Under Scenario I, the state may not get the full debt write-off in 2007-08 and 2008-09 because of violation of the FD cap. Scenario II therefore adds the further constraint of the absolute FD cap of 2004-05 to Scenario I.

Scenario III: The state conforms to the fiscal correction path in aggregate for all states, prescribed by the TFC, using the conformity formula which prescribes the corresponding path for each state, along with the RD correction required for a full debt write-off in each period.

All three scenarios grind the RD down to zero by 2008-09. But scenario I permits higher fiscal deficits, and hence higher rates of growth of capital expenditure, against the trade-off of a higher interest burden than in Scenarios II and III (and hence lower non-interest revenue expenditure). The trade-offs are quantified in the report. The choice between the three scenarios lies with the Government of Rajasthan.

Restructuring the Finances of the State:

A supporting component of this study relates to restructuring the finances of the state, such that service delivery by the government and the growth prospects of the state are not constrained by the fiscal discipline imposed by the FRBM Bill. To this end, the study examines ways by which to contain infructuous expenditure, and improve own revenue collections both at state and local levels, a critical underpinning of the fiscal discipline effort. The study also looks at the larger problem of funding road development, and examines a new 50:50 joint venture set up by the Government of Rajasthan with the Infrastructure and Leasing Finance Service Ltd. (IL&FS)

Non-Departmental Public Sector Undertakings (PSUs):

The PSUs of Rajasthan do not in general earn the minimum required rate of return on investment, as specified by the Planning Commission. None, except for Rajasthan State Mines and Minerals Ltd, has paid any significant dividends to the Government in recent years. The transport and power companies are among the largest loss-making PSUs. The study makes a number of recommendations for improving the financial performance of the PSUs in these two critical sectors. Given the fiscal burden of budgetary support to the power sector, an electricity duty has been imposed on captive power plants with capacity 125 KVA or more.

This duty acts as a deterrent to IPPs, but is an unfortunate concomitant of the continuing necessity of budgetary support to the power sector.

The power companies seem to have high employment efficiencies in generation, transmission and distribution, according to the data and parameters provided by them. However, they have the problem of aged linesman unable to climb poles and therefore unfit to perform their assigned functions. Reduction of the retirement age for linesmen, and replacement with younger recruits, will address this particular problem.

For PSUs in sectors other than power and transport, a calculation using salary/turnover norm reveals that there does exist excess manpower. Immediate implementation of VRS schemes will ease the burden of salary expenditure for these PSUs. The norms used have been explicitly stated, so that any PSU in question may, at its discretion, use other norms judged more suitable to their line of activity.

A VRS has so far been implemented only by Rajasthan Financial Corporation (RFC). A more central issue with RFC is the level of NPA it carries currently. The Annual Report of RFC (2003-04) reveals that NPA for FY 03-04 was 17 percent of outstanding loans. The comparative figure for all public sector banks and all commercial banks for the same year was 7.8 percent and 7.2 percent respectively. The loan portfolio of RFC needs to be urgently restructured using standard banking protocols.

Departmental Staff:

The number of civil servants per capita in Rajasthan works out to 1.09 per hundred population, whereas the corresponding all-India figure, albeit for 1996, is higher, at 1.4. Thus, there are no grounds for further absolute reduction in staff size, which is among the recommended options in the TFC Report. At the same time, there is no case for an absolute increase in staff size. A freeze on total employment with zero net addition every year implies gross annual recruitment equal to the yearly attrition due to retirement. Annual attrition is normally 3 percent of total staff size.

Given that an absolute reduction in the total size of the bureaucracy cannot be justified, there is a need to identify overstaffed departments, from which excess employees can be reallocated to departments identified as understaffed. This staff restructuring measure in itself will not reduce the burden on the revenue expenditure, but is a very important exercise from a governance perspective. The study performs this exercise and identifies 26 overstaffed

departments, from among 42 deemed amenable to the use of non-salary revenue expenditure as a measure of scale of activity.

Non-salary expenditure is not an appropriate measure of the scale of activity of the revenue department. The total revenue expenditure of the revenue department in 2004-05 was 3.81 percent of total revenue collected. The comparable figure for the Government of India is 0.85 percent. The revenue collected in Rajasthan as an average per staff member (aggregating across all categories) is 0.33 crore. The comparable figure for GoI is 2.5 crore. It should be reiterated once again that these numbers do not necessarily call for an overall reduction in staff size so much as a change in composition towards higher skill level posts, so as to secure higher revenue collections with the existing staff strength.

Own Tax and Non-Tax Revenues:

The very high buoyancy of 1.44 recorded by own tax revenues in Rajasthan over the period 1996-97 to 2003-04 suggests that the state might well exceed the own-tax underpinnings of the FRBM. Notwithstanding the good tax revenue performance in recent years, the state held only rank 9 among 25 states in 2002-03, with an own-tax/GSDP ratio of 7.2 percent, as against 9.3 percent in the top ranked state. Cross-state comparisons have to be treated with caution, because the composition of GSDP matters. But there is clearly room for further tax effort by Rajasthan so as to rise in the state rankings.

The percent revenue recovered from additional demands made in 2003-04 and 2004-05 is appallingly low overall, even after reduction due to adjustments and appeals. The percentage also varies widely across zones. A zonal ranking by percent recovery shows stability between the two years 2003-04 and 2004-05, with a statistically significant rank correlation coefficient of 0.68, suggestive of a systematic zonal pattern of non-compliance. The zones in which anti-evasion efforts will prove most revenue productive have been identified as Jaipur II, Jaipur I, the Bhiwadi industrial area in Alwar, and the textile centre in Bhilwara, in that order. Total additional demand, net of adjustments and appeals, amounted to 1097.78 crore in 2004-05. The unrecovered amount, at 93 percent of the total, is 1020.93 crore. This is around 20 percent of the total realised sales tax revenue, of 4795.46 crore in 2004-05. Even if all 20 percent is not recoverable in the first year, an annual increase in revenue of at least 200 crore, should easily be possible from this untapped tax base. With motor vehicle taxation as well, the zonal evidence suggests that evasion is higher in Jaipur than in other zones in the state.

The present structure of excise duty on liquor and intoxicants is excessively complicated, with a multiplicity of types of levy, leviable goods, and rates. These need to be simplified and rationalised.

The lowering of stamp duty rates to 8 percent for men, and further to 5 percent for women, from January 2004, along with a number of other commendable design and administrative reforms, has led to greater buoyancy of revenues. Duty reductions create an enabling framework for complete declaration of the value of a transaction, but there are limitations posed to full declaration by the corresponding income tax liability for the seller. Comparisons with other states across rate reductions do not yield satisfactory answers. Therefore, it is difficult to make a judgement on whether a further reduction in stamp duty rates would bring about added buoyancy in revenues.

Institution of a Tax Research Cell in the Commercial Taxes Department will help in the systematic evaluation of the data and foster research in tax related matters. Such an institution will also help in-service training of officers on specific matters related to sales tax collection, which is important for improving human capital formation in the Department.

Finances of Municipalities:

The municipalities of the state are in a pathetic financial condition. Although property tax is an obligatory tax, 66 out of 183 municipal bodies are not levying property tax, which is the main source of income of urban local bodies everywhere. Even in municipal bodies which are levying the property tax, revenue recovery is ineffective. Following the success achieved in Andhra Pradesh, Tamil Nadu, and Gujarat, the Rajasthan government replaced the Annual Rateable Value (ARV) basis of property taxation, by Unit Area Valuation (UAV). The unit area valuations have been notified on 31 March 2003, but with what are so far uniform flat levies differentiated only by class of city. As a result urban local bodies in Rajasthan are heavily dependent on budgetary support. This is effectively a transfer from the rural areas of the state to the urban rich. The measures needed to rectify this situation follow clearly from the lacunae in the present situation.

The Constitution (Seventy-Fourth) Amendment, 1992, envisages that municipalities should assume responsibility for urban planning including town planning and regulation of land use functions. As the Government of Rajasthan moves towards making this change, which is also a pre-requisite for accessing funds provided under the recently announced National Urban Renewal Fund, it will require a reexamination of the role of Urban Improvement Trusts (UITs) vis-

a-vis municipalities. The Government of Rajasthan has not yet effected this change in its Municipalities Act. It is important that duality of control over land and land-related matters is done away with for orderly growth of cities and towns.

Road Development:

The Government of Rajasthan has entered into a 50:50 joint venture with IL&FS, named the Rajasthan Road Infrastructure Development Company of Rajasthan Limited (RIDCOR), for a Mega Highways Project, whereby 5 existing North-South corridors, with a total length of 1053 kms., will be upgraded into improved, tolled stretches. The project has several ingenious features for tackling what is an inherently risky project, given the competition from pre-existing non-tolled national highways. These are:

- Unbundling and allocation of construction risk and revenue risk to the appropriate agency. The quality of construction is ensured through the detailed provisions of the Integrated Improvement-cum-Maintenance contract,
- Stage construction to reduce construction cost and staggered tolling in order to allow traffic ramp up on the roads,
- IL&FS participation in the partnership, which has enabled the mobilization of Rs.910 crore of external debt without the provision of explicit guarantees for the full amount.

Exclusive dependence on toll revenues to service the debt on the project appears a bit risky, considering the arithmetic of the required density of traffic, and the likelihood of this density being realized at the tolls levied. Therefore, the project must actively look for supplementary revenues from services provided along the highways to secure the financial viability of the project.

The report also suggests a more central role for the Road Fund by securitizing the cess receipts flowing into the fund, in order to raise further resources for road development. Securitisation of predictable cess receipts of this kind should be possible on better terms than securitization of uncertain toll receipts.

1. INTRODUCTION

This study was initiated by the Government of Rajasthan with the principal aim of designing a Fiscal Responsibility and Budget Management (FRBM) Bill, with accompanying Rules. Through a process of continual interaction between the authors of this study and the Government of Rajasthan, the FRBM Bill was designed, enacted as Act No. 7 of 2005, and notified on 3 May 2005. The study was initiated in November 2004, well before the Report of the Twelfth Finance Commission, which was issued in March 2005. As is well known, the TFC has introduced an interest concession on state debt owed to the Centre, conditional on legislation of an FRBM with certain minimum features. The Rajasthan FRBM Act was finalized after the TFC Report was made public. The interest rate concession enabled by the FRBM will contribute in a major way towards reducing the stress on Rajasthan government finances. The rate reduction to 7.5 percent amounts to a 300 basis point reduction, from the average interest rate paid by all states in aggregate on debt owed to the Centre, of 10.5 percent. Rajasthan is bracketed by the TFC along with West Bengal, Punjab, Orissa, Uttar Pradesh, Kerala and Bihar, among the highest interest paying states. Outstanding debt stood at 55.74 percent of GSDP at the end of 2004-05, of which approximately 45 percent was high-interest debt owed to the Centre.

A supporting component of this study relates to restructuring the finances of the state, such that service delivery by the government and the growth prospects of the state are not constrained by the fiscal discipline imposed by the FRBM Bill. To this end, the study examines ways by which to improve own revenue collections both at state and local levels, a critical underpinning of the fiscal discipline effort. The study also summarizes the recent policy initiatives and institutional developments in the road sector in Rajasthan.

Chapter 2 begins with an overview of the fiscal background and developments in the state over the last twenty-five years. The fiscal indicators in the state, going into the FRBM correction period, are a revenue deficit at around 3 percent of GSDP, amounting to roughly one-fifth of total revenue receipts. The interest component of this however exceeds 3 percent of GSDP, so that the primary revenue balance is actually in surplus. Thus, the FRBM Act, which is the TFC conditionality for the interest rate concession, is a timely development, and important for an improvement in the fiscal health of the state. Aside from the interest burden already referred to, a major macroeconomic cause of concern for

the state is the secular decline in the five-year average compound (nominal) growth rate of GSDP from 17.29 percent over 1994-99 to 5.91 percent over 1998-03. Given that nominal growth is an outcome of the real rate of growth of GSDP and the inflation factor, this decline can partly be attributed to the declining rates of inflation in the country as a whole during this period. But there has also been a sharp decline in real growth, from 9.66 percent over 1994-99 to 0.95 percent over 1998-03.

The Rajasthan Act targets a zero revenue deficit by the year 2008-09, with an average annual reduction in RD/RR by 3 percent upto 2008-09. It targets a fiscal deficit of 3 percent of GSDP in an unspecified year, with a path commitment of an average annual reduction by 0.4 percent of the GSDP. Both these are perfectly compatible with the minimum requirements stipulated by the TFC, which permits a targeted fiscal deficit of 3 percent of GSDP in an unspecified year, with no stipulated fiscal deficit path commitment among its minimum requirements for state FRBMs, other than the requirement that there should be a stated path.

The TFC stipulates an independent set of conditionalities for the write-off of repayments of principal on state debt owed to the Centre. These conditionalities focus on the required *absolute* revenue deficit reduction in each year, but also include a requirement that the *absolute* fiscal deficit should be capped at the level reached in fiscal year 2004-05.

The compatibility issue is unfortunately further complicated by the fact that the TFC prescribes a fiscal deficit correction path for all states in aggregate, with a conformity formula[1] that specifies the state path that will be in conformity with the aggregate path. The conformity formula requires projection of state-specific values for three parameters. These are the nominal GSDP growth rate of the state; total revenue receipts as a percent of GSDP; and the interest rate on aggregate debt. The nominal growth rate for Rajasthan has been projected in the TFC Report at 12.8 percent, above the national average of 12 percent, and also well above recent historical experience in the state. The conformity path becomes more stringent at a projected growth rate lower than the TFC projected rate. There could arise incompatibilities between the fiscal deficit path of the FRBM, and that set externally.

The TFC suggests the formation of a Loan Council that will prescribe annual comprehensive limits on annual borrowing by each state. In effect, such

[1] The conformity formula as given in Appendix 4.1 of the TFC Report is incorrect. The correct formula is given in Chapter 2 of this Report.

borrowing limits have already been set by the present guidelines issued by GoI under which absolute limits on annual additional net borrowings by states, and hence their annual fiscal deficits, are set under Article 293(3) of the Constitution. These, however, will most likely be amended so as to enable the states to exceed the 2004-05 FD cap, at the cost of losing the annual debt write-off in part or in full.

Thus the simulations of the paths of the fiscal indicators over 2005-10 are performed in the chapter for three scenarios. Scenario I assumes that the state strictly follows the enacted FRBM. Under this scenario, the state gets the benefit of interest relief on Central loans, by virtue of having enacted an FRBM with the requisite features, but will get only partial debt write-offs in 2007-08 and 2008-09, because the absolute fiscal deficit cap is violated in these two years. The tangled TFC conditionalities however permit a full write-off of repayments of principal with retrospective effect in the terminal year 2009-10 if the RD will be reduced to zero by 2008-09, as it will under this Scenario. Nonetheless, the interest payments are higher in this scenario than the scenario where there is full debt write-off in each year. Scenario II adds the further constraint of the absolute fiscal deficit cap of 2004-05 to Scenario I. Under this scenario, the state will become eligible for a complete debt write-off during the period instead of getting a bunched write-off at the end of the period. Finally, Scenario III assumes that the state follows the conformity fiscal deficit path, at the historically-based growth rate of 10 percent, along with the absolute revenue deficit path required for a full debt write-off each year. The latter is automatically ensured by the FRBM revenue deficit path for 2005-06, but not for 2006-07 and 2007-08; by 2008-09 both are reduced to zero.

The total debt stock comes down to 51.80 percent of GSDP in Scenario III in 2009-10, in contrast with 56.33 percent in Scenario I and 53.86 percent in Scenario II. Chapter 2 also works out the expenditure compression required under the three scenarios. In all three scenarios, the rate of growth of non-interest revenue expenditure is higher over 2005-10 than it was over 2000-05. It is highest in the third scenario and the lowest in the case of the State FRBM. This is the impact of higher interest relief possible in Scenario III, because of complete fulfillment of all the conditions for write-off of principal repayments due. The rate of growth of capital expenditure is, however, much lower over 2005-10 than the rate over 2000-05 in all the three scenarios. The degree of compression is the largest in Scenario III and the least in Scenario I because the fiscal deficit reduction is the greatest in Scenario III.

There is clearly a trade-off between a lower interest burden (Scenarios II and III) and a higher rate of growth of capital expenditure (Scenario I). This is an

important policy issue, since the permissible rate of growth of capital expenditure impacts on the future growth potential of the state. The choice between the three scenarios lies with the Government of Rajasthan.

Chapter 3 examines the 27 non-departmental PSUs in the state for possible ways of improving financial and staff discipline. The companies fall in five categories: manufacturing (eight), trading and services (three), financial (two), promotional (four) and utility (ten). The Planning Commission's stipulated returns on investment for these categories are 12, 10, 9, 8 and 12 percent respectively.[2] During 1990-99, none of the Rajasthan PSUs met these criteria, except for promotional companies in one year. However, aggregate accumulated losses of Rajasthan PSUs registered year-on-year decreases over 1990-99, unlike in any other state. This streak of good performance came to a halt in 2000-01, when accumulated losses went up from 262.89 crores in 1999-00 to 338.79 crores.

Despite the promising aggregate picture, there remains a burden on the exchequer due to the losses in the power and transport sectors. The chapter therefore goes on to analyse the transport and power sector companies in some detail. Rajasthan State Road and Transport Corporation Limited (RSRTC) alone had a share of 58.45 percent in aggregate accumulated losses in 2000-01. It receives no explicit subsidies from the exchequer, unlike the power sector companies, but pays no dividend income, despite an operating surplus. The chapter examines the reasons for why, despite good operational performance indicators, RSRTC displays poor financial performance, and suggests eight further reforms to address this. RSRTC fares, even after recent revisions in July and September 2005, are lower than what fares in neighbouring states were, prior to the general round of 2005 revisions everywhere. The chapter also reports a disaggregated depot-wise analysis, identifies 12 depots which account for 66.18 percent of the total loss made by the Corporation in 2004-05, and makes suggestions for improved performance in these.

In the power sector, the erstwhile RSEB has been unbundled into five separate power companies: one generating company (RVUN), one transmission company (RVPN) and three distribution companies (Jaipur, Jodhpur and Ajmer Vidyut Vitran Nigams). The Financial Restructuring Plan of 2003 sets the horizon for the restructuring initiative up to 2011-12 with explicit provisions for yearly financial support by the state government to the power sector. Given this committed financial liability, there exists no scope for curtailment of expenditure

[2] Final Report of the Study Group on Reforms in State Public Sector Undertakings; Volume I; Planning Commission, August 2002.

on the power sector by the Government of Rajasthan. Implementation of the Feeder Renovation Programme is expected to reduce the T&D losses of the sector to 20 percent by 2012 from the very high level of 41 percent in 2004-05. The chapter identifies some additional measures for reducing T&D losses and improving the financial viability of the sector.

Chapter 3 goes on to quantify staff redundancy for those PSUs for which salary, total expenditure, turnover and employment data were available for 2003-04. A VRS scheme should help ease the burden of salary expenditure for these PSUs.

Chapter 4 looks at staffing within departments of the state government. There are a total of 67 different Budget heads in Rajasthan with 6,15,744 employees in 2004-05. Civil servants in Rajasthan number 1.09 per 100 population, which is lower than the figures for India (1.4 in 1996).[3] Therefore it is difficult to build a case for further reduction in overall numbers. However, there is considerable scope for redeployment of staff from overstaffed departments, which are identified in the chapter, towards departments with a crippling shortage of staff. The data collection centres at the borders of the state for example are severely understaffed, with a critically urgent need for (A+B) category staff.

Staff composition also has to change away from the 91 percent presently in C, D, or casual categories,[4] towards a higher percentage in the managerial categories A and B. This has already happened to some degree. The staff reduction of 1.08 percent achieved from 2001-02 to 2004-05 was achieved through significant attrition in the Casual category, accompanied by a concurrent increase in the Category A and B employees (who fall in the higher pay-scales). There was therefore a 18.67 percent increase in the salary expenditure per head. This is a pattern of downsizing that is beneficial in terms of its implications for the quality of governance of the state, provided the new managerial staff in the higher categories have been departmentally allocated where their services are most critically needed.

[3] National figures are available only with a time-lag because of the need to sum staff across the Central and all state governments. One of the five minimum requirements for the FRBM as prescribed by the TFC is the provision of detailed information on staff.

[4] Civil servants in Rajasthan are categorized only by payscales. These data have been mapped onto A, B, C, D and casual categories, with reference to the chapter on Classification of Services and Posts, Report of the Fifth Pay Commission, 1997.

The 2004-05 RE figure for salary expenditure is at 46.61 percent of the revenue expenditure net of pensions and interest payments, [5] whereas the TFC has recommended a target salary expenditure of 35 percent of the revenue expenditure net of pensions and interest payments. Adherence to this target by 2009-10 will imply too severe compression of salaries for feasibility. The recent recruitment of school teachers and the proposed fresh employment of 4000 police constables in 2005-06 will inflate the salary and pension bill and increase the difficulty of attaining the FRBM targets. The (net) freeze on staff size has to continue, which will imply that gross staff additions have to be contained within the 3 percent point attrition every year from retirement.

Chapter 5 looks at ways by which to improve own revenue collections in the state, a critical underpinning of the fiscal discipline effort. The recent good performance of sales tax collections and the non-tax revenue generation possibilities from oil and natural gas point towards a positive outlook for revenue generation. However, in order to unleash the potential of revenue generation from oil, the state government needs very large investments in infrastructure, particularly power, roads and water. In order to release resources for these purposes, the state government will have to adopt measure to curtail excess expenditure as already pointed out in chapters 3 and 4.

Although the very high buoyancy of 1.44 recorded by own tax revenues in Rajasthan over the period 1996-97 to 2003-04 suggests that the state is well-poised in terms of the own-tax underpinnings of the FRBM, the state held only rank 9 among 25 states in 2002-03, with an own-tax/GSDP ratio of 7.2 percent, as against 9.3 percent in the top ranked state. There is room therefore for further tax effort by Rajasthan so as to rise in the state rankings. It is inevitable that, later if not sooner, Rajasthan will have to move to the VAT along with other states. Pending the move to a VAT, there is considerable room for additional revenue gains from reducing evasion in sales tax, which accounts for more than half of total own tax revenues. The zonal data on percent of revenue recovery from additional demands made in 2003-04 and 2004-05 have been used to identify four zones, Jaipur II, Jaipur I, the Bhiwadi industrial area in Alwar, and the textile centre in Bhilwara, in that order, in which anti-evasion efforts will prove most revenue productive. The chapter calculates that evaded sales tax amounts to 20 percent of currently realised tax of around 5000 crore. With motor vehicle taxation again, there is the same cross-sectional variation across zones. Revenue realisation per registered vehicle was among the lowest in Jaipur zone, where the numbered of registered vehicles is highest. All evidence points to the

[5] The numerator in the TFC target is assumed to consist of salary expenditure alone as the denominator excludes pension payments.

zone around Jaipur as the principal zone for concentration of incremental tax effort. Other more minor sources of tax and non-tax revenue are also examined in the chapter.

Chapter 6 examines the recent trends in the finances of municipalities. As the chapter shows, the finances of municipalities in Rajasthan continue to be in an unsatisfactory state, notwithstanding the implementation of the recommendations of the First and Second State Finance Commissions, constituted under Section 276-A of the Rajasthan Municipalities Act, 1959. Of particular concern is the suboptimal use of property tax, which constitutes a legitimate local tax and which is expected to yield much of the revenues for municipalities, apart from its non-levy in a number of municipalities. Other municipal taxes are of no revenue significance.

The municipal functional domain in Rajasthan is narrow in that the provision of water supply has been assumed by the state government and, the 12th Schedule functions are still to be formally incorporated into the Municipalities Act. This Chapter's recommendations assume that the state government would, within a reasonable time frame of 3-5 years, accord to municipalities a role that is compatible with the decentralized framework envisioned under the 74th Amendment. This would necessitate a major restructuring of the finances of municipalities and fresh initiative towards making municipalities creditworthy.

Road infrastructure is an important component of the overall infrastructure requirements of the state of Rajasthan, particularly in light of the fact that the state has one of the lowest road lengths per unit area among the major Indian states. Chapter 7 summarizes the recent policy initiatives taken by the state government in the road sector. The most important developments are the 2002 amendment of the 1994 Road Development Act facilitating private sector participation, and the establishment of a non-lapsable road fund in 2004. The enabling conditions for a transparent and efficient road fund and its possible functions are enumerated, and two possible supplementary funding possibilities for the road fund for financing road development are detailed. The enabling criteria for a successful public private partnership (PPP) are enumerated in the chapter and different contractual frameworks for invoking PPP arrangements are discussed.

The Government of Rajasthan has entered into a 50:50 joint venture with IL&FS, named the Rajasthan Road Infrastructure Development Company of Rajasthan Limited (RIDCOR), for a Mega Highways Project, whereby 5 existing North-South corridors, with a total length of 1053 kms., will be upgraded. The

project has several ingenious features for tackling what is an inherently risky project, given competition from pre-existing non-tolled national highways. The chapter examines the required volume of traffic for payback of debt, and suggests some measures for improving the financial viability and the transparency of the project.

Chapter 8 pulls together numbered recommendations following from the preceding seven chapters.

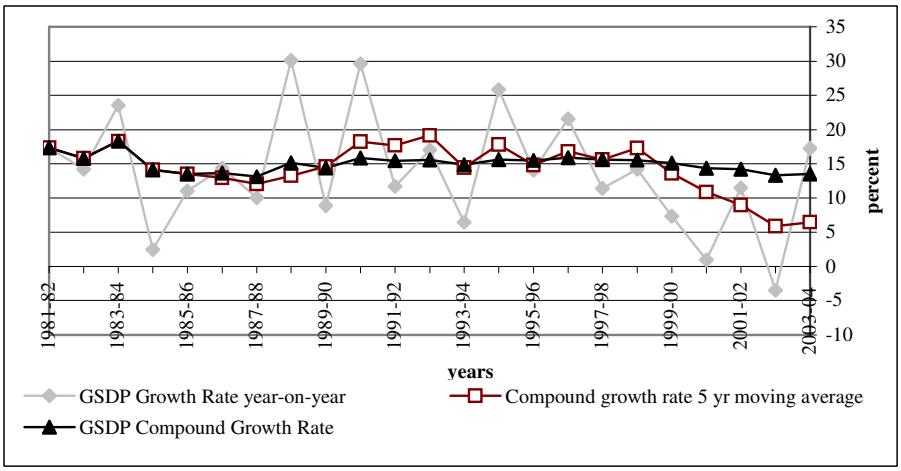
2. FISCAL RESPONSIBILITY LEGISLATION

2.1 BACKGROUND

The TFC has introduced an interest concession on debt owed to the Centre conditional on the legislation of an FRBM with certain minimum features.[1] Given that Rajasthan currently has a very high stock of debt,[2] enactment of an FRBM that enables debt relief should reduce the stress on state government finances. The magnitude of debt relief and the cost to the state for conforming to the relief requirements are examined later in this chapter.

Regarding the current fiscal outlook of Rajasthan, there are two immediate reasons for concern. The first is the decline in the recent past in the growth of nominal GSDP[3] and the other is the heavy interest burden on outstanding liabilities.

Chart 2.1 Growth Rates of Nominal GSDP of Rajasthan



[1] TFC Report, page no.87

[2] The stock of debt is Rs. 60215.15 crore, which includes Ways & Means advances from RBI, reserve funds and deposits.

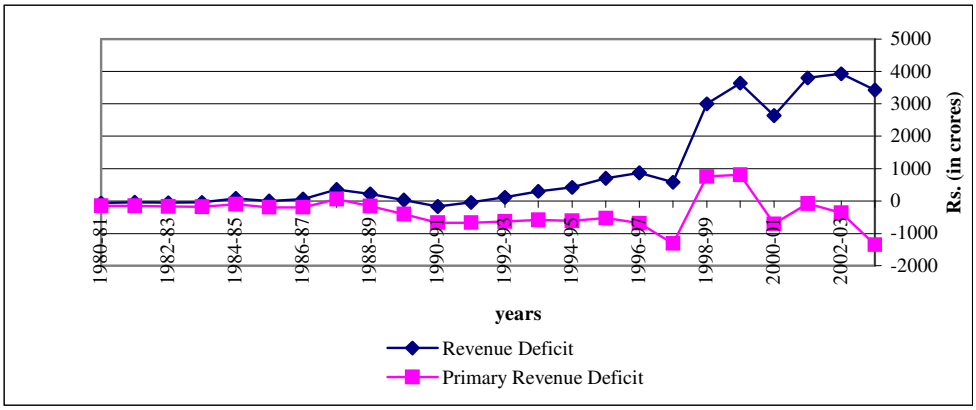
[3] GSDP is measured nominally throughout the chapter.

As is evident from the chart 2.1, the growth rate of nominal GSDP in Rajasthan has shown considerable year-to-year volatility. More importantly, there has been a secular decline in the five-year average compound growth rate from 17.29 percent over 1994-99 to 5.91 percent over 1998-03.[4] There has been a corresponding decline in the real growth rate, from 9.66 percent over 1994-99 to 0.95 percent over 1998-03. Thus, the nominal growth decline is not due to the decline in inflation rates alone over this period.

The second reason for fiscal stress in recent years has been the onerous interest burden. The TFC brackets Rajasthan, along with West Bengal, Punjab, Orissa, Uttar Pradesh, Kerala and Bihar, as some of the highest interest paying states.[5]

As the chart 2.2 shows, the revenue deficit, along with interest payments, in Rajasthan started going up significantly from 1990-91. It is interesting to note that thereafter upto 2003-04, the revenue deficit has been consistently greater than the level attained in 1990-91.

Chart 2.2 Revenue Deficit and Primary Revenue Deficit



Interest payments, which was 2.41 percent of GSDP in 1990-91, climbed to 4.57 percent of GSDP in 2003-04. This large increase in interest payments created a big difference between the revenue deficit and the primary revenue deficit, as seen from the chart above. Even though revenue deficit was increasing

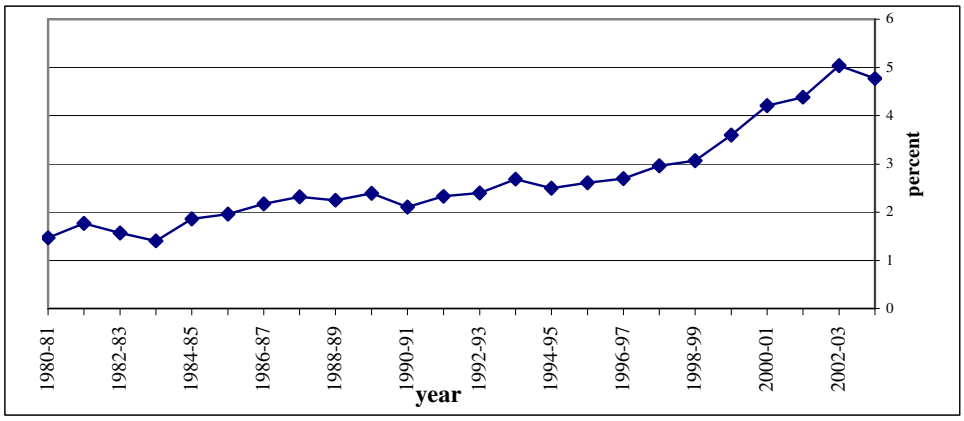
[4] Given that the nominal aggregate is a combination of the real rate of growth of GSDP and the inflation factor, this decline can partly be attributed to the declining rates of inflation in the country as a whole during this period.

[5] These states have a ratio of interest payments to revenue receipts above the average of 24.58 percent over 2000-01 to 2002-03 for all major states.

from 1990-91, the primary revenue balance was in surplus and continued to be so until 1998-99.

The steep rise in the interest payments, shown in chart 2.3, has created a huge fiscal drag on the state of Rajasthan.

Chart 2.3 Interest Payments as a percentage of GSDP



Apart from these macroeconomic variables, the paths of some of the fiscal variables of Rajasthan, as summarized in the table 2.1, do not portend future economic health, although there is certainly some improvement in recent years. The revenue deficit (RD) in 2004-05 stood at 2.44 percent of GSDP and at 15.15 percent of revenue receipts (RR). A large component of this deficit was interest payments and, therefore, it is not surprising that the primary revenue deficit (PRD), in isolation, has gone down from a high of 8.78 percent of RR in 1998-99 to a surplus of 14.49 percent of RR in 2004-05.

Despite the improvement in 2004-05 relative to the preceding year, debt stands at 55.74 percent of GSDP in 2004-05.

This background underscores the necessity for sustained fiscal restructuring such that fiscal stresses are reduced, debt is stabilized and the growth rate of nominal GSDP is on an upward trajectory.

Table 2.1

Performance Parameters on which to Base Fiscal Restructuring of Public Finances in Rajasthan

Variables	Values						
Year	2004-05 (RE)	2003-04	2002-03	2001-02	2000-01	1999-00	1998-99
RD/GSDP (%)	2.44	3.28	4.60	4.31	3.33	4.63	4.09
RD/RR (%)	15.15	22.20	30.07	31.23	21.24	37.18	34.92
PRD/RR (%)	-14.49	-8.77	-2.80	-0.68	-5.69	8.32	8.78
Interest Rate (%)	9.68	10.41	10.76	11.45	11.13	11.69	11.64
Debt/GSDP (%)	55.74	51.26	54.11	45.32	43.29	38.20	33.03

Source: Finance Department, Government of Rajasthan.

The layout of this chapter is as follows: Section 2.2 discusses the assumptions about the parameters underlying the paths of the fiscal projections over 2005-10. Section 2.3 discusses the compatibility of the State FRBM with the TFC requirements for debt relief. Implications of different scenarios for the deficit targets are also discussed. Section 2.4 explicates the implications of these scenarios on the projected rates of growth of capital expenditure and the non-interest revenue expenditure, bringing out the costs and benefits of adherence to the TFC requirements for debt relief. Section 5 summarizes. Rules of the Act, as designed by the authors, are provided in an Annexure.

2.2 PARAMETERS UNDERLYING PROJECTIONS 2005-10

The simulation of the path of fiscal and macroeconomic variables over the projection period 2005-10 requires some assumptions about the rates of growth of the parameters over 2005-10. These assumptions are discussed in detail below:

1. Nominal GSDP: It is difficult to make an assumption about the rate of growth of nominal GSDP over 2005-10 given the volatility of annual growth rates as discussed in Section I. As the five year average compound growth rate is more stable than the annual growth rate, the most recent five year average compound growth rate has been used to base the assumption about the rate of growth of nominal GSDP. Chart 2.1 shows that this growth rate was 17.29 percent over 1994-99, 13.62 percent over 1995-00, 10.88 percent over 1996-01,

8.98 percent over 1997-02, 5.91 percent over 1998-03 and 7.38 percent 1999-04 respectively. Given this historical rate of growth, an assumption of 10 percent annual growth rate of GSDP would be realistic.

However, the TFC has assumed a much higher rate of growth of 12.8 percent for the projection period. This is predicated on the 8.3 percent real rate of growth of GSDP forecast by the Tenth Five Year Plan document (2002-07). Given the rate of growth of the nominal GSDP in the recent past, this rate of growth appears to be very optimistic. Therefore, a growth rate of 10 percent, and not 12.8 percent, has been assumed in order to project the rate of GSDP over 2005-10. For the purpose of simulations over the five-year projection period from 2005-06 to 2009-10, the growth rate of nominal GSDP is treated as an exogenous given.

Nominal GSDP is considered the revenue-generating base. In the specific context of state finances, its role might be limited as a part of the revenues is external to the state (e.g. central transfers). To analyze this, revenue parameters are discussed next.

2. Total Own Revenue*:* On an average, own revenues were around 60 percent of total revenues in the three most recent years. There are two major subsections to total revenues of the state: Own revenues and Central transfers.

For own taxes, the TFC has prescribed a buoyancy of 1.2 for own tax for the projection period. Together with a TFC prescribed growth rate of 12.8 percent, this gives an annual growth rate of 15.36 percent for own tax revenue. Since Rajasthan will have to improve its revenue efforts in order to meet the targets of the FRBM, a buoyancy of 1.2 for taxes has been assumed over the projection period as prescribed by the TFC, and not 1.1 as calculated from the historical data (see chapter 5). However, with a growth rate of 10 percent, own taxes will have an annual growth rate of 12 percent and not 15.36 percent.

The absolute figures for non-tax revenue, as projected in the TFC Report in Annexure 6.12, have been used for the projection period. With these assumptions, the annual growth rate of own-revenue receipts is at 10.98 percent over the projection period. The buoyancy of own non-tax receipts has not been estimated because of extreme volatility in the magnitude of non-tax revenue from year to year. Over 1996-2001, the annual growth rate was negative at -5.64 percent and it jumps to 8.89 percent over 1999-2004.

There is a further difficulty. Debt write-offs in the past have always been shown in the accounts as a notional capital account disbursement with a

corresponding notional non-tax revenue receipt. Since the debt write-off is itself conditional on revenue deficit reduction (see section 2.3) it is not clear if the non-tax revenue so enabled, in say year (t – 1), can be factored in for the debt write-off enabled in year t. It has been assumed here that it cannot be factored in.

3. Central Transfers*:* Central transfers are a part of the total revenue receipts of the state that is not a part of its internal revenue-generating mechanism. It consists of the statutory share of Central taxes plus grants.

The TFC has recommended a share of 5.609 percent in total sharable taxes (other than service tax) and 5.683 percent in service tax for Rajasthan for the period 2005-10. These are higher than the EFC share for Rajasthan, of 5.473 percent and 5.544 respectively.[6] In order to get the net amount devolved to Rajasthan, as projected by the TFC, the pre-tax devolution revenue deficit has been subtracted from the post-tax devolution revenue deficit for each year from 2005-06 to 2009-10 as given by the TFC Report.[7] The annual growth rate of share of statutory taxes over 2005-10 is 15.71 percent, which is higher than the 14.53 percent annual growth rate over 2000-05. But it has to be remembered that these growth rates are predicated on growth rates of Central tax revenues, as projected in the TFC Report.

Regarding TFC grants, Rajasthan is not a recipient of non-Plan revenue deficit grant and grants for health expenditure under the TFC's recommendations. The amount of grants over 2005-10 is Rs.4643.91 crore to Rajasthan, a 55.17 percent increase over the Eleventh Finance Commission grants (2000-05) of Rs. 2992.74 crore.

Apart from TFC grants, states receive grants from the Planning Commission and other sources. In the absence of new data for these grants during the projection period, the amount of these grants have been assumed to be Rs. 2500 crore every year. The basis for this assumption is the magnitude of these grants received in 2003-04 and 2004-05 as reported by the state government.

Combining statutory share of taxes and all grants, the annual growth rate of the total sum of central transfers is 12.07 percent for the period 2005-2010 in contrast to 13.85 percent growth rate over 2000-05. This rate of growth rests on the assumptions made about the growth rates of the individual components of central transfers as delineated above.

[6] In the EFC, the second rate was applicable to expenditure tax and service tax together.
[7] TFC Report, tables 10.2 and 10.3.

4. Interest Rate and Parameters for the Debt Write-off: Under the scheme of interest relief introduced by the TFC, interest rate will be lowered to 7.5 percent from 2005-06 on Central loans contracted till March 2004 and outstanding on March 2005. Rajasthan will be eligible for this interest relief scheme as it has already enacted the FRBM.

However, the rate of interest payable on non-Central loans will presumably be unaffected. The rate of interest on these loans is assumed to be 9 percent during the projection period, because this rate is 8.92 percent in 2005-06.[8] All states are presently compelled to lift small saving loans from the NSSF, to the full extent of jurisdictional collections, at a rate of 9.5 percent, as against market loans currently available at 7 percent. The assumption of 9 percent is based on an expectation that the NSSF compulsion will continue for the foreseeable future.

Regarding the stock of Central debt on which the debt concessions are on offer, there are a number of inconsistencies between the state figures and the TFC figures. First, the state figure for the stock of Central loans in 2005-06 is Rs.6177.38 crore, whereas the TFC figure is Rs.6833.53 crore. Second, the state figure for the annual repayments due on these loans per period is Rs.308.87 crore in contrast with the TFC figure of Rs.314.68 crore. For both, the state figure has been used. However, the TFC calculated ratio of 0.45 has been applied,[9] which when applied to the revenue deficit reduction in year (t-1) relative to year (t-2), determines the quantum of repayments to be written-off in year t.

2.3 STATE FRBM ACT, TFC REQUIREMENTS FOR DEBT WRITE-OFF AND THE CONFORMITY FISCAL CORRECTION PATH

With these assumptions, the paths of different fiscal variables over 2005-10 can be projected, after factoring in the constraints on these variables imposed by the State FRBM. However, the consistency of the State FRBM with the requirements imposed by the TFC for the debt write-off has to be validated first. Further, the TFC has a conformity requirement for the path of the fiscal deficit for each state such that the aggregate fiscal deficit across all states comes down to

[8] The total interest burden for 2005-06 is Rs.5319.27 crore and with interest relief, interest burden on Central loans will be Rs.463.30 crore in 2005-06. Therefore, interest payments on non-Central loans amounts to Rs.4855.97 crore, derived residually for 2005-06. With a stock of Rs.54037.77 crore for these loans in 2004-05, the interest rate on non-Central loans for 2005-06 work out to 8.99 percent.

[9] This ratio is calculated by dividing total repayments due by the average revenue deficit over 2001-02 to 2003-04. Using TFC figures, 0.45 = (341.68*5)/(3799). If the state figure is used, then the ratio becomes (304.67*5)/(3799) = 0.40. The lower is the ratio, the lower is the quantum of write-off per period for every rupee reduction in the revenue deficit. Therefore, the ratio of 0.45 (and not 0.40) has been used.

3 percent of GDP by 2008-09 and remains constant at that level in 2009-10. The consistency of the FD path of the FRBM with this FD path has to be ascertained.

Therefore, as far as the state is concerned, the State FRBM, the TFC requirements for debt write-offs, and the conformity adjustment of the FD path are three sources of restrictions on the deficits over the projection period and these restrictions might be mutually inconsistent. Before addressing this issue about the mutual compatibility of these different constraints, the features of each are discussed below.

The State FRBM: The FRBM Bill of the Government of Rajasthan, as enacted on April 16, 2005, carries the following targets and paths for the revenue deficit and the fiscal deficit:

Box 2.1: Performance Targets as Enacted in State FRBM

Variables	Target	Path
Revenue Deficit (RD)	Zero in 2008-09	Average annual reduction in RD/RR by 3 percent upto 2008-09.
Fiscal Deficit (FD)	3 percent of GSDP; year not specified	Average annual reduction of FD/ GSDP by 0.4 percent.

Note that the paths for both the revenue deficit and the fiscal deficit target are average annual corrections, which gives scope for counter-cyclical flexibility. This is important for a state like Rajasthan, which is subject to severe agricultural cycles.

TFC Requirements for Debt Concessions: The TFC has introduced a scheme of debt concessions for states with two components:

(i) *interest relief:* reduced rate of 7.5 percent interest on consolidated Central loans as contracted upto 31 March 2004 and outstanding on 31 March 2005;

(ii) *debt write-off*: repayments due on the aforementioned loans from 2005-06 to 2009-10 to be written off.

There are separate conditions attached to each of the above. The scheme for interest rate reduction is conditional on the enactment of an FRBM with the following features:

- RD is reduced to zero in 2008-09 with an annual path that the state can decide on.
- FD/GSDP is reduced to 3 percent (terminal date not specified) with an annual path that the state can decide on.
- Disclosure of total salary and the total number of employees in government departments, public sector undertakings and other government aided institutions is declared in each Budget.
- Annual statements giving the prospects for the state economy and related fiscal strategy are published annually.

For the debt write-off scheme, the state will have to adhere to the following conditions on the paths for the RD and the FD in absolute terms:

Box 2.2: TFC Requirements

Variables	Conditions on the paths of variables
Revenue Deficit (RD)	1. The quantum of write-off in year t is obtained by applying the ratio 0.45 to the reduction in RD (in absolute amount) in year 't-1' relative to year 't-2'. 2. The write-off will be admissible only if the state reduces the RD to a level lower than the base year figure and the cumulative reduction in RD is not less than the cumulative interest relief every year. 3. If the entire RD is reduced to zero by 2008-09, then the entire repayments will be written off, presumably in 2009-10.
Fiscal Deficit (FD)	Eligibility for debt write-off in any given year between 2005-10 requires that the FD in that year (in absolute value) should not go above the absolute level of FD attained in 2004-05.

The requirement for full debt write-off requires a specific path for the revenue deficit. With the ratio of 0.45,[10] which determines the quantum of the debt written-off in period 't', the required path of the revenue deficit is calculated in absolute terms in the table 2.2.

Under these conditions, full debt write-off implies that the value of the FD in any year cannot exceed the value attained in 2004-05. If the state puts an absolute cap on the fiscal deficit at the level of 2004-05, this requirement will be fulfilled. However, it must be stressed that such a path for the fiscal deficit will

[10] The ratio 0.45 for Rajasthan is the aggregate debt repayments due on central debt over 2005-10 as a proportion of the average (absolute) revenue deficit over the three financial years 2001-04. See footnote 9.

allow capital expenditure to grow only to the extent to which revenue deficit can be reduced. This constrains the rate of growth of capital expenditure to a very large extent (as shown in the last section of the chapter), and this will adversely affect the future growth potential of the state.

Table 2.2

Calculation of the RD Path for Full Debt Write-Off

(Rs.crore)

Year	Repay-ment due	Interest relief : required minimum reduction in the RD		Application of formula for full debt relief			Revenue deficit
		Yearly	Cumula-tive	Enabled by application of ratio =0.45	Excess reduction in the RD (carried fwd.)	RD reduction from formula	Calculated from formula
1	2	3	4	5	6	7	8
2004-05							2647.79
2005-06	308.87	223.03	223.03	518.04	209.17	223.03	2424.76
2006-07	308.87	194.64	417.67	309.54	0.67	684.89	1739.87
2007-08	308.87	163.32	580.99	308.87	0.00	686.38	1053.49
2008-09	308.87	129.25	710.24	308.87	0.00	1053.49	0.00
2009-10	308.87	109.99	820.23	474.07	165.20	0.00	0.00

Source: TFC Report, relevant Annexures and tables as indicated in the notes.

Notes:

1. The base value for the revenue deficit for the state averaged over 2001-04, to be attributed as the base year figure, is Rs. 3799 crore (Annexure 12.8)
2. The RD in 2004-05 was Rs. 2647.79 crore (RE).
3. The required minimum reduction in RD for the selected state is on account of the interest concession as worked out in Annexure 12.9 of the TFC Report.
4. The required debt write-off is the uniform annual repayments due after debt consolidation as worked out in Annexure 12.8 of the TFC Report.
5. The ratio of repayments due from 2005-10 to the average RD over 2001-04 is 0.45 for the state. This ratio applied to the reduction in the RD in the year 't-1' yields the debt write-off enabled in year 't'. (Column 5)
6. The required reduction in RD (by formula) is derived so that the state gets the entire debt repayments for the next year written off. This is obtained for the year 't-1' by application of the constant ratio for the state to the required debt write-off in year 't'.

Path of the FD for conformity adjustment: In addition to these conditionalities, the TFC has suggested a path for the FD in terms of GDP that the states should follow so that the aggregate FD of all states comes down to 3 percent of GDP in 2009-10. The suggested path for FD/GDP is: 4.13 percent in 2005-06, 3.75 percent in 2006-07, 3.38 percent in 2007-08, 3 percent in 2008-09 and 3.00 percent in 2009-10.

In accordance with this suggestion, the Central government has issued guidelines to all states under which absolute limits on annual additional net borrowings by states, and hence their annual FD, are set under Article 293(3) of the Constitution. These guidelines ensure that the FD in 2004-05 is not exceeded. However, it should be noted that a nominal cap on the FD will be a very harsh constraint on the net new borrowings of states, and most states will find this target infeasible. Given this difficulty, it is likely that the guidelines will be amended so as to give states the option of exceeding the 2004-05 FD cap, at the cost of losing the annual debt write-off in part or in full.

Scenario I: The State Strictly Follows the Enacted FRBM: The paths of the different fiscal variables simulated under the FRBM constraints and the assumptions from Section II are shown in table 2A.1 in the Appendix. The state gets the benefit of interest relief on Central loans, by virtue of having enacted an FRBM with the requisite features. However, the RD path in the FRBM (as enacted) is not consistent with the RD path required for full debt relief. The state will therefore get only partial debt write-off in 2007-08 and 2008-09. Of course, the entire repayment will presumably be written off in the terminal year 2009-10 as the RD will be reduced to zero by 2008-09. Nonetheless, the interest payments are higher in this scenario than the scenario where there is full debt write-off in each year.[11]

The absolute cap on FD at the level attained in 2004-05 is a problem. If the actual reductions in the FD and the RD are higher than the FRBM targets, then Rajasthan will be eligible for the full debt write-off even with the full set of requirements for the debt write-off, including the absolute FD cap.

Scenario II: The State follows the TFC Requirements for Full Debt Write-Off: This scenario, with the fiscal deficit capped and held at the level of 2004-05 and the RD path as shown in table 2.3, is simulated in table 2A.2 in the Appendix. The benefit of adherence to the targets of this scenario is that the state

[11] It is pertinent to note here that in our draft FRBM sent to the state, we had recommended that the RD/GSDP ratio should be reduced by 0.68 percent per period over 2005-10. This path of the RD is consistent with the requirements for full debt write-off each period and therefore, the interest payments would have been lower with this RD path.

will become eligible for full debt write-off during the period instead of getting a bunched write-off at the end of the period. The expenditure compression with the deficit paths of this scenario is quantified in the next section.

Scenario III: The State follows the FD Path Required for Aggregate Conformity Along with the RD Path for Full Debt Write-Off: The FD path required for conformity to the overall 3 percent target for FD/GDP places a more severe constraint on the absolute value of the FD than the previous scenario. The state becomes eligible for full debt write-off each period, but the constraint on the FD implies a lower rate of growth of capital expenditure than the previous scenario. The implication of this Scenario on the paths of fiscal variables is shown in table 2A.3 in the Appendix.

For ease of comparison of the paths of the RD and the FD under these Scenarios, the table 2.3 summarizes these results:

Table 2.3

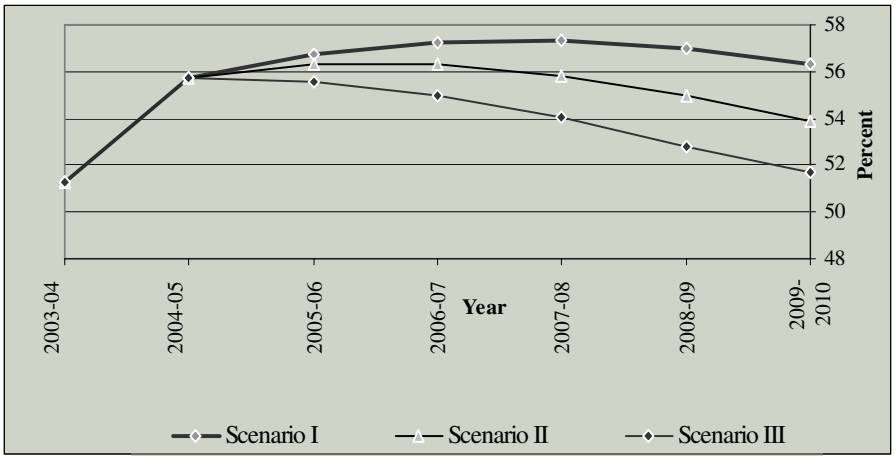
Paths of the Fiscal Deficit and the Revenue Deficit under the Different Constraints

Years	2005-06	2006-07	2007-08	2008-09	2009-10
Path of the Fiscal Deficit as a percentage of GSDP					
Scenario I	6.08	5.68	5.28	4.88	4.48
Scenario II	5.90	5.36	4.87	4.43	4.03
Scenario III	5.16	4.75	4.32	3.88	3.88
Path of the Revenue Deficit (Rs. crore)					
Scenario I	2334.97	1983.55	1481.54	0.00	0.00
Scenario II	2424.76	1739.87	1053.49	0.00	0.00
Scenario III	2424.76	1739.87	1053.49	0.00	0.00

Source: Author's calculations based on data from the Finance Department, Government of Rajasthan.

It is evident that the compressions on the FD and the RD are the lowest in Scenario I relative to the other scenarios. The compressions on the RD are similar in Scenarios II and III, but the compression on the FD is more severe in Scenario III than in Scenario II. This is borne out by the impact on the total debt stock as a percentage of GSDP is shown in the chart 2.4.

Chart 2.4 Impact on Debt as a percentage of Nominal GSDP



The total debt stock comes down to 51.80 percent of GSDP in Scenario III in 2009-10, in contrast with 56.33 percent in Scenario I and 53.86 percent in Scenario II. The impact on interest payments as a percentage of revenue receipts is shown in the table 2.4.

Table 2.4

Interest Payments as a percentage of Revenue Receipts

Scenarios	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
I	30.97	29.64	27.67	27.75	27.76	27.48	26.95
II	30.97	29.64	27.67	27.55	27.32	26.80	26.04
III	30.97	29.64	27.67	27.18	26.69	25.97	25.04

Source: Ibid.

It should be noted that interest payments as a ratio of revenue receipts in 2009-10 derived from all the scenarios are much higher than the TFC target of 15 percent. This is due to the fact that the rate of growth assumed for simulating the outcomes in these scenarios is 10 percent, whereas the TFC target is based on a rate of growth of 12.8 percent.

The impact of the compressions on the projected rates of growth of capital expenditure and revenue expenditure is analysed in the next section.

2.4 SIMULATIONS OF EXPENDITURE IMPLICATIONS OF FISCAL CORRECTION

The following table summarizes the impact on the projected five-year average growth rate of capital expenditure and non-interest revenue expenditure and contrasts them with the growth rates achieved over 2000-05:

Table 2.5

Impact on Five-Year Average Compound Growth Rate of Capital Expenditure and Non-Interest Revenue Expenditure

Variables	Capital expenditure		Non-interest revenue expenditure	
Year	2000-05	2005-10	2000-05	2005-10
Scenario I	20.67	12.27	7.11	7.94
Scenario II		9.87		8.21
Scenario III		9.06		8.50

Source: Ibid.

The rate of growth of non-interest revenue expenditure is higher over 2005-10 in all the scenarios than the rate of growth over 2000-05. It is highest in the third scenario and the lowest in the case of the State FRBM. This is the impact of different degrees of interest relief present in each of these scenarios.

The rate of growth of capital expenditure is, however, much lower over 2005-10 than the rate over 2000-05 in all the cases. The degree of compression is the largest in Scenario III and the least in Scenario I. This is because the compression on the fiscal deficit is the greatest in Scenario III. The rate of growth of capital expenditure in Scenarios II is dependent on the rate of reduction of the revenue deficit as the absolute amount of fiscal deficit is fixed at the level of 2004-05.

Effectively, there is a trade-off between a lower interest burden (Scenarios II and III) and a higher rate of growth of capital expenditure (Scenario I), because the cost of adhering to the TFC requirements for debt write-off is the

lower rate of growth of capital expenditure. Thus it is evident that the choice of the paths for the fiscal deficit will greatly impact the permissible rate of growth of capital expenditure and thereby, the future growth potential of the state.

Appendix to Chapter 2

Table 2A.1 Scenario I State FRBM

	Rajasthan	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	**GSDP (Rs.cr.)**	104483.15	108733.99	119607.39	131568.13	144724.94	159197.43	175117.18
2a.	**Own revenue (Rs.cr.)**	9317.83	10432.26	10966.67	12333.99	13868.25	15586.55	17518.45
2b.	**Central transfers (Rs.cr.) = statutory share of taxes + grants**	6106.02	7048.29	8255.84	9351.13	10233.33	11261.20	12460.97
2	**Revenue receipts (RR) (Rs.cr.) = own revenue + central transfers**	15423.85	17480.55	19222.51	21685.12	24101.58	26847.75	29979.42
	RR/GSDP%	14.76	16.08	16.07	16.48	16.65	16.86	0.1712
3	**Revenue expenditure (Rs.cr.)**	18848.29	20128.34	21557.48	23668.67	25583.12	26847.75	29979.42
4	**Revenue deficit (RD) (Rs.cr.)**	3424.44	2647.79	2334.97	1983.55	1481.54	0.00	0.00
5	**(RD/RR) %**	22.20	15.15	12.15	9.15	6.15	0.00	0.00
5a.	**(RD/GSDP) %**	3.28	2.44	1.95	1.51	1.02	0.00	0.00
	Capital expenditure(Rs.cr.)	3942.68	4403.33	4942.83	5495.76	6166.80	7776.39	7853.56
	Total expenditure (Rs.cr.)	22790.97	24531.67	26500.31	29164.43	31749.93	34624.14	37832.97
6	**(Fiscal deficit/GSDP) %**	7.05	6.48	6.08	5.68	5.28	4.88	4.48
	Fiscal deficit (Rs.cr.)	7367.13	7051.12	7277.80	7479.31	7648.34	7776.39	7853.56
	Total debt (Rs.cr.)	53553.58	60604.70	67882.50	75361.81	83010.15	90786.54	98640.10
	Total interest payment (Rs.cr.)	4777.15	5181.00	5319.27	6016.76	6689.90	7378.25	8078.13
	Interest rate %	10.34	9.67	8.78	8.86	8.88	8.89	8.90
	(Debt/GSDP) %	51.26	55.74	56.75	57.28	57.36	57.03	56.33
	(Interest paid/GSDP) %	4.57	4.76	4.45	4.57	4.62	4.63	4.61
	(Interest paid/RR) %	30.97	29.64	27.67	27.75	27.76	27.48	26.95
7	**Primary fiscal deficit (PFD) (Rs.cr.)**	2589.98	1870.12	1958.53	1462.55	958.44	398.13	-224.57
	Primary revenue deficit (PRD) (Rs.cr.)	-1352.71	-2533.21	-2984.30	-4033.21	-5208.36	-7378.25	-8078.13
	(PRD/RR) %	-8.77	-14.49	-15.53	-18.60	-21.61	-27.48	-26.95
	Non-interest revenue expenditure (Rs.cr.)	14071.14	14947.34	16238.21	17651.90	18893.22	19469.50	21901.29
	(PFD/GSDP) %	2.48	1.72	1.64	1.11	0.66	0.25	-0.13

Source: Authors' calculations based on data from the Finance Department, GoR.

Notes: The fiscal deficit figure for 2004-05 is a revised estimate. The pre-actual figure for 2004-05 is Rs. 6145.98 crore.

Table 2A.2 Scenario II TFC Requirements for Full Debt Write-Off

	Rajasthan	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	GSDP (Rs.cr.)	104483.15	108733.99	119607.39	131568.13	144724.94	159197.43	175117.18
2a.	Own revenue (Rs.cr.)	9317.83	10432.26	10966.67	12333.99	13868.25	15586.55	17518.45
2b.	Central transfers (Rs.cr.) = statutory share of taxes + grants	6106.02	7048.29	8255.84	9351.13	10233.33	11261.20	12460.97
2	Revenue receipts (RR) (Rs.cr.) = own revenue + central transfers	15423.85	17480.55	19222.51	21685.12	24101.58	26847.75	29979.42
	RR/GSDP%	14.76	16.08	16.07	16.48	16.65	16.86	17.12
3	Revenue expenditure (Rs.cr.)	18848.29	20128.34	21647.27	23424.98	25155.07	26847.75	29979.42
4	Revenue deficit (RD) (Rs.cr.)	3424.44	2647.79	2424.76	1739.87	1053.49	0.00	0.00
5	(RD/RR) %	22.20	15.15	12.61	8.02	4.37	0.00	0.00
5a.	(RD/GSDP) %	3.28	2.44	2.03	1.32	0.73	0.00	0.00
	Capital expenditure (Rs.cr.)	3942.68	4403.33	4626.36	5311.25	5997.63	7051.12	7051.12
	Total expenditure (Rs.cr.)	22790.97	24531.67	26273.63	28736.24	31152.70	33898.87	37030.54
6	(Fiscal deficit/GSDP) %	7.05	6.48	5.90	5.36	4.87	4.43	4.03
	Fiscal deficit (Rs.cr.)	7367.13	7051.12	7051.12	7051.12	7051.12	7051.12	7051.12
	Total debt (Rs.cr.)	53553.58	60604.70	67346.95	74089.20	80831.45	87573.70	94315.95
	Total interest payment (Rs.cr.)	4777.15	5181.00	5319.27	5973.20	6584.63	7196.07	7807.50
	Interest rate%	10.34	9.67	8.78	8.87	8.89	8.90	8.92
	(Debt/GSDP) %	51.26	55.74	56.31	56.31	55.85	55.01	53.86
	(Interest Paid/GSDP) %	4.57	4.76	4.45	4.54	4.55	4.52	4.46
	(Interest Paid/RR) %	30.97	29.64	27.67	27.55	27.32	26.80	26.04
7	Primary Fiscal Deficit (PFD) (Rs. cr.)	2589.98	1870.12	1731.85	1077.92	466.49	-144.95	-756.38
	Primary Revenue Deficit (PRD) (Rs.cr.)	-1352.71	-2533.21	-2894.51	-4233.33	-5531.14	-7196.07	-7807.50
	(PRD/RR) %	-8.77	-14.49	-15.06	-19.52	-22.95	-26.80	-26.04
	Non-interest Revenue Expenditure (Rs.cr.)	14071.14	14947.34	16328.00	17451.78	18570.44	19651.69	22171.91
	(PFD/GSDP) %	2.48	1.72	1.45	0.82	0.32	-0.09	-0.43

Source: Ibid.

Table 2A.3 Scenario III Conformity Adjustment

	Rajasthan	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	**GSDP (Rs.cr.)**	104483.15	108733.99	119607.39	131568.13	144724.94	159197.43	175117.18
2a.	**Own Revenue (Rs.cr.)**	9317.83	10432.26	10966.67	12333.99	13868.25	15586.55	17518.45
2b.	**Central transfers (Rs.cr.) = statutory share of taxes + grants**	6106.02	7048.29	8255.84	9351.13	10233.33	11261.20	12460.97
2	**Revenue receipts (RR) (Rs.cr.) = own revenue + central transfers**	15423.85	17480.55	19222.51	21685.12	24101.58	26847.75	29979.42
	RR/GSDP %	14.76	16.08	16.07	16.48	16.65	16.86	17.12
3	**Revenue expenditure (Rs.cr.)**	18848.29	20128.34	21647.27	23424.98	25155.07	26847.75	29979.42
4	**Revenue deficit (RD) (Rs.cr.)**	3424.44	2647.79	2424.76	1739.87	1053.49	0.00	0.00
5	**(RD/RR) %**	22.20	15.15	12.61	8.02	4.37	0.00	0.00
5a.	**(RD/GSDP) %**	3.28	2.44	2.03	1.32	0.73	0.00	0.00
	Capital expenditure (Rs.cr.)	3942.68	4403.33	3746.98	4509.62	5198.63	6176.86	6794.55
	Total expenditure (Rs.cr.)	22790.97	24531.67	25394.25	27934.60	30353.70	33024.61	36773.96
6	**(Fiscal deficit/GSDP) %**	7.05	6.48	5.16	4.75	4.32	3.88	3.88
	Fiscal deficit (Rs.cr.)	7367.13	7051.12	6171.74	6249.49	6252.12	6176.86	6794.55
	Total debt (Rs.cr.)	53553.58	60604.70	66467.57	72408.19	78351.43	84219.43	90705.10
	Total interest payment (Rs.cr.)	4777.15	5181.00	5319.27	5894.05	6433.34	6972.87	7505.62
	Interest rate%	10.34	9.67	8.78	8.87	8.88	8.90	8.91
	(Debt/GSDP) %	51.26	55.74	55.57	55.03	54.14	52.90	51.80
	(Interest paid/GSDP) %	4.57	4.76	4.45	4.48	4.45	4.38	4.29
	(Interest paid/RR) %	30.97	29.64	27.67	27.18	26.69	25.97	25.04
7	**Primary fiscal deficit (PFD) (Rs.cr.)**	2589.98	1870.12	852.47	355.43	-181.22	-796.01	-711.07
	Primary revenue deficit (PRD) (Rs.cr.)	-1352.71	-2533.21	-2894.51	-4154.19	-5379.85	-6972.87	-7505.62
	(PRD/RR) %	-8.77	-14.49	-15.06	-19.16	-22.32	-25.97	-25.04
	Non-interest revenue expenditure (Rs.cr.)	14071.14	14947.34	16328.00	17530.93	18721.73	19874.89	22473.80
	(PFD/GSDP) %	2.48	1.72	0.71	0.27	-0.13	-0.50	-0.41

Source: Ibid.

Annexure to Chapter 2

RAJASTHAN STATE FISCAL RESPONSIBILITY RULES, 2005

NOTIFICATION

Jaipur, the …of …, 2005

In exercise of the powers conferred by section 10 of the Rajasthan Fiscal Responsibility and Budget Management Act, 2005 (Act no.7 of 2005), the State Government hereby makes the following rules, namely:

1. Short title and Commencement:

a) These rules may be called the Rajasthan Fiscal Responsibility Rules, 2005.
b) They shall come into force on the …day of …(month), 2005.

2. Definitions:

In these rules, unless the context otherwise requires:
a) "Act" means the Rajasthan Fiscal Responsibility Act, 2004 (Act no.7 of 2005);
b) "form" means a form appended to these rules;
c) "section" means a section of the Act;
d) words and expressions used herein but not defined and defined in the Act shall have the meanings respectively assigned to them in the Act.

3. Medium Term Fiscal Policy Statement:

a) The Medium Term Fiscal Policy Statement, as required under sub-sections (2) and (3) of section 5 of the Act, shall include in Form F-1 three year rolling targets in respect of the following fiscal indicators:
    i. Revenue deficit as a percentage of nominal GSDP;
    ii. Fiscal deficit as a percentage of nominal GSDP. For the purpose of calculation of fiscal deficit, borrowings by Public Sector Undertakings and Special Purpose Vehicles and other equivalent instruments where liability for repayment is known with full certainty to fall on the State Government are to be treated as borrowings of the State Government;
    iii. Total outstanding liabilities as a percentage of GSDP;
    iv. Total outstanding guarantees as a percentage of GSDP;
    v. Any additional target(s) that the State may like to prescribe, as provided for, in respect of sub-sections (a), (b) and (c) of section 6 of the Act, for the period after the 31st day of March 2010.

b) The Medium Term Fiscal Policy Statement shall prescribe the form in which the annual statement shall be prepared for detailing the prospects for the State economy and related fiscal strategy. It shall also provide for a format for the special statement, alongside the budget, giving in detail the number of employees in Government, Public Sector and aided institutions and related salaries;

c) The Medium Term Fiscal Policy Statement shall also explain the assumptions underlying the above-mentioned targets for fiscal indicators and an assessment of sustainability relating to the items indicated in sub-section (2) of section 5 of the Act.

4. Fiscal Policy Strategy Statement:

The Fiscal Policy Strategy Statement as required under sub-section (4) of section 5 of the Act shall be in Form F-2.

5. Disclosures:

a) The State Government shall, at the time of presenting the budget, make disclosures as required under section 7 of the Act together with the following statements:
   i. A statement of select indicators of the fiscal situation in Form D-1.
   ii. A statement on components of State Government liabilities and interest cost of borrowings/ mobilization of deposits in Form D-2.
   iii. A statement on the Consolidated Sinking Fund in Form D-3.
   iv. A statement on guarantees given by the Government in Form D-4.
   v. A statement on the outstanding risk-weighted guarantees in Form D-5.
   vi. A statement on the Guarantee Redemption Fund in Form D-6.
   vii. A statement of assets in Form D-7.
   viii. A statement on claims and commitments made by the State Government on revenue demands raised but not realized in Form D-8.
   ix. A statement on liability in respect of major works and contracts, committed liabilities in respect of land acquisition charges and claims on the State Government in respect of unpaid bills on works and supplies in Form D-9.

b) The provisions of sub-rule a) shall be complied with not later than three years after the coming into force of this Act.

6. Fiscal Conduct:

a) No department of the State Government shall allow any liabilities, which have become due, to remain unpaid for a period of more than three months, or incur fresh liabilities, if previously increased liabilities have remained unpaid for a period of more than three months.

b) No financial disbursements from the State Governments to State Public Sector Undertakings for the purposes of cover of losses may be made from the capital account. All such disbursements shall be made from the revenue account.

7. Measures to enforce compliance:

Compliance with the targets in section 6 will be automatically ensured with the six-monthly reviews of trends in receipts and expenditure, as mentioned in sub-section (2) of section 9 of the Act. In case the outcome of the review at the end of the first six months of any financial year shows that:

a) The total non-debt receipts are less than 50 percent of Budget Estimates for that year; or
b) The fiscal deficit is higher than 50 percent of the Budget Estimates for that year; or
c) The revenue deficit is higher than 50 percent of the Budget Estimates for that year;

Then:
the Minister-in-charge of the Ministry of Finance shall, in accordance with sub-section (2) of section 9 of the Act, make a statement in the Legislature during the session immediately following the end of the second quarter detailing the corrective measures taken, the manner in which any supplementary demands for grants are proposed to be financed and the prospects for the fiscal deficit of that financial year.

8. Terms and conditions of service of Members of the Public Expenditure Review Committee:

The Public Expenditure Review Committee, as required under section 8 of the Act shall include the Principal Finance Secretary of the State Government of Rajasthan as Member-Secretary (ex officio). The other four members shall have a term of two years (fixed). The Committee is required to meet quarterly, and to assess whether departmental expenditures are in line with the expenditure policy as stated in the Fiscal Policy Strategy Statement. The minutes of the quarterly meetings shall serve as the official record of the recommendations of the committee, and shall be circulated to all departments of the State Government.

FORM F-1
(See rule 3)

MEDIUM TERM FISCAL POLICY STATEMENT

Fiscal Indicators – Rolling Targets

		Current year (t-1) revised estimates (BE)	Current year (t-1) revised estimates (RE)	Ensuing year (t); budget estimates (BE)	Targets for next two years	
					t + 1	t + 2
1.	Revenue deficit as percentage of GSDP					
2.	Fiscal deficit as percentage of GSDP					
3.	Total outstanding liabilities as percentage of GSDP					
4.	Any additional target(s)					

A. Assumptions Underlying the Fiscal Indicators:

1. Revenue receipts

   (a) Tax revenue - Sectoral and GSDP growth rates
   (b) Non-tax-revenue – Policy stance
   (c) Devolution to Local Bodies
   (d) Share of own tax revenue to total tax revenue
   (e) Share of own non-tax revenue to total non-tax revenue.

2. Capital receipts: Debt stock, repayment, fresh loans and policy stance

   (a) Loans and advances from the Centre
   (b) Special securities issued to the NSSF
   (c) Recovery of loans and advances
   (d) Borrowings from financial institutions
   (e) Other receipts (net) – small savings, provident funds, etc.
   (f) Outstanding Liabilities – Internal Debt and Other Liabilities.

3. Total expenditure – Policy Stance

   (a) Revenue account
      (i) Interest payments – (a) on borrowings during the year (aggregate and category-wise); (b) on outstanding liabilities – (aggregate and category-wise).
      (ii) Major subsidies
      (iii) Salaries
      (iv) Pensions

(v) Others

(b) Capital account
(i) Loans and advances
(ii) Capital Outlay

3. GSDP growth

B. Assessment of sustainability relating to:

(i) **The balance between receipts and expenditure in general and revenue receipts and revenue expenditure in particular:** The Medium Term Fiscal Policy Statement may specify the tax-GSDP ratio, own tax-GSDP ratio and State's share in Central tax – GSDP ratio for the current year and subsequent two years with an assessment of the changes required for achieving it. It may discuss the non-tax revenues and the policies concerning the same. Expenditure on revenue account, both plan and non-plan, may be also discussed with particular emphasis on the measures proposed to meet the overall objectives. It may discuss policies to contain expenditure on salaries, pension, subsidies and interest payments. An assessment of the capital receipts shall be made, including the borrowings and other liabilities, as per policies spelt out. The statement shall also give projections for GSDP and discuss it on the basis of assumptions underlying the indicators in achieving the sustainability objective.

(ii) **The use of capital receipts including market borrowings for generating productive assets:** The Medium Term Fiscal Policy Statement may specify the proposed use of capital receipts for generating productive assets in different categories. It may also spell out the proposed changes among these categories and discuss them in terms of the overall policy of the Government.

(iii) **The estimated yearly pension liabilities worked out on actuarial basis for the next ten years:** In case it is not possible to calculate the pension liabilities on actuarial basis during the period of first five years after the coming into force of this Act, the State Government may, during that period, estimate the pension liabilities by making forecasts on the basis of trend growth rates (i.e. average rate of growth of actual pension payments during the last five years for which data are available).

D. Annual Statement Detailing the Prospects for the State Economy:

(i) Overview of the State Economy: This paragraph shall contain a synoptic analysis of trend in the rate of growth of output. Information on key macroeconomic indicators shall be presented in the table at the end of this form.

(ii) GSDP Growth: This paragraph shall contain an analysis of trends in overall GSDP growth and its sectoral composition.

(iii) Overview of State Government Finances: This paragraph shall detail the developments in State Finances including an analysis of trends in revenue collections and expenditure, and the important fiscal deficit and debt indicators and the measures taken to improve the financial position of the State Government. Trends in State Government finances shall be presented in the format appended (Table 1). This will, inter alia, indicate the developments related to the Consolidated Sinking Fund, Guarantee Redemption Fund, and issuances of risk-weighted guarantees and Ways and Means Advances availed from the RBI. This paragraph shall also cover analysis of finances of local bodies and State-level public sector undertakings including the progress made by them for compilation/finalisation of annual statements of accounts and Central transfers.

(iv) Prospects: Based on the trends in major sectors presented in the previous sections, an assessment shall be made regarding the growth prospects, along with the underlying assumptions. An assessment of fiscal prospects shall also be made. The details of the trends in macroeconomic indicators, along with fiscal indicators, shall be presented in the format presented in table 1.

E. Statement Detailing the Number of Employees and Salaries in Government Departments, Public Sector Enterprises and Government-Aided Institutions: The number of employees in the Government Departments, Public Sector Enterprises and Government-Aided institutions shall be disclosed in the following format (table 2).

Table 1: Trends in Select Macroeconomic and Fiscal Indicators

		April-reporting period*			
		Absolute value (Rs crore)		Percentage Changes	
		Previous year	Current year	Previous year	Current year
	Real Sector				
I	GSDP at factor cost				
(a)	at current price				
(b)	at 1993-94 price				
II	Agriculture production				
III	Industrial production				
IV	Tertiary sector production				
	Government Finances				
1	Revenue receipts (2+3)				
2	Tax revenue (2.1+2.2)				
2.1	Own tax revenue				
2.2	State's share in central taxes				
3	Non-tax revenue (3.1+3.2)				
3.1	State's own non tax revenue				
3.2	Central transfers				
4	Capital receipts (5+6+7)				
5	Recovery of loans				
6	Other receipts				
7	Borrowing and other liabilities				
8	Total receipts (1+4)				
9	Non-plan expenditure				
10	Revenue account				
	Of which				
11	(a) Interest payments				
	(b) Subsidies				
	(c)Wages and salaries				
	(d) Pension payments				
12	Capital account				
13	Plan expenditure (13.1+13.2)				
13.1	Revenue account				
13.2	Capital account				
14	Total expenditure (9+13)				
15	Revenue expenditure (10+13.1)				
16	Capital expenditure (12+13.2)				
17	Revenue deficit (15-1)				
18	Fiscal deficit {14-(1+5+6)}				
19	Primary deficit (18-11(a))				
	Memo:				
	Average amount of WMA from RBI^				
	Average amount of OD from RBI^				
	Number of days of OD				
	Number of occasions of OD				

Notes: * Date will relate to the period up to which information for the current year is available. To facilitate comparison, date of previous year corresponds to the same period of current year. Accordingly, reporting period may vary for different items.

^ The average amount of WMA/OD is calculated by summing up the outstanding amount of WMA as on each day (including holidays) and dividing by the total number of days during April-reporting period.

Table 2: Employment and Salary Expenditure in Government Departments, Public Sector Enterprises and Government-Aided Institutions

		Number of employees		**Salary expenditure**		**Salary expenditure per person**	
		Previous year	**Current year**	**Previous year**	**Current year**	**Previous year**	**Current year**
		(Actuals)	(RE)	(Actuals)	(RE)	(Actuals)	(RE)
S. No.	*(1)*	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*
1	Government Departments						
2	Public Sector						
3	Government-Aided Institutions						

FORM F-2
(See rule 4)

FISCAL POLICY STRATEGY STATEMENT

A. Fiscal Policy Overview: This paragraph will present an overview of the fiscal policy currently in vogue.

B. Fiscal policy for the ensuring year: This paragraph shall have, *inter alia*, five sub-paragraphs dealing with:

1. *Tax Policy*

In the sub-paragraph on tax policy, major changes proposed to be introduced indirect and indirect taxes in the ensuring financial year will be presented. It shall contain an assessment of exemption in various taxes and how far it relates to principles regarding tax exemptions.

2. *Expenditure Policy*

Under expenditure policy, major changes proposed in the allocation for expenditure shall be indicated. It shall also contain an assessment of principles regarding the benefits and target group of beneficiaries.

3. *Borrowings and Other Liabilities, Lending and Investments*

In this sub-paragraph on borrowings, the policy relating to internal debt, including the access to WMA/OD facility from the Reserve Bank of India, Government lending, investments and other activities; including principles regarding average maturity structure, bunching of repayments, etc., shall be indicated. The borrowings by Public Sector Undertakings and Special Purpose Vehicle), lending, investments, pricing of administered goods and services and description of other activities, and activities of Public Sector Undertakings which have potential budgetary implications; and the key fiscal measures and targets pertaining to each of these shall be indicated.

4. *Consolidated Sinking Fund*

In this sub-paragraph, the policy related to the Consolidated Sinking Fund (CSF) shall be indicated.

5. *Contingent and other Liabilities*

Any change in the policy on contingent and other liabilities, in particular guarantees, which have potential budgetary implications shall be indicated. Any change in the policy related to special purpose vehicle (SPV) and other equivalent instruments where liability for repayment is on the State Government shall be indicated. The policy on building up of the Guarantee Redemption Fund (GRF) and commission charged/ collected for guarantees issued shall also be indicated.

6. *Levy of User Charges*

Any change proposed in the levy of user charges of public services shall be spelt out.

C. Strategic Priorities for the Ensuing Year:

1. Resource mobilization for the ensuing financial year through tax, non-tax and other receipts shall be spelt out.
2. The broad principles underlying the expenditure management during the ensuing year shall be spelt out.
3. Priorities relating to management of public debt proposed during the ensuring year shall be indicated.

D. Rationale for Policy Changes:

1. The rationale for policy changes consistent with the Medium Term Fiscal Policy Statement, in respect of taxes proposed in the ensuing Budget shall be spelt out.
2. The rationale for major policy changes in respect of budgeted expenditure including expenditure on subsidies and pensions shall be indicated.
3. Rationale for changes, if any, proposed in the management of the public debt shall be indicated.
4. The need for changes, if any, proposed in respect of pricing of administered goods shall be spelt out.

E. Policy Evaluation:

The paragraph shall contain an evaluation of the changes proposed in the fiscal policy for the ensuring year with reference to fiscal deficit reduction and objectives set out in the Medium Term Policy Statement.

FORM D-1
[See rule 5]

Select Fiscal Indicators

	Item	Previous year (Actuals)	Current year (RE)
1.	Gross fiscal deficit as percentage of GSDP		
2.	Revenue deficit as percentage of gross fiscal deficit		
3.	Total liabilities as percentage of GSDP		
4.	Total liabilities as percentage of total revenue receipts		
5.	Total liabilities as percentage of total own revenue receipts		
6.	Own revenue receipts as percentage of revenue expenditure		
7.	Capital outlay as percentage of gross fiscal deficit		
8.	Interest payment as percentage of revenue receipts		
9.	Non-development expenditure as percentage of aggregate disbursements		
10.	Gross transfers from the Centre as percentage of aggregate disbursements		
11.	Non-tax revenue as percentage of revenue expenditure		

FORM D-2
[See rule 5]

A. Components of State Government Liabilities

(Rs. crore)

Category	**Raised during the fiscal year**		**Repayment/redemp-tion during the fiscal year**		**Outstanding amount (end-March)**	
	Previous year (actuals)	**Current year (RE)**	**Previous year (actuals)**	**Current year (RE)**	**Previous year (actuals)**	**Current year (RE)**
Market borrowings						
Loans from Centre						
Special securities issued to the NSSF						
Borrowings from financial institutions/banks						
WMA/OD from RBI						
Small savings, provident funds, etc.						
Reserve deposits						
Other liabilities						
Total						

FORM D-2
[See rule 5]

B. Weighted Average Interest Rates on State Government Liabilities

(Rs. crore)

Category	Raised during the fiscal year^		Outstanding amount (End-March)	
	Previous year (actuals)	Current year (RE)	Previous year (actuals)	Current year (RE)
Market borrowings				
Loans from Centre				
Special securities issued to the NSSF				
Borrowings from financial institutions/banks				
WMA/OD from RBI				
Small savings, provident funds, etc.				
Reserve deposits				
Other liabilities				
Total*				

^ Weighted average interest rate where the respective weight is the amount borrowed. This is calculated on contractual basis and then annualized.

* Weighted average interest rate where the weights are the amount of the respective components of State Government liabilities.

FORM D-3
[See rule 5]

Consolidated Sinking Fund

(Amount in Rs. crore)

Outstanding at the beginning of the previous year	Additions during the previous year	Withdrawals during the previous year	Outstanding at the end of previous year/ beginning of current year	(4)/Stock of SLR borrowings (%)	Additions during the current year	Withdrawals during the current year	Outstanding at the end of previous year/ beginning of current year	(8)/Stock of SLR Borrowings (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

FORM D-4
[See rule 5]

Guarantees given by the Government

Category (No. of guarantees within bracket)	Maximum amount guaranteed during the year (Rs. crore)	Outstanding at the beginning of the year (Rs. crore)	Additions during the year (Rs. crore)	Deletions (other than invoked during the year) (Rs. crore)
(1)	(2)	(3)	(4)	(5)

Invoked during the year (Rs. crore)		Outstanding at the end of the year (Rs. crore)	Guarantee commission or fee (Rs. crore)		Remarks
Discharged	Not discharged		Receivable	Received	
(6)	(7)	(8)	(9)	(10)	(11)

FORM D-5
(See rule 5)

Outstanding Risk – Weighted Guarantees

(Amount in Rs. crore)

Default probability	**Risk weights (per cent)**	**Amount out-standing as in the previous year and the current year**	**Risk weighted outstanding guarantee in the previous year and the current year**
Direct liabilities	100		
High risk	75		
Medium risk	50		
Low risk	25		
Very low risk	5		
Total Outstanding			

FORM D-6
[See rule 5]

Guarantee Redemption Fund (GRF)

(Amount in Rs. crore)

Outstanding invoked guarantees at the end of the previous year	Outstanding amount in the GRF at the end of the previous year	Amount of guarantees likely to be invoked during the year	Addition to the GRF during the current year	Withdrawal from the GRF during the current year	Outstanding amount in the GRF at the end of the current year
(1)	(2)	(3)	(4)	(5)	(6)

Note: As per the terms of the GRF, during each year, the Government is required to contribute an amount equivalent at least to one-fifth of the outstanding invoked guarantees plus an amount likely to be invoked as a result of the incremental guarantees issued during the year.

FORM D-7
[See rule 5]

Statement of Assets

	Assets at the beginning of the reporting year	**Assets acquired during the reporting year**	**Cumulative total of assets at the end of the reporting year**
Financial assets:			
Loans and advances Loans to local bodies Loans to companies Loans to others			
Equity investment Shares Bonus shares			
Investments in GoI dated securities/treasury Bills			
Investments in 14-day intermediate treasury Bills			
Other financial investments (please specify)			
Total			
Physical assets:			
Land			
Building – office/ residential			
Roads			
Bridges			
Irrigation projects			
Power projects			
Other capital projects			
Machinery & equipment			
Office equipment			
Vehicles			
Total			

Notes:

1. Assets above the threshold value of Rupees two lakh only to be recorded.
2. Reporting year refers to the second year preceding the year for which the annual financial statement and demands for grants are presented.
3. The Statement in respect of physical assets is to be prepared based on asset register maintained by the Government. The value to be indicated would be book-value, i.e. acquisition cost netted for depreciation/impairment.
4. In case the states is not in a position to provide information in respect of physical assets, it may to begin with, provide information only in respect of financial assets. Physical assets may be disclosed within 3 years from the date of publication of the Notification of the Rules in the State Gazette.

FORM D-8
[See rule 5]

Tax Revenues Raised But Not Realised (principal taxes)
(As at the end of the reporting year)

		Amount under disputes (Rs. crore)					Amount under disputes (Rs crore)					Grand total
Major head	**Description**	**Over 1 year but less than 2 years**	**Over 2 years but less than 5 years**	**Over 5 year but less than 10 years**	**Over 10 years**	**Total**	**Over 1 year but less than 2 years**	**Over 2 years but less than 5 years**	**Over 5 year but less than 10 years**	**Over 10 years**	**Total**	
	Taxes on income & expenditure											
	Agricultural income tax											
	Taxes on professions, trades, call-ings and employment											
	Taxes on property & capital services											
	Land revenue											
	Stamps & re-gistration fees											
	Urban immovable property tax											
	Taxes on commodities and services											
	Sales tax											
	Central sales tax											
	Sales tax on motor spirit & lubricants											
	Surcharge on sales tax											
	State excise											
	Taxes on vehicles											
	Other taxes											
	TOTAL											

Note: Reporting year refers to the second year preceding the year for which the annual financial statement and demands for grants are presented.

FORM D-9
[See rule 5]

Statement of Miscellaneous Liabilities: Outstandings

(Rs. crore)

	Outstanding Amount*
Major Works and Contracts	
Committed liabilities in respect of land acquisition charges	
Claims in respect of unpaid bills on works and supplies	

***** The outstanding amount pertains to the end-March figure for the year before the current year.

3. RESTRUCTURING NON-DEPARTMENTAL PUBLIC SECTOR UNDERTAKINGS

3.1 AGGREGATE PERFORMANCE

In the context of state finances, non-departmental Public Sector Undertakings (PSUs) play a very important role. A substantial part of state government expenditure arises due to subsidy payments made to loss-making PSUs. Very few contribute interest and dividend payments to the exchequer.

There were 27 public sector units under the purview of the State Bureau of Public Enterprises as on end-March, 2003. In terms of structure, 7 of these were statutory Boards and the remaining 20 were registered companies. In terms of nature of business, these companies have been grouped into five categories: manufacturing (eight companies), trading and services (three companies), financial (two companies), promotional (four companies) and utility (ten companies). Among utility companies, there has been some change in the structure of Rajasthan State Electricity Board (RSEB). It was unbundled into five separate power companies in 2000. In the manufacturing segment, Rajasthan State Mineral Development Corporation Ltd. has been merged with Rajasthan State Mines and Minerals Ltd. Of the 27, only 21 are active at present.

Aggregate Financial Performance: In the aggregate, the growth of total revenue fared well over 1990-91 to 1998-99 with the second highest cumulative annual growth rate (CAGR) of 21.56 percent among twenty-six states and Union Territories. This was well above the all-India average CAGR of 15.14 percent. The operating margin (defined as the percentage of operating surplus with respect to total revenue) was as high as 23.13 percent in 1997-98, but went down to 15.21 percent in 2000-01, mainly due to a sharp increase in operating costs. Nonetheless, there was no revenue deficit in the aggregate.

In terms of contribution towards non-tax revenue of the state, the performance of PSUs has been poor. The growth rate of dividend payments of PSUs in Rajasthan does not fare well in comparison to the growth rate of dividends paid by public sector companies at the all-India level over 1990-91 to 1998-99.[1] In recent years, dividend and profits have been mostly below the all-

[1] Final Report of the Study Group on Reforms in State Public Sector Undertakings; Volume I; Planning Commission, August 2002.

India average as shown in table 3.1. Not only is the total sum of dividend payment very small, the number of companies paying dividends is also just a handful. For instance, in 2000-01, just a couple of companies contributed 92 percent of the total dividend payment.[2] Further, the total contribution to government in the form of excise duty, income tax dividend, cess and interest on government loans has declined from Rs. 549.29 crore in 1999-00 to Rs. 352.53 crore in 2002-03, as shown in table 3.2.

Table 3.1

Dividends and Profits of the PSUs

(Rs. crore)

Sl.No.	States	2002-03(A/C)	2003-04(RE)	2004-05(BE)
1	AP	14.93	3.22	3.35
2	Bihar	1.34	44.47	1.39
3	Chhattisgarh	0.09	0.01	0.01
4	Goa	25.57	50.37	100.37
5	Gujarat	0.19	3.52	3.87
6	Haryana	42.03	33.60	30.20
7	Jharkhand	1.73	3.99	4.20
8	Karnataka	1.12	1.12	1.20
9	Kerala	9.61	20.06	21.66
10	MP	4.09	23.46	17.52
11	Maharashtra	1.86	2.34	2.34
12	Orissa	152.22	10.00	10.15
13	Punjab	0.91	1.00	1.00
14	**Rajasthan**	**8.26**	**19.63**	**5.10**
15	Tamil Nadu	25.99	25.69	26.39
16	Uttar Pradesh	7.84	5.92	5.92
17	West Bengal	1.38	1.66	1.99
	Average	**17.60**	**14.71**	**13.92**

Source: RBI State Finances Study of Budgets 2004-05.

Despite the higher than average growth rate of total revenue, return on investment for these companies have been much lower than the norms set down by the Planning Commission. The Planning Commission's stipulated returns on investment for the different categories of manufacturing, trading and services, financial, promotional and utility are 12 percent, 10 percent, 9 percent, 8 percent and 12 percent respectively.[3] During 1990-91 to 1998-99, none of them met these criteria, except promotional companies in the year 1996-97. Additionally,

[2] RSMML accounted for 62 percent and RSWC accounted for 30 percent of the total dividend payment of Rs. 498.59 lakhs in 2000-01. The others contributed a mere 8 percent of the total.

[3] Final Report of the Study Group on Reforms in State Public Sector Undertakings; Volume I; Planning Commission, August 2002.

the rates of return of manufacturing, trading and services and financial companies were almost uniformly below the all-India averages for this period as shown in table 3.3.

Table 3.2

Details of Government Investment in the Government Companies of Rajasthan

(Rs. crore)

Category	Item	1999-00	2000-01	2001-02	2002-03
Equity	Investments	11.05	31.08	333.20	326.67
	Cumulative investments	2231.75	2262.83	2596.03	2922.70
	(% of total paid-up capital)	93.95	94.58	94.24	93.56
	Proposed dividends	4.80	4.98	5.19	5.79
Debt	Term loans	1887.26	428.16	456.55	410.32
	(% of total loans)	20.50	4.41	4.12	3.27
	Contribution to Govt.[@]	549.29	512.62	459.27	352.53

Source: Public Enterprises Profile, Bureau of Public Enterprises; State Enterprises Department, Jaipur, Rajasthan.

Notes: @ : Contribution to Government includes aggregate amount of excise duty, Income tax dividend, cess, interest on capital and interest on Government loans (in case of RSEB).

Table 3.3

Average Rates of Return over 1990-91 to 1998-99

Category of PSU	Rajasthan	All-India
Manufacturing	4.09	4.75
Financial	0.49	7.21
Utility	8.68	5.21
Trading and Services	5.80	16.75
Promotional	6.02	1.99

Source: Final Report of the Study Group on Reforms in State Public Sector Undertakings; Volume I; Planning Commission, August 2002.

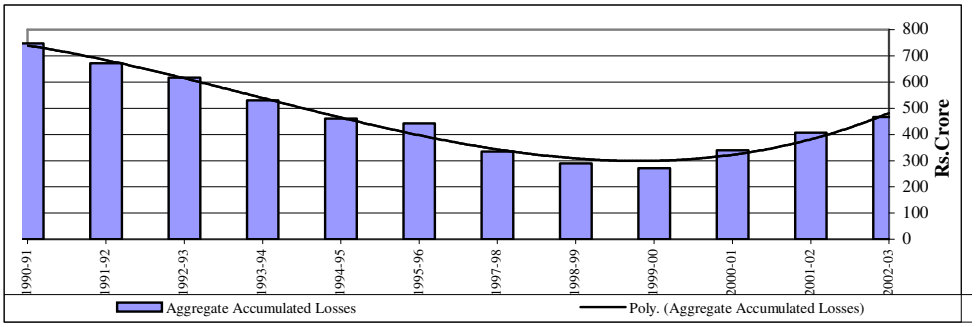
However, in terms of reduction of aggregate accumulated losses, performance of these companies was better than the all-India average for the period 1990-91 to 1998-99. Aggregate accumulated losses registered year-on-year decreases from 1990-91 to 1998-99, unlike any other state. The compound

annual growth rate (CAGR) of accumulated losses for this period was -11.88 percent, whereas the contemporaneous all-India average CAGR for accumulated losses was 13.53 percent.

This streak of good performance came to a halt in 2000-01, when accumulated losses went up from Rupees 262.89 crore in 1999-00 to Rupees 338.79 crore, as shown in the chart 3.1.

Chart 3.1

Aggregate Accumulated Losses of PSUs in Rajasthan (Rs. crore)



Source: Data upto 1999-00 from the Final Report of the Study Group on Reforms in State Public Sector Undertakings; Volume I; Planning Commission, August 2002. From 2000-01, data sourced from Public Enterprises Profile, Bureau of Public Enterprises; State Enterprises Department, Jaipur, Rajasthan.

Capital Formation: Rajasthan's non-departmental PSUs contributed to only 5 percent of the total investment made by PSUs across states in 1998-99. This is contrast to 11 percent of total investment made by PSUs of Uttar Pradesh and 6 percent by PSUs of West Bengal.

Summary of the Aggregate Scenario: In the aggregate, the government companies are operationally in surplus and have reduced accumulated losses year-on-year upto 2000-01. However, this aggregate picture coexists with a drag on the finances of the states due to the magnitude of the losses made by just a few of the government companies. The Government of Rajasthan is currently giving explicit subsidies to power companies in Rajasthan. It is also bearing the burden of repaying the loans taken by Rajasthan Land Development Bank, which has been defunct for quite some time. Rajasthan State Road and Transport Corporation Limited (RSRTC) alone had a share of 58.45 percent in the aggregate accumulated losses in 2000-01.

Henceforth, the focus will be on two of the largest loss-making companies. The layout of this chapter is as follows: Section 3.2 analyses the transport sector, with a focus on the depot-wise performance of the transport corporation. Section 3.3 reviews the pre- and post-reform scenario in the power sector, with recommendations for further restructuring. Section 3.4 analyses the extent of labour redundancy in some PSUs for which manpower data were available. Section 3.5 concludes.

3.2 TRANSPORT SECTOR

The Rajasthan State Road Transport Corporation (RSRTC), established in 1964, operates an impressive fleet of 4592 buses across 46 depots,[4] plying 10.70 lakh passengers every day (2004-05). However, its accumulated losses amount to Rs. 340.85 crore as on March 2004.

The Corporation does not receive any explicit subsidies from the state government. However, the Government has not received any dividend income from its equity investment in the Corporation. The latest data for FY 2004-05 shows that the equity stake of the Government in the Corporation is Rs.167.13 crore, including Rs. 112.11 crore outstanding Special Road Tax which was converted to equity. However, the Corporation has not declared any dividends from 1997-98 to 2002-03.

On the other hand, the Corporation has paid Rs. 1.63 crore each year from 2001-02 to 2003-04 as interest on loans taken from the state government. Over the entire 10th Plan period (2002-07), the Corporation has estimated an interest burden of Rs. 8.15 crore on state government loans.

Therefore, the government has received interest income on debt from the Corporation but nothing in return of equity invested. However, the Corporation has the potential to become a lucrative investment option for the government if it becomes financially healthy and starts paying adequate dividends (so that return on equity is at least 12 percent). Given its good operational performance and the positive gross surplus (explained in the next section) from 2001-02 to the present, there is every reason to believe that targeted reforms that increase revenue and reduce redundant expenditure should be able to achieve this goal.

The aggregate performance of the Corporation is reviewed before analysing the depot-wise financial performance.

[4] 49 depots have recently been reduced to 46 with the closure of Jaisalmer, Falna and Revdar.

Financial Performance of the RSRTC: The income statement of the Corporation up to 2004 reveals that the Corporation had positive gross surplus (before deducting depreciation, interest payments and taxes) from 2001-02 to 2004-05. It is the subtraction of depreciation reserve, taxes and interest payments from gross surplus that gives rise to a negative net profit figure in these years.

In fact, the Corporation was making positive net profits up to 1996-97. It went into net losses in 1997-98 (V^{th} Pay Commission) and has been making losses since then. The salary increase that accompanied the V^{th} Pay Commission is one of the major reasons for the losses accumulated by the RSRTC. In fact, of the total accumulated loss of Rs.340.85 crore upto 31 March 2004, 52 percent is due to overtime payments, V^{th} Pay Commission arrears, bonus payments and other salary payments.

However, after an initial jump in net losses between 1997-98 and 2000-01, these losses have started coming down from Rs.62.91 crore in 2001-02 to Rs.37.62 crore in 2003-04. The Corporation has estimated that the losses for 2004-05 will be brought down further to Rs.14 lakh.[5] Nonetheless, it is worrisome that the Corporation is making a net loss of 66 paise per kilometer (2003-04).

The fare structure of the RSRTC, in comparison to that of other transport corporations, is given in table 3.4. These fares are prior to revisions in 2005.

With respect to the older tariff rates of RSRTC, the table shows that the RSRTC had the cheapest fares in the Local, Express and Semi-Deluxe categories in comparison to other states. RSRTC has recently hiked tariffs partially, after two recent tariff orders on 2 July 2005 and again on 10 September 2005, as shown in table 3.5.[6] The full tariff hike permissible under the tariff orders has not been implemented in order to keep RSRTC comparable to the rates offered by private competitors in the state. Even this partial tariff increase is estimated to yield an additional Rs.47.70 crore in 2005-06.

[5] This reduction in losses to Rs. 14 lakh in 2004-05 is through book adjustments, whereby outstanding salary arrears and uniform expenses have been written off.
[6] The latter tariff hike has been approved due to the recent hike in diesel and petrol prices.

Table 3.4

Comparative Fare Structure of the RSRTC
(Prior to 2005 revisions)

(paise per seat per km)

Sl. No.	State (1)	Local (2)	Express (3)	Semi deluxe (4)	Deluxe (5)	A.C. (6)	C.T.S (7)	w.e.f	Remarks
1	Rajasthan	33.00	40.00	46.00	67.00	120.00	41.12	22.06.02 14.11.99 03.12.97	(3 and 4) (7) (5 and 6)
2	Haryana	45.00	50.00	67.50	90.00	157.50	-	21.08.03	-
3	U.P.	46.89	-	53.60	73.00	-	-	01.08.04	-
4	Gujarat	35.00	46.00	50.75	55.00	55.00	-	11.11.04	-
5	Punjab	42.00	52.50	63.00	84.00	105.00		31.01.03	-
6	H.P.	37.98	47.48	56.97	117.70	-	-	22.10.99	-
7	Maharashtra	56.82	56.82	67.64	88.23	113.83	-	24.11.04	-
8	Uttaranchal	46.89	-	-	-	-	-	06.03.03	-
9	Chandigarh	-	90.00	-	200.00	-	-	15.12.03	-
10	J&K	-	-	-	-	-	-	-	-
11	Delhi	-	25.81	-	71.00	93.50	0	07.01.03	-

Source: RSRTC.

Cross-state comparison is not possible with respect to the new rates of RSRTC as the rates of other states shown in table 3.4 have also been revised due to increasing petrol and diesel prices. Data on recent tariff rates in the other states was not available. However, it is worth mentioning that the revised rates in Rajasthan in the Express and Semi-Deluxe categories are lower than the corresponding old rates in Gujarat. The revised rates in Rajasthan in the Local, Semi-Deluxe and Deluxe categories are also lower than the old rates in U.P. The new rates in all the categories in Rajasthan are lower than the old rates in Haryana.

Table 3.5

Latest Tariff Structure of RSRTC
(After Tariff Hikes on 2 July and 10 September, 2005)

(paise per seat per km.)

Category	Local	Express	Semi-Deluxe	Deluxe	A.C.	Volvo	C.T.S
Rate	38.00	45.00	47.00	69.00	120.00	150.00	49.43

Source: RSRTC

The Corporation has already taken some other measures for improving its financial health. Notable among them are:

- Negotiations with some oil companies for a Rs.900 per kilolitre discount on diesel, which will yield a cost saving of at least Rs.8 crore per annum.
- Increasing casing life of tyres from 1.45 lakh km to 1.55 lakh km which will give rise to a cost saving of Rs. 1 crore per annum.
- Negotiations with banks in order to reduce rate of interest on outstanding loans and thereby, save Rs.1.50 crore per annum.
- Sub-letting spare lands in the bus stands/ workshops to oil companies for petrol pumps so that non-operating revenue increases by more than Rs. 1 crore per annum.

The 'Turn-Around Strategy' of the Corporation (July 2005), which is currently under consideration by the state government, envisages that the Corporation will start making net profits from 2005-06 through improved operations management (increasing vehicle utilization from 346 km. to 370 km. per bus per day, increasing the number of A.C/ Deluxe buses gradually from the present 1.5 percent to 17 percent by 2011-12 etc.) and financial assistance from the state government. If implemented, the Strategy will cost the state government Rs.709 crore over 2005-06 to 2011-12. This additional burden on the state government should be subordinated to the overall fiscal constraints imposed by the FRBM, as mentioned in chapter 2 of the Report.

Operational Performance of the RSRTC: In terms of operational performance in the aggregate, RSRTC compares well with all-India figures. As per latest estimates, vehicle productivity of the RSRTC is 325 km per bus per day against the national average of 300 km per bus per day. Comparative operational performance of RSRTC with respect to five other state transport corporations is shown in table 3.6.

However, non-operational earnings, which have always been very low for RSRTC, have fallen from Rs. 0.43 per km in 2000-01 to Rs. 0.40 per km. in October 2004. In contrast, earnings per kilometer went up from Rs.10.79 to Rs.13.07 during this period.

Load factor was at 65.60 percent in 2003-04 and 70.30 percent in 2004-05. There is significant scope for improvement in the load factor and the Corporation is itself targeting a load factor of 71 percent in 2005-06. In fact, load factor achieved in the first quarter of 2005-06 is at 75 percent.

Table 3.6

Performance of RSRTC vis-à-vis other S.T.Us.

Particulars	2003-04						RSRTC 2004-05
	APSRTC	KSRTC	UPSRTC	GSRTC	MSRTC	RSRTC	
Average vehicles held	19012	4396	7394	8963	16121	4750	4592
Km/day (lakh)	61.93	15.36	20.44	27.67	48.23	15.26	15.27
Passenger/day (lakh)	91.25	16.85	9.90	27.23	56.57	9.95	10.70
Revenue/day (Rs. lakh)	791.16	211.26	235.26	340.03	734.48	197.15	211.41
Profit/loss (Rs. crore)	-33.92	26.22	-34.63	-268.18	-225.74	-37.62	-0.14
Profit/loss per km. (paise)	-14.96	46.64	-46.28	-264.84	-127.88	-0.14	-
Vehicle utilisa-tion (km)	326	349	277	309	299	342	346
E.P.K.M. (Rs.)	12.78	13.75	11.51	12.29	15.23	12.92	13.84
C.P.K.M. (Rs.)	12.93	13.29	11.97	14.94	16.51	13.59	14.68
Rate of accidents	0.10	0.15	0.12	0.16	0.19	0.12	0.11
Fuel (km./litre)	5.37	5.25	4.88	5.24	4.81	4.96	5.00
Buss staff ratio	6.27	5.37	6.15	6.08	6.36	4.90	4.82
Staff producti-vity (km.)	51.95	65.01	42.68	50.74	47.07	65.83	67.40

Source: RSRTC.

Notes: APSRTC : A.P. State Road Transport Corporation.
KSRTC : Kerala State Road Transport Corporation.
UPSRTC : U.P. State Road Transport Corporation.
GSRTC : Gujarat State Road Transport Corporation.
MSRTC : Maharashtra State Road Transport Corporation.

Surprisingly the RSRTC, with a reasonably low staff-bus ratio (4.82 in 2004-05, 4.96 upto November 2004) and a good fleet utilization (98 percent upto November 2004), has large losses and heavy expenditure due to salary payments.[7] This seeming contradiction apparently is a result of seniority of age

[7] The composition of the accumulated losses upto March 2004 reveals that most of it (Rs. 153 crore) is due to unpaid D.A. arrears, Vth Pay Commission arrears, overtime pay and bonus and ex-gratia payments. Large part of the due arrears have been written off this year, which has reduced the loss for 2004-05 to Rs.14 lakh.

profile of the Corporation staff, which has resulted in highly paid employees, as noted by the Planning Commission (Transport Division).[8]

Depot-wise performance: Currently, the Corporation operates a total of 46 depots. Of the initial 49 depots, Jaisalmer and Revdar have recently been closed down and Falna is being considered for closure. We have considered all 49 depots as the RSRTC Monthly Progress Report, November 2004 has reported the performance of all 49 depots. Depot-wise financial and operational performance is heterogeneous and the aggregate picture masks these individual differences. In fact, the load factor in the loss-making depots is much worse than the average load factor though they operate with a similar infrastructure and fixed costs, as shown below. Hence, relative to their load factor and kilometers operated, there is overstaffing in these depots.

Depots have been grouped into three categories according to net profits per kilometer as follows:

Group A: Depots with positive net profit per kilometer upto November 2004 (7 in number).

Group B: Depots with net losses below Rs. 2.00 per kilometer upto November 2004 (30 in number).

Group C: Depots with net losses greater than Rs. 2.00 per kilometer upto November 2004 (12 in number).

The Group C depots are weakest and the analysis focuses only on these depots. The combined loss of these depots is 66.18 percent of the total loss made by the Corporation in 2004-05 (upto November 2004). A focused effort at reducing the net losses of these depots would improve the overall financial health of the Corporation substantially.

The main operational parameters of these depots are shown in the table 3.7. It is evident from the table that the percentage of fleet utilization and staff-bus ratio is not very much below the average for these depots. In fact, Jhalana Dungri has a staff-bus ratio of 5.66, which is much higher than the average of 4.96 across all depots. This is due to the fact that this depot is in Jaipur, where most employees prefer to be posted.

[8] Report of meeting of the Planning Commission, 18 November, 2004.

Table 3.7

Operational Parameters of Group C Depots in 2004-05 (upto November'04)

Sl. No.	Depot	Loss per km.	Total staff	Staff bus ratio	Load factor %	Fleet utilization %
1	Jhalana Dungri	-4.38	594	5.66	73	97
2	Jaisalmer	-4.25	0	NA	48	97
3	Vidyadhar Nagar	-3.53	712	5.74	71	98
4	Khetri	-2.71	268	4.39	68	98
5	Bundi	-2.35	359	4.60	66	98
6	Falna	-2.31	183	3.89	63	91
7	Jodhpur	-2.29	609	4.72	59	98
8	Baran	-2.23	293	4.25	69	95
9	Srimadhopur	-2.23	256	3.61	64	92
10	Bikaner	-2.17	598	4.71	64	98
11	Nagaur	-2.16	387	4.30	66	98
12	Phalodi	-2.05	243	4.42	58	97
	Average across all Depots	**-1.04**	**22703**	**4.96**	**70**	**98**

Source: RSRTC Monthly Progress Report, November 2004.
Notes: The average figure is calculated with respect to all the 49 Depots.

Load factor of most of these depots is much lower than the average across all depots. With similar operational infrastructure and lower load factor than other depots, the average operational revenue for these depots should be lower than that across all depots.

This is borne out in table 3.8, which analyses the performance of these depots upto November 2004. The average operational revenue across all depots is Rs. 13.19 lakh per kilometer, whereas the average operational revenue for these 12 depots is Rs. 11.50 lakh per kilometer.

A possible reform scenario has been worked out in the same table. Other things constant, if operational revenue were increased by 20 percent for each of these depots, then net losses in these depots would go down by Rs. 1869.23 lakhs, which is equivalent to 89.88 percent decrease in the total net loss of these depots upto November 2004. If this 20 percent increase goes with a load factor increase of 10 percent, then the residual 9.1 percent has to come out of a tariff increase. This has been worked out in table 3.9.

Table 3.8

Reform Scenario: Operating Revenue is increased by 20 percent in Group C Category Depots (upto Nov'04)

(Rs. lakh, except where mentioned)

Sl. No.	Depot	Current operating revenue	Kilometers operated (lakh)	Operating revenue per km. (Rs.)	New operating revenue per km. (Rs.)	New operating revenue	Non-operating revenue	New total revenue	Total cost	Net new losses	Current losses	Net gain
1	**2**	**3**	**4**	**(5) = (3)/(4)**	**(6) = (5)*1.20**	**(7) = (4)*(6)**	**8**	**(9) = (7)+(8)**	**10**	**(11) = (9)-(10)**	**12**	**(13) = (11)-(12)**
1	Jhalana Dungri	783.45	65.04	12.05	14.45	940.14	7.72	947.86	1076.09	-128.23	-284.92	156.69
2	Jaisalmer	118.13	15.77	7.49	8.99	141.76	0.00	141.76	185.16	-43.40	-67.03	23.63
3	Vidyadhar Nagar	972.29	71.96	13.51	16.21	1166.75	11.67	1178.42	1237.79	-59.37	-253.83	194.46
4	Khetri	584.78	47.83	12.23	14.67	701.74	6.19	707.93	720.36	-12.43	-129.39	116.96
5	Bundi	867.98	68.11	12.74	15.29	1041.58	10.45	1052.03	1038.38	13.65	-159.95	173.60
6	Falna	388.34	32.62	11.90	14.29	466.01	4.73	470.74	468.37	2.37	-75.30	77.67
7	Jodhpur	1440.45	137.15	10.50	12.60	1728.54	31.21	1759.75	1785.58	-25.83	-313.92	288.09
8	Baran	625.90	49.31	12.69	15.23	751.08	9.88	760.96	745.98	14.98	-110.20	125.18
9	Srimadhopur	568.42	48.79	11.65	13.98	682.10	8.30	690.40	685.42	4.98	-108.70	113.68
10	Bikaner	1518.56	136.99	11.09	13.30	1822.27	44.65	1866.92	1859.85	7.07	-296.64	303.71
11	Nagaur	895.98	78.69	11.39	13.66	1075.18	9.69	1084.87	1075.46	9.41	-169.79	179.20
12	Phalodi	581.88	53.80	10.82	12.98	698.26	7.25	705.51	699.25	6.26	-110.12	116.38
	Total for group C depots	*9346.16*	*806.06*			*11215.39*	*151.74*	*11367.13*	*11577.69*	*-210.56*	*-2079.79*	*1869.23*
	Average for group C depots	*778.85*	*67.17*	*11.50*	*13.81*	*934.62*	*12.65*	*947.26*	*964.81*	*-17.55*	*-173.32*	*155.77*
	Average across all depots			**13.19**					**1444.87**		**-79.26**	

Source: Authors' calculations based on RSRTC Monthly Progress Report, November 2004.

Table 3.9

Reform Scenario Achieved by Increasing Load Factor by 10% and Mean Tariff by 9.1%

Sl No.	Depot	Load factor %	Kilometers operated (lakh)	Person kilometers (lakh)	Operating revenue (Rs.lakh)	Mean tariff (Rs.)	New mean tarriff (Rs.)	New load factor %	New operating revenue per km. (Rs.)
1	*2*	*3*	*4*	*5=3*4*	*6*	*7=6/5*	*8=(1.091)*7*	*9=(1.10)*3*	*10=8*9*
1	Jhalana Dungri	73	65.03	4747.19	783.45	0.17	0.18	80.30	14.46
2	Jaisalmer	48	15.77	756.96	118.13	0.16	0.17	52.80	8.99
3	Vidyadhar Nagar	71	71.96	5109.16	972.29	0.19	0.21	78.10	16.22
4	Khetri	68	47.83	3252.44	584.78	0.18	0.20	74.80	14.67
5	Bundi	66	68.10	4494.6	867.98	0.19	0.21	72.60	15.30
6	Falna	63	32.62	2055.06	388.34	0.19	0.21	69.30	14.29
7	Jodhpur	59	137.15	8091.85	1440.45	0.18	0.19	64.90	12.60
8	Baran	69	49.31	3402.39	625.90	0.18	0.20	75.90	15.23
9	Srimadhopur	64	48.79	3122.56	568.42	0.18	0.20	70.40	13.98
10	Bikaner	64	137.00	8768	1518.56	0.17	0.19	70.40	13.30
11	Nagaur	66	78.69	5193.54	895.98	0.17	0.19	72.60	13.66
12	Phalodi	58	53.80	3120.4	581.88	0.19	0.20	63.80	12.98
	Total for group C depots		*806.05*	*52114.15*	*9346.16*				*165.68*
	Average for group C depots	*64.08*	*67.17*	*4342.85*	*1437.87*	*0.18*	*0.20*	*70.49*	*13.81*
	Average across all depots	**70.00**						**70.00**	**13.19**

Source: Ibid.

Suggested Measures for Further Reform: Despite its good operational performance, the financial performance has been poor. Reform measures, in addition to the measures already undertaken by RSRTC, should be adopted in order to address the seven specific issues that have afflicted the financial performance of the RSRTC. These are:

- **Salary increase induced by the implementation of the Vth Pay Commission recommendation:** The corporation was making positive net profit upto 1996-97. It started making net losses since 1997-98, when salaries were increased in accordance with the recommendations of the Vth Pay Commission.

- **Seniority of the employees:** The age profile of the employees of the RSRTC inflates the salary bill despite a reasonable staff-bus ratio according to the Planning Commission, Transport Division.
- **Overstaffing in loss-making depots:** Depot-wise performance shows that in the 12 most loss-making depots (2004-05), staff-bus ratio is similar to the average across all depots though the average operational revenue is much smaller due to a lower load factor. The average operational revenue across all depots is Rs. 13.19 lakh per kilometer, whereas the average operational revenue for these 12 depots is Rs. 11.50 lakh per kilometer.
- **Tariff rates:** Tariff revision has always lagged behind diesel price hikes by 3-4 years, according to the Turn-Around Strategy Document (July 2005). Despite hike in prices of diesel and spare parts, there was no fare revision from 2002 to 2005. Even after the recent tariff revisions in 2005, the rates of RSRTC are lower in some categories of buses in comparison to the pre-revision rates of Gujarat and U.P. and lower across all categories in comparison to the pre-revision rates in Haryana. In fact, to keep parity with even the older tariff rates of U.P., the revision required is shown in table 3.10. It should be noted that the tariff hike permitted by the latest tariff revision has been implemented only partially in order to keep the rates of RSRTC competitive with respect to private competitors in the state.
- **Competition from clandestine private operators:** These operators function on a much smaller level of operating costs and offer much lower rates for travel over the same routes operated by RSRTC, without maintaining requisite safety standards. According to the officials of the RSRTC, the average salary figure for a bus driver with the RSRTC is currently around 13,000 per month, whereas it is around Rs.4000 per month for a driver in a privately operated bus.
- **Inadequate reimbursement from the state government for free/concessional travel:** Following the social objectives of the Corporation, it has to grant free/concessional travel for the following passenger classes, as shown in box 3.1.

  According to the Corporation, there is inadequate compensation for giving such concessional fares to these passenger categories. The state government compensates concessional travel by exempting Special Road Tax for the last two months of the year. In the absence of proper records for these passengers, the state government has opined that it cannot provide direct cash compensation for such concessions.

Box 3.1 Concessional Fares for Different Passenger Categories

Passenger Category	Fare concession
Journalist	Free
Blind	Free
Freedom fighter and attendant	Free
Widows of freedom fighters	Free
War widows and dependents	Free
Tribal girl students (classes I to VIII)	Free
Mentally retarded with companion	50 percent of fare
Student	50 percent of fare
Physically challenged/leprosy patient	75 percent of fare
Cancer/thalassemia patient with companion	75 percent of fare
Deaf and dumb	75 percent of fare

Source: www.rajtrans.com/corporation.asp

- **High rate of commercial vehicle taxation:** Commercial vehicles are very heavily taxed in Rajasthan. The rate for two-wheelers is currently 5 percent of the cost of the vehicle. The rate for four wheelers with seating capacity upto 6 ranges between 3 percent (if registered in the name of an individual) and 6 percent (if not registered in the name of an individual) of cost of the vehicle, whereas for four wheelers with seating capacity between 6 to 13, the rates are 5 percent and 7 percent of the cost of the vehicle respectively. The rate for commercial vehicles has a much larger range, varying from 1.125 percent of the cost of the vehicle to 37 percent of the cost of the chassis of the vehicle. In addition, RSRTC has to pay a Special Road Tax (SRT). In 2004-05, the outstanding SRT of Rs.112.11 crore was converted to equity by the state government.

Therefore, the following measures are recommended in order to address these particular problems of the RSRTC, with particular reference to the Group C depots:

- The new tariff orders of 2 July and 10 September 2005 have been partially implemented, in order to keep the rates competitive with those of private competitors. However, given that these rates are lower than the pre-revision rates in most other states, there is a case for fully implementing the tariff hike with increased vigilance to check clandestine private operations. The tariff hike required to match the pre-revision rates in U.P. are worked out in table 3.10.

Table 3.10

Required Increase in Tariffs to Keep Parity with U.P.

(paise per seat per km.)

	Local	Semi-deluxe	Deluxe
Rajasthan current tariff	38.00	47.00	69.00
Target tariff (parity with pre-revision rate in U.P.)	46.89	53.60	73.00
Percentage increase	23.39	14.04	5.80

Source: Authors' calculations based on data from RSRTC.

- A mean tariff increase of 9.1 percent will, along with an increase in the load factor by 10 percent in loss-making depots, reduce their losses significantly. RSRTC monitors its load factor on a weekly basis at its headquarters. It might consider increasing the frequency of buses plying between any two district headquarters, as the concentration of passengers is very high on these routes.
- Smaller buses like Rural Transport Vehicles should be plied on the loss making routes. These buses should be operated with a staff-bus ratio lower than 4.82, which is the average across all depots for 2004-05.
- Rotation of staff, so that low paid employees are shifted to Group C depots. As already noted, depots like Jhalana Dungri are overstaffed because employees prefer to be posted in Jaipur, rather than in other outlying areas of the state. The Corporation has noted that removing low-paid employees to the far-flung loss-making depots would be counter-productive, as this would impact employee morale negatively. RSRTC might consider compensating such employees with a hardship allowance, in order to incentivize staff removal from depots like Jhalana Dungri to other depots.
- Net staff freeze across all depots: Since 1997-98, there has been no new employment in RSRTC. Given the seniority of the age profile of RSRTC employees, there will be a number of retirements in the near future. A net staff freeze will ensure that fresh recruitment will simply fill in the vacancies arising due to retirements, without affecting the existing staff-bus ratio.
- Measures to improve non-operational revenues so that it becomes at least 5 percent of total revenues: RSRTC is trying to increase non-operational revenue through optimum use of land at bus stands/depot

offices and other locations of the Corporation, which has resulted in an increase of Rs.3.53 crore in non-operational revenue between 2003-04 and 2004-05. The Corporation is also hiring out land to petrol pumps at 24 locations, each of which is expected to yield Rs.5 lakh per year in revenue. However, these lands are being contested by the UITs. Relations between state agencies need to be rationalized, so that RSRTC is able to improve its non-operational revenues.

- The high rate of taxation of the Corporation by the state government (very high rate of commercial vehicle tax apart from SRT etc.) coupled with periodic one-time arrear write-offs (conversion of outstanding SRT to equity in 2004-05) complicates the financial relationship between the state government and para-statals like the RSRTC. Instead of this system, a lower rate of taxation of commercial vehicles, with no arrear write-offs for outstanding taxes should be put in place.
- Instead of equity cover, the state government should directly compensate the RSRTC for giving concessional fares to students, senior citizens and other such groups. For this purpose, the RSRTC should introduce a method whereby the total number of such passengers is recorded properly. According to the Corporation, it has started keeping records of such passengers.

3.3 POWER SECTOR

Power sector reforms have created an immense fiscal pressure on state governments. According the RBI Study of State Budgets, 2003-04, one of the major reasons for the sharp increase in resource gaps in 2003-04 for state governments was the issuance of power bonds by state governments to Central PSUs under the One Time Settlement Scheme for State Electricity Boards. RBI estimates that around half of the increase in ratio of gross fiscal deficit to the GDP ratio in 2003-04 was on account of transactions in the power sector alone.

In the specific context of Rajasthan, the Rajasthan Power Sector Reform Bill was passed on 25 September 1999 and was motivated by the widening revenue-cost gap, high level of cross subsidization, high levels of energy losses and increasing subsidy burden on the state government.[9] Since 2000, some of the major provisions of the Act have been implemented. The erstwhile RSEB has been unbundled into five separate power companies: one generating company (RVUN), one transmission company (RVPN) and three distribution companies

[9] As noted in the Financial Restructuring Plan document dated December 8, 1999.

(Jaipur, Jodhpur and Ajmer Vidyut Vitran Nigams). The Rajasthan Electricity Regulatory Commission has been established on 2 January 2000. Open access has been initiated and investments have been made to reduce T&D losses. The Electricity Act, 2003 has been implemented in Rajasthan on 1 April 2004.

The Financial Restructuring Plan of 2003 set the horizon for the restructuring initiative up to 2011-12 and made explicit provisions for yearly financial support by the state government to the power sector. The total commitment under this FRP is summarized in table 3.11.

Table 3.11

Provisions of the Financial Restructuring Plan

(Rs. crore)

Cash Transition Support	3800
Retention of Electricity Duty	3951
Interest Subsidy on IBRD Loan	282
Subsidy under the APDRP Scheme of the Government of India	145

Source: www.rajenergy.com

The yearly break-up of the total subsidy payments, the quantum of loans disbursed and equity invested in the power sector by the state government from 2000-01 to 2004-05 is shown in table 3.12.

From 2000 to 2005, Rs.1000 crore has been paid to the power sector in cash support alone, along with an additional subsidy of Rs.260 crore for purchasing power during the Rabi season. The annual commitment under the Financial Restructuring Plan of Rs.400 crore will have to be paid every year up to 2011-12 or beyond. In addition, the government is the guarantor for most of the loans taken by the power sector. The guarantees given by the government to the power sector is shown in table 3.13.

The proportion of total guarantees to the power sector has been increasing over the years and is projected to go up to 82 percent of the total guarantees in 2004-05.

Table 3.12

Summary of Subsidies Paid and Investments Made by the State Government in the Power Sector

(Rs. crore)

Year	Subsidy							Equity	Loan to Power Companies					Total
	Non-Plan				Plan									
	Interest on state govt. loans & bonds	Interest on World Bank loans	Stamp duty and land & building tax	Retention of electri-city duty	Subsidy in lieu of tariff non-revision	Cash support	APDRP Incentive		Interest-free loans	Issue of power bonds	World Bank loan	APDRP loan	APDRP grant	
2000-01	90.17		2.25	250.00		130.00 (Addl.PP)		30.00						502.42
2001-02	34.02	2.63		249.00				333.00			70.01	22.50	22.50	733.66
2002-03	26.92	2.67		238.00		130.00 (Addl.PP) 200.00		332.00			97.53	45.32	45.32	1117.76
2003-04	21.75	6.71	28.56	278.00		400.00	137.71	282.00	200.00	368.78*	209.78	56.00	56.00	2045.29
2004-05 (BE)	20.88	14.07	10.25	434.09	200.00	400.00		348.00	200.00		120.39	91.59	91.59	1930.86
Total	**193.74**	**26.08**	**41.06**	**1449.09**	**200.00**	**1260.00**	**137.71**	**1325.00**	**400.00**	**368.78**	**497.71**	**215.41**	**215.41**	**6329.99**

Source: Finance Department, Government of Rajasthan and Rajasthan Vidyut Prasaran Nigam Limited.

Notes: *: Power companies have adjusted the amount of Power bonds against deferred subvention.

Besides the above, the state government has released interest-free loan of Rs.127.00 crore on account of non-application of revised tariff.

Given this committed financial liability, the scope of expenditure curtailment in the power sector is limited for the state government. Therefore, the thrust of this section is to analyse the extent to which the performance of the sector has improved with this financial assistance from the state government post reforms in contrast to the pre-reform scenario.

Table 3.13

Guarantees given by the State Government to Power Companies

(Rs. crore)

Year	Guaranteed amount	Percentage of total guarantees given
2001-02	6607.60	51.17
2002-03	7871.45	52.59
2003-04	9182.23	53.26
2004-05 (projected)	10409.00	81.95

Source: Finance Department, Government of Rajasthan.

Pre-Reform Scenario: Prior to the reforms, cost coverage by revenue was declining at an alarming rate. It fell from 91 percent to 76 percent between 1989 and 1999, resulting in a revenue deficit of 24 percent in FY 98-99. Revenue deficit had increased by over 18 times during this period. The government subsidy required to cover costs and to earn 3 percent on net fixed assets (as per Electricity Supply Act 1948) had increased from Rs. 163 crore (FY92) to Rs. 1196 crore (FY99). As the erstwhile RSEB could not earn the stipulated 3 percent without the government subvention, the debt burden was increasing and stood at Rs. 5501 crore in 1998-99.

Post-Reform Scenario: Post-reforms, there have been significant improvements in power generation[10] and rural electrification. However, the financial performance of the sector along with the levels of transmission and distribution (T&D) losses leaves much to be desired.

This is reflected in one of the most recent (4 July 2004) and comprehensive performance rankings of the different state power companies

[10] Plant Load Factor, which is an indicator of generation performance for thermal power stations, is at 88 percent in 2002-03 compared to the all-India average of 67.30 percent. Source: Rajasthan Power Sector Vision, 2020.

done by CRISIL. In terms of aggregate performance, Rajasthan has been ranked fourth among 28 states using the parameters relating to generation, T&D losses, financial risk, commercial viability and some state government and Electricity Regulatory Commission parameters. In terms of individual parameters, Rajasthan has received the highest score among all states in electricity generation but has a 10th rank in the T&D parameter.

Regarding T&D losses, the sector is undertaking an impressive Feeder Renovation Programme, which aims to reduce the current T&D levels to 20 percent by 2012. A pilot Feeder Renovation Programme has been undertaken by Jaipur distcom in Badhal village. The implementation of the programme, at a cost of Rs.50.05 lakh, has reduced T&D losses from 66.77 percent (upto April 2004) to 13.27 percent (after March 2005). It can be expected that the extension of the Feeder Renovation Programme to other distcoms will reduce the current levels of T&D losses, which appears to have worsened in comparison to the pre-reform scenario. In fact, Rajasthan's figure was 29.34 percent in 1999-00 (PE), whereas the current T&D loss figures shown in table 3.14 are much higher.

Table 3.14

T&D Losses of the Distcoms in Rajasthan in 2002-03 and 2003-04

Name of distribution company	Average T&D losses in percentage		Annual percentage change
	2002-03	2003-04	
Jaipur	39.24	39.85	1.55
Ajmer	39.90	45.51	14.06
Jodhpur	40.95	42.56	3.93

Source: Audited Annual Accounts of respective distribution companies.

The T&D losses of the all distcoms have increased from 2002-03 to 2003-04. Reported T&D losses in the state are at 41.10 percent for FY05. This large increase in the T&D losses in the post-reform scenario is due to the application of a different computing principle for measuring power consumption from agriculture.[11] Flat rate agriculture consumers were assumed to consume electricity for a fixed amount of time daily (around 6 to 7.5 hours) in the mid- and later 1990s, whereas from 2001-02, a different computing principle converts revenue (flat rate) into power consumed by dividing it by the metered rate.

[11] Rajasthan Power Sector Vision, 2020.

The progress of meterization in agriculture has been slow. As on March 2004, only 34.70 percent of the total number of the consumers using electricity at a flat rate since 1 April 2004 have been converted to a meterized rate.[12]

Meterization of the 11 K.V. feeders, which helps in the identification of areas with high energy consumption, is incomplete. As on 4 March 2004, around 12 percent of the total of such feeders are still unmeterized. Jodhpur distcom alone has 528 such unmeterized 11 K.V. feeders at present.

Regarding financial performance, the financial viability of the sector has not improved even after the reforms. The gap between average revenue realization and average cost has gone up to 114 paise per unit in 2003-04 from the pre-reform 100 paise per unit in 1999-00. Revenue per unit has increased but the increase in per unit cost has outstripped it, giving rise to a lower cost coverage by revenue as shown in table 3.15.

Transmission and distribution, in isolation, contributes significantly to this gap. For instance, Ajmer distcom has a gap of 138 paise per unit in 2003-04, which amounts to only 71 percent cost coverage by revenue.

Table 3.15

Per Unit Cost vs. Per Unit Revenue Realization

(in paise per unit)

Year	Cost per unit	Revenue per unit	Difference	Revenue per unit as % of cost per unit
1997-98	259	217	42	83.78
1998-99	272	208	64	76.47
1999-00	326	226	100	69.33
2000-01	417	311	106	74.58
2001-02	426	339	87	79.58
2002-03	446	343	103	76.91
2003-04	460	346	114	75.22

Source: Rajasthan Power Sector Financial Position & Related Issues, Jaipur, November 23, 2004.

This increasing gap between per unit average revenue realization and per unit average cost is due to the following reasons:

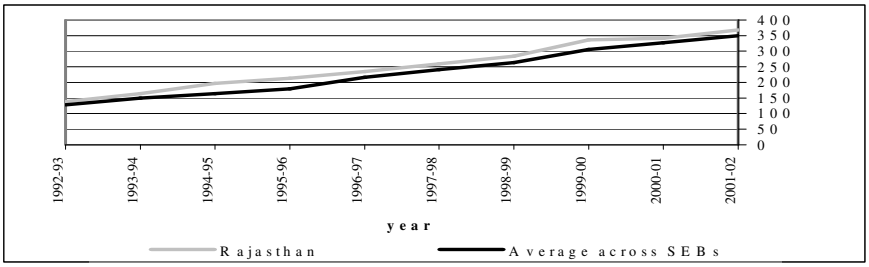
- The cost of power supply is high in Rajasthan both in terms of generation and transmission. Transmission costs, in particular, are

[12] Progress Report of the Rajasthan Power Distribution Companies, 2003-04.

very high due to the sparse population density over the large geographical area of the state, two-thirds of which has desert topography. Chart 3.2 compares the cost of per unit electricity transmission in Rajasthan with the average across all State Electricity Boards from 1992-93 to 2001-02:

Chart 3.2

Comparison of the per Unit Cost of Transmission in Rajasthan with the Average per Unit Cost across all SEBs (in paise/KwH)



Source: Planning Commission (Power and Energy Division) Annual Report on the Working of State Electricity Boards & Electricity Departments, 2001-02.

- One of the largest consumers of electricity in Rajasthan is agriculture, which is heavily subsidized. The share of agriculture in total consumption has varied between 28.09 percent to 38.34 percent over 1990-91 to 1999-00. Further, revenues from agricultural electricity consumption suffers from periodic droughts. The demand for power from the industrial sector is low due to the industrial stagnation in the state. The revenue assessed from different categories of consumers is summarized in table 3.16.

Table 3.16
Revenue Assessed from Different Categories of Consumers by the Distcoms in 2003-04 (PE)

(Rs. crore)

Name of distribution company	Domestic	Non-domestic	Agricul-tural	Industrial	Others	Total
Jaipur	408.16	273.85	158.12	783.91	252.07	1876.11
Ajmer	302.01	150.80	196.11	779.92	135.86	1564.70
Jodhpur	294.92	155.06	169.11	412.71	271.33	1303.54

Source: Final Revenue Returns (MIS) of respective distcoms.

The total revenue realized from agriculture was only 11 percent of the total revenue realization, though the share of agriculture in total electricity consumption was 29 percent in 2003-04.[13]

- Despite increases in the cost of diesel, tariffs rates were left unchanged between 2001 to 2005. The average tariff for sale of electricity has consistently lagged behind the average across all SEBs since 1998-99.[14] The latest tariff order (effective from 1 January 2005) has recently been implemented. In fact, apart from domestic consumption, medium scale industry and mixed load, the relative rank of Rajasthan among 18 other states for all other categories of electricity consumption has either remained unchanged (small scale industry) or gone down (non-domestic, agriculture, large scale industry and street lighting) in the 2005 tariff order relative to the 2001 tariffs. The rank of Rajasthan relative to other states in respect of each consumption category for the 2001 and 2005 tariff orders is summarized in table 3.17.

Table 3.17

Relative Rank of Rajasthan in Different Categories of Power Consumption with respect to the 2001 and the 2005 Tariff Orders Among 18 States

Sl.No.	Category	Rank according to the 2001 tariff order	Rank according to the 2005 tariff order
1	Domestic	10	4
2	Non-domestic	8	11
3	Agricultural	8	9
4	Small-scale industry	9	9
5	Medium-scale industry	8	7
6	Large-scale industry	5	7
7	Street lighting	3	4
8	Mixed load	10	8

Source: Latest information from JVVNL.

With the revised tariffs, the relative rank of Rajasthan among 18 states in all categories of electricity consumption is around the middle, except for street lighting and domestic consumption.

In conclusion, some of the past problems (most importantly, financial viability) continue to haunt the power sector in Rajasthan even after reforms. Implementation of the Feeder Renovation Programme is expected to reduce the

[13] Ibid.

[14] Planning Commission (Power and Energy Division) Annual Report on the Working of State Electricity Boards & Electricity Departments, 2001-02.

T&D losses of the sector to 20 percent by 2012 and improve the financial viability of the sector. However, the state government should keep in mind the additional expenditure for implementing the Feeder Renovation Programme while factoring in the constraints on expenditure as imposed by the enacted FRBM, as mentioned in chapter 2. Some additional measures for reducing T&D losses and improving the financial viability of the sector are mentioned below:

Recommendations:

- Given the cost structure of electricity supply, tariffs will have to be revised very regularly in order to improve the financial viability of the sector. A multi-year tariff philosophy, as suggested by CRISIL, would be a welcome development.
- Meterization of agriculture and the 11 K.V. feeders should be taken up on a priority basis, so that T&D losses can be reduced.
- Introduction of drip and sprinkler irrigation in agriculture will reduce the dependence of farmers on motor sets for irrigation of fields, reducing consumption of electricity and also conserving water. Accordingly, Rajasthan has introduced a differential set of tariffs, at 10 paise per unit for sprinkler and 25 paise per unit for drip irrigation.

3.4 EMPLOYMENT IN SELECTED UNDERTAKINGS

Employment redundancy has been analysed for those PSUs for which salary, total expenditure, turnover employment and other relevant data was available for 2003-04. These PSUs have been grouped as follows:

I. **Power Companies:** Rajasthan Vidyut Utpadan Nigam Ltd. (RVUNL), Rajasthan Vidyut Prasaran Nigam Ltd. (RVPNL); Jaipur Distcom, Ajmer Distcom and Jodhpur Distcom.[15]

II. **Utility Companies:** Rajasthan Jal Vikas Nigam Ltd. (RJVNL), Rajasthan State Road Transport Corporation (RSRTC) and Rajasthan State Road Development and Construction Corporation Ltd. (RSRDCCL).

III. **Financial Company:** Rajasthan Financial Corporation (RFC).

IV. **Other Companies:** Rajasthan State Hotels Corporation (RSHC), Rajasthan Small Industries Company Ltd. (RSICL), Rajasthan State Mines and Minerals Ltd. (RSMML), Rajasthan Land Development

[15] Rajasthan Renewable Energy Corporation (RREC) provided two sets of conflicting manpower and salary data. Therefore, RREC has not been included in the analysis.

Corporation (RLDC), Rajasthan State Warehousing Corporation Ltd. (RSWC) and Rajasthan Housing Board, Jaipur (RHB).

I. Power Companies: The staff strength in the erstwhile Rajasthan State Electricity Board had been frozen in 1980-81. An overall reduction of 8000 employees has taken place over 1992-93 to 2004-05. In order assess staff redundancy in the unbundled entities separately, the power companies suggested the following parameters:

- Generation company: generation MW per employee
- Transmission company: transmission lines (km.) and GSSs serviced per employee
- Distribution companies: Consumers serviced per employee (with due allowance for geographical area and population density).

Table 3.18 lists these parameters for Rajasthan along with those for MP, AP, Orissa, Assam and UP.

Table 3.18

Staffing in Power Companies in Rajasthan relative to Other States

Parameters	MP	Rajasthan	Orissa	AP	Assam	UP
Generation MW per generation employee	0.47	0.77	0.65	0.64	0.12	0.41
No. of customers per distribution employee	136	141	105	334	80	164
Transmission lines in ckt-km per transmission employee	3.29	2.32	2.03	2.20	1.72	1.88

Source: RVPNL.

According to these parameters, Rajasthan has the best generation MW per employee in generation (0.77) among the other states considered in table 3.18. This attests the strides made in improving efficiency in generation post-reform, as mentioned in section 3.3. The number of customers serviced per distribution employee is the highest in Andhra Pradesh (334) and the lowest in Assam (80). Rajasthan ranks third among these six states in distribution efficiency, as measured by this parameter, with 141 customers serviced per distribution employee. Considering the vast geographical area of Rajasthan, with low density of population, the rank of Rajasthan among other states in terms of distribution efficiency is good. Efficiency in transmission, as measured by transmission lines in

ckt-km per transmission employee, is second highest among the six states, with Madhya Pradesh in the lead.

Thus, the efficiency in employment in generation, transmission and distribution, as measured by the relevant parameters, is high in Rajasthan. The employment in these power companies should be retained at levels such that the values of these parameters are not adversely affected. The power companies have opined that they would require additional linesmen, as the existing linesmen are too old to climb up poles to fix lines. Rather than increasing the number of linesmen and retaining them till the age of 60, the retirement age of these linesmen should be reduced from 60 to 45. This will ensure that the transmission company does not have to retain aged linesmen, who cannot be redeployed to other activities due to lack of skill. None of these companies have a VRS agreement with its employees. Implementation of a VRS scheme would help reduce the age profile of staff and improve the efficiency of some areas of operation as in the case of the task of linesmen.

II. **Utility Companies:** Manpower and salary data was available for three utility companies, Rajasthan Jal Vikas Nigam Ltd., Rajasthan State Road Development and Construction Corporation Ltd. and Rajasthan State Road Transport Corporation. An ad-hoc norm of 20 percent for salary expenditure/turnover has been applied to the first two. With this norm, there are 2 redundant employees in Jal Vikas Nigam, which amounts to 4.65 percent of total employment. There is no redundant employment in RSRDCCL. Section 3.2 has already declared RSRTC as having staff redundancy varying across depots, but the overall staff-bus ratio, at 4.82 staff per bus in 2004-05, is better than the national average.

However, salary expenditure is high due to the seniority of the employees. In order to address this issue, the Corporation should implement the recommendations regarding the introduction of smaller buses with a staff-bus ratio lower than 4.82 on the loss-making routes and the increase of the frequency of operations on the profitable routes between district headquarters.

III. **Financial Companies:** Of the two financial companies in Rajasthan, data was available only on Rajasthan Financial Corporation. This is the only PSU that has already implemented a VRS scheme for employees in two phases. A total of 75 employees have opted for VRS (of these, only 21 are from B and C categories). According to company officials, VRS has not resulted in a change in the employee composition, which would improve

the quality of service delivery by the company. In order to assess labour redundancy, ad-hoc manpower norms of 15 employees per branch and 30 employees at the Head Office were applied. With these norms, there are 176 redundant employees in the Corporation, which amounts to 18.13 percent of the total employment. However, a far more central aspect of the functioning of RFC is the level of NPA it carries currently. The Annual Report of RFC (2003-04) reveals that the level of NPA for FY 03-04 was 17 percent of outstanding loans. The comparative figure for all public sector banks and all commercial banks for the same year was 7.8 percent and 7.2 percent respectively. In comparison to these figures, the NPA of RFC are very high and the financial status of RFC very risky.

IV. Other Companies: Labour redundancy in Rajasthan Small Industries Company Ltd.(RSICL), Rajasthan State Hotels Corporation Ltd. (RSHCL), Rajasthan State Mines and Minerals Ltd. (RSMML), Rajasthan Land Development Corporation (RLDC), Rajasthan State Warehousing Corporation (RSWC) and Rajasthan State Agricultural Marketing Board (RSAMB) is analyzed in this section. Assessment of excess staff has been done with respect to varying staff norms, keeping in mind the nature of the business.

RSICL was established in 1961 to promote small-scale industries in Rajasthan, in particular handicrafts, woollen yarn, carpets and other such enterprises. It made net profits in 1999-00 and 2000-01, but has been making losses since then. Applying an ad-hoc norm of 8 percent for the salary/turnover ratio yields 14 redundant employees, which amounts to 4.03 percent of the total employee strength.

RSHCL is a very small company, which was established in 1965 with the express purpose of catering to the boarding and lodging requirements of visiting tourists and officials. Currently, it is almost defunct operationally. With a norm of 15 percent for salary/turnover, there are 31 redundant employees, which is 39 percent of the total employment.

RSMML is the most profitable PSU, established in 1947 as Bikaner Gypsum Ltd. for acquiring and operating mines and for trading in minerals, particularly gypsum and rock phosphate for manufacturing phosphate fertilizers, cement and mineral concentrates. It has recently been merged with Rajasthan State Mineral Development Corporation Ltd. RSMML also has the distinction of being the highest dividend paying company in Rajasthan. In fact, as mentioned earlier, in 2000-01 it

accounted for 62 percent of the total dividends paid by all PSUs in Rajasthan. In 2003-04, the salary/turnover ratio in RSMML was 11.34 percent. With an ad-hoc salary/turnover norm of 10 percent, 259 employees are redundant, which is 11.83 percent of the total employment.

RLDC was established in 1975 in order to disburse cheap loans to farmers. A complete loan waiver scheme for all outstanding loans made by the RLDC had been announced by an earlier government and therefore, the current role of the RLDC has been reduced to repayment of all the loans of the farmers to the banks from which the RLDC had borrowed in order to make loan disbursement. The Corporation will be liquidated once all the loan repayments have been made through explicit budgetary cover from the state government. From the point of view of state finances, the operations of the RLDC are a pure drain on the exchequer (in the fiscal 2003-04, the RLDC had to repay Rs. 1173.26 crore and it is estimated by the Finance Department that the RLDC will require an explicit budgetary support of Rs.1101.52 crore in 2004-05 for loan repayments.) Currently, the RLDC has a staff strength of 12, with salary/turnover at 71.85 percent. Given the reduced role of the RLDC, a staff reduction should be done so that the burden on the exchequer is eased. With an ad-hoc norm of 15 percent, there are 9 redundant employees in the RLDC, which is 79.12 percent of total employment.

RSWC was established in 1957 with the purpose of acquiring and building godowns and warehouses for storing agricultural produce, seeds, fertilizers, agricultural implements and other notified commodities. It is a profitable company, with a profit after tax (PAT) of Rs.1209.15 lakh in 2002-03. It has also made regular dividend payments on equity investment (in 2000-01, this company paid 30 percent of the total dividend payments made by all PSUs in Rajasthan.) With an ad-hoc norm of 20 percent for the salary/turnover ratio, there are 344 redundant employees in the company, which amounts to 60.33 percent of the total employment.

RSAMB was established in 1974 for the regulation of agricultural markets in the state and for the construction of market yards and approach roads to markets. It is a profitable company, with an estimated net profit of Rs.350 lakh in 2003-04. However, salary expenditure in 2003-04 is very high at 69.42 percent. Application of an ad-hoc norm of 20 percent for the salary expenditure ratio yields a staff redundancy of 684 employees, which is 71.19 percent of total employment. By this norm, RSAMB is grossly overstaffed.

RHB was established in 1970, with a total turnover of Rs.4375.78 and salary/ turnover ratio at 55.29 percent lakh in 2003-04. With an ad-hoc norm of 20 percent for salary/turnover, there are 1375 redundant employees in RHB, which is 63.82 percent of the total employment.

3.5 SUMMARY AND RECOMMENDATIONS

This chapter reviewed the aggregate financial and operational performance of the PSUs in Rajasthan. Though accumulated losses were reduced every year up to 2000, these losses have started increasing thereafter. This is presumably due to the unbundling of the power companies into five separate entities in 2000 and subsequent accounting changes. The more worrisome issue is that the return on government investment from these PSUs is almost negligible. Most of the PSUs of Rajasthan are not earning the minimum required rate of return on investment, as specified by the Planning Commission. In terms of dividend payment, none, except for Rajasthan State Mines and Minerals Ltd, have paid any significant amount of dividends to the Government till date. Therefore, there is a case for disinvestment of some of the defunct loss-making PSUs, which have been more of a drain on the exchequer.

Among the loss-making PSUs, the financial and operational performance of the transport and power companies was analysed. The transport corporation has commendable operational performance and with some further reform measures, as mentioned at the end of Section 3.2, this corporation should become financially viable. The power sector has undergone substantial reforms and some operational parameters have improved significantly after reforms. These are mostly in the area of power generation and rural electrification. However, the sector is still heavily dependent on government subsidies and suffers from large T&D losses. The implementation of the Feeder Renovation Programme is expected to reduce the T&D losses to 20 percent by 2012 and improve its financial viability. Additional reform measures, as suggested at the end of Section 3.3, should be implemented in order to improve the financial viability of the power companies.

For PSUs, in other than power and transport sectors, a calculation using salary/turnover norms reveals that there exists excess manpower in most of them. Ad-hoc norms have been used to judge the extent of labour redundancy in these companies in Section 3.4. The power companies seem to have high employment efficiencies in generation, transmission and distribution, according to the data and parameters provided by them. Employment should be retained at levels such that

these efficiency ratios are not adversely affected. Reduction of the retirement age for linesmen will address the problem of aged linesmen unable to climb poles and therefore unfit to perform their assigned functions.

4. DEPARTMENTAL STAFF RESTRUCTURING

4.1 INTRODUCTION

Salaries and pension payments to employees of government departments[1] constitute a substantial part of total revenue expenditure in Rajasthan. Total expenditure on salaries, pensions, medical and travel allowances accounted for 45.83 percent of the total revenue expenditure in 2000-01. Reform measures undertaken by the state government have reduced this burden to 40.84 percent of the total revenue expenditure in 2003-04. Table 4.1 shows the resulting trends in employment and salary payments from 2001-05.

Table 4.1

Employee Strength and Salary Payments (2001-2005)

Year	Employee strength	Salary expenditure (Rs. lakh)	Average salary expenditure per person (Rs. lakh)
2001-02	6,22,491	5,29,806	0.85
2002-03	6,17,457	5,28,187	0.86
2003-04	6,07,380	5,74,520	0.95
2004-05 (RE)	6,15,744[2]	6,21,702	1.01

Source: Finance Department and Budget Document Schedule 4A (2004-05).

There has been a 1.08 percent reduction in the workforce from 2001-02 to 2004-05. However, this staff reduction has been accompanied by a 17.35 percent

[1] The data on employees is grouped under Budget Heads and not by Departments. There might be more than one Budget Head under each Department. Employees have been grouped under Budget heads in this chapter, but the two terms have been used synonymously.

[2] The total number of employees in various Government Departments for 2004-05 is 5,29,319 according to the Finance Department, whereas it is 6,15,744 according to the Budget Document, Schedule 4A for 2004-05. The latter figure has been used for all calculations in the chapter as the Budget Document has given the breakup of the total employee strength into different Budget Heads.

increase in the total salary bill with an 18.67 percent increase in the salary expenditure per head. The reason for the increase in the per head salary expenditure is explored later in the chapter.

Another point to note is that the 2004-05 RE figure for salary expenditure is at 46.61 percent of the revenue expenditure net of pensions and interest payments, whereas the TFC has recommended a target salary expenditure of 35 percent of the revenue expenditure net of pensions and interest payments. Adherence to this target by 2009-10 will imply a severe compression of salaries.[3] The possible methods of achieving this target, suggested by the TFC, are: (i) reduction in salary payments per staff; (ii) reduction in the number of employees in the government departments; and (iii) increase in the growth of revenue receipts.

The third method will be analysed in chapter 5 on revenue restructuring and is kept out of the purview of this chapter. Among the first two alternatives, the first method is counter-productive as it reduces the work incentives and increases the chances of corruption.

The staff reduction alternative has to be analysed in the context of the optimum size of the bureaucracy for Rajasthan. In the absence of an absolute norm for the optimum strength of the bureaucracy, the comparative norm of the per-capita penetration of civil servants in Rajasthan relative to the all-India level or to the level in other states/countries has been adopted. Given a total population figure of 56,507,188[4] and total employee strength of 6,15,744[5] as of 2004-05, the penetration of civil servants per capita in Rajasthan works out to be 1.09 percent, which is lower than the figures for India (1.4 percent in 1996) and China (2.8 percent in the early nineties).[6] As the size of the bureaucracy in Rajasthan seems to be smaller than the national average, it can be concluded that a reduction in the total number of government employees is not desirable. In fact, the adherence to the TFC target for salary expenditure by reducing employee strength is not recommended, as this will imply that the per capita penetration of civil servants will fall to around 0.75 percent. This will not be conducive to good delivery of public services.

[3] The numerator in the TFC target has been assumed to consist of salary expenditure alone as the denominator excludes pension payments.
[4] Primary Census Abstract, Census of India, 2001.
[5] Schedule 4A of Budget Documents, 2004-05.
[6] Schiavo-Campo, Salvatore, 1998 "Government Employment and Pay: The Global and Regional Evidence" Public Administration and Development 18; 457-78.

However, the overall size of the bureaucracy is not informative of the actual quality of governance in the state. This composition of government staff (categorised in terms of A, B, C, D and casual classifications) is critically important for the quality of governance in the state and is analysed in detail in this chapter.

Given that an absolute reduction in the total size of the bureaucracy cannot be justified, there is a need to develop a single uniform measure of scale of activity applicable across departments, such that overstaffed departments can be identified from which excess employees can be reallocated to departments that are understaffed. This staff restructuring measure will not reduce the burden on the revenue expenditure, but is in itself, a very important exercise from a governance perspective.

The structure of this chapter is as follows: Section 4.2 discusses the current composition of government departments. Section 4.3 develops the methodology to identify departments that are over-staffed and discusses the possibilities of redeployment of officials from these departments to other relatively understaffed departments. This methodology is applied to those departments that are amenable to the cross-departmental measure used. Section 4.4 details a different methodology to identify the optimum size of the workforce in General Education, a department that is not amenable to the uniform norms developed in the earlier section. Section 4.5 concludes.

4.2 DEPARTMENTAL STAFF COMPOSITION

There are a total of 67 different Budget heads in Rajasthan[7] with 6,15,744 employees in 2004-05, with certain Budget heads accounting for most of the total work force. For example, General Education (Budget head 2202) has a total of 2,38,750 employees which makes up 38.77 percent of the total number of

[7] On the expenditure side, there are 73 Budget heads under the Revenue account and 88 Budget heads under the Capital Account in the Finance Accounts. Among these, there are Budget heads like 2071 (Pensions), which does not have any manpower. The manpower data is given for 66 Budget heads in the Revenue Account and 5 Budget Heads in the Capital account in the Budget Document, Schedule 4A, 2004-05. Of the 5 Capital account Budget heads, 4 have counterparts in the Revenue account and the total manpower from these has been added to the manpower in the corresponding Revenue account. Therefore, the total number of Departments aggregates to 67 Departments.

government employees. In fact, 83.32 percent of the total is concentrated in ten Budget heads shown in the table 4.2.

Table 4.2

Employment in Ten Most Employee-Intensive Departments in Rajasthan, 2004-05

Sl.No.	Departments	Percentage of employees
1	General Education	38.77
2	Police	12.27
3	Medical and Public Health	10.79
4	Water Supply and Sanitation	7.23
5	Major and Medium Irrigation	2.76
6	Land Revenue	2.69
7	Forestry and Wild Life	2.43
8	Administration of Justice	2.17
9	Animal Husbandry	2.12
10	Family Welfare	2.04

Source: (Basic Data), Budget Document Schedule 4A (2004-05).

Within each Budget head, employees can be classified under various pay-scales. However, the large number of pay-scales fragments the data into a very large number of classes. The number of groups have been reduced by categorizing the employees under A, B, C, D and casual heads.[8] This classification has been done as shown in table 4.3

As table 4.3 shows, most of the employees are concentrated in the lower scales of pay with 16.65 percent of total employees in the lowest pay-scale. A similar picture emerges in the A,B, C, D and Casual categorization as well, with 68.41 percent of the total employee strength in Group C. This is shown in the pie chart 4.1.

[8] Chapter on *Classification of Services and Posts*, Report of the Fifth Pay Commission, 1997.

Table 4.3

Classification of Total Number of Employees in Rajasthan, 2004-05

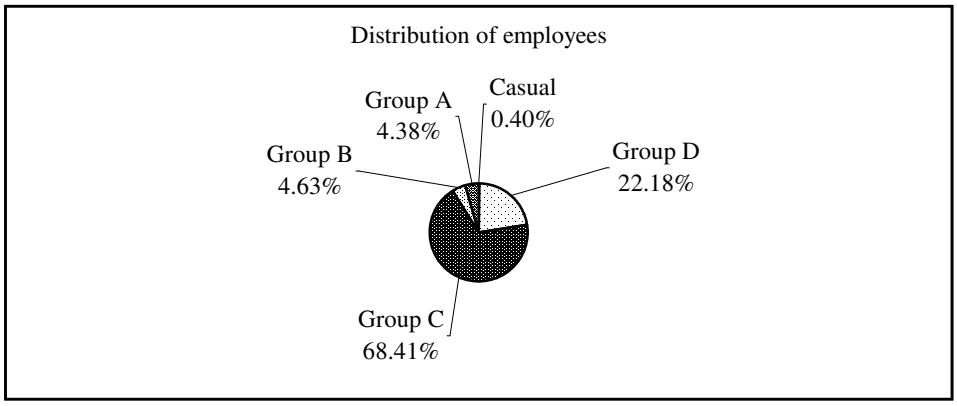
Categories	Pay-scales valid from 01.09.1996	Groups	Percentage of employees
OTHER	NONE	CASUAL	0.40
1	2550-55-2660-60-3200	D	16.65
2	2610-60-3150-65-3540	D	1.93
3	2650-65-3300-70-4000	D	3.60
4	2750-70-3800-75-4400	C	1.14
5	2950-75-4075-80-4475	C	0.58
6	3050-75-3950-80-4590	C	19.86
7	3200-85-4900	C	2.05
8	3400-90-5200	C	1.04
9	4000-100-6000	C	7.61
9A	4500-125-7000	C	18.62
10	5000-150-8000	C	6.40
11	5500-175-9000	C	11.10
12	6500-200-10500	B	4.08
12A	7500-250-13500	B	0.55
13	8000-275-13500	A	2.56
14	9000-300-14400	A	0.55
15	10000-325-15200	A	0.83
16	10650-325-15850	A	0.03
17	11300-350-16200	A	0.02
18	12000-375-16500	A	0.23
19	13500-400-17500	A	0.03
20	14300-400-18300	A	0.07
21	16400-450-20000	A	0.06
22	18400-500-22400	A	0.01
Total			100.00

Source: Ibid.

This structure of employee composition, with a preponderance of C and D category employees, is also observed at the pan-India level and Rajasthan is no exception. However, it is heartening to note that the composition of employees has changed over time with a reduction in the number of casual employees and an increase in the category A and B employees. This is shown in table 4.4.

Chart 4.1

Distribution of Government Employees in Rajasthan in the A, B, C, D and Casual Categories, 2004-05



Source: (Basic Data), Budget Document Schedule 4A (2004-05).

Table 4.4

Change in the Composition of Employee Categories from 1999-00 to 2004-05

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	Cumulative growth rate
Casual	15,279	16,414	8,197	2,849	3,276	2,453	-30.64
Group D	1,18,834	1,19,152	1,41,329	1,39,719	1,37,085	1,36,559	2.82
Group C	4,20,355	4,23,934	4,19,568	4,20,450	4,12,542	4,21,257	0.04
Group B	26,294	25,909	26,784	27,270	27,277	28,502	1.63
Group A	22,107	21,830	26,613	27,169	27,200	26,973	4.06
Total	**602869**	**607239**	**622491**	**617457**	**607380**	**615744**	**0.42**

Source: Authors' calculations based on Budget Document Schedule 4A (2004-05).

Therefore, the large reduction of the employee strength between 2001-02 and 2003-04 mentioned earlier, is attributable to the significant attrition in the Casual category employees. The concurrent increase in the Category A and B employees

(who fall in the higher pay-scales) explains the increase in per staff salary expenditure. This is a pattern of downsizing that is beneficial in terms of its implications for the quality of governance of the state.

There is a further need to phase out vacancies in category D and upgrade these posts to category C, where the skill requirements are stipulated and met by fresh inductees. Examples of functions no longer required include posts of Gestetner operators, in a context where cyclostyling is almost obsolete; archival jobs rendered redundant by computerization; and such. These vacancies were provided for in the colonial era, and need to be phased out in favour of skills needed in the world of today.

4.3 ASSESSMENT OF STAFF REDUNDANCY

Reducing the burden of revenue expenditure requires us to address the issue of overstaffing in government departments. Some norm is required by which relative overstaffing in different departments can be inferred. An ad-hoc norm in terms of per staff non-salary expenditure has been used in this analysis in the following manner:

Assumptions: Non-salary revenue expenditure has been taken as a proxy for the scale of activity handled by each department. There is no other suitable cross-departmental handle on the scale of activity handled. Further, revenue expenditure has a stable time-path, and therefore, non-salary revenue expenditure as a measure of scale of activity should be stable over time. Employees in five departments (Major and Medium Irrigation, Minor Irrigation, Water Supply and Sanitation, Command Area Development and Flood Control Projects) out of the total 67 departments are separated under the revenue account and the capital account. As non-salary revenue expenditure is used to measure the scale of activity handled, therefore the employees in the capital account in these departments were excluded for the analysis. In particular, employees in the Flood Control Projects department are exclusively under the capital account. This department was dropped and the total number of departments for the calculations below is 66.

A uniform per staff non-salary expenditure is then applied to departments that are amenable to such a uniform norm. Of these 66 departments, only 42 departments considered amenable to the uniform norm are analysed below. The remaining 24 departments are not inherently amenable for reasons of staff-intensive character (e.g. Education, Revenue, Health and Family Welfare, Justice, Police, Jails etc.) or due to

capital expenditure intensity (e.g. Public Works, Command Area Development). These departments are listed in table 4.5.

Table 4.5

Listing of Employment in Non-Amenable Departments

Sl. no.	Demand no.	Budget Head	Category			Total employees
			(A+B)	(C+D)	(C+D+ Casual)	
Not amenable to uniform norm						
1	2029	Land revenue	89	16483	16484	16573
2	2030	Stamps and registration	96	421	421	517
3	2035	Collection of other taxes on property & capital transactions	22	219	230	252
4	2039	State excise	95	2234	2269	2364
5	2040	Taxes on sales, trade etc.	487	3472	3481	3968
6	2041	Taxes on vehicles	109	1200	1206	1315
7	2045	Other taxes & duties on commodities & services	19	171	178	197
8	2014	Administration of justice	791	11852	12592	13383
9	2053	District administration	592	11438	11476	12068
10	2054	Treasury and accounts admin.	424	2632	2632	3056
11	2055	Police	1769	73611	73817	75586
12	2056	Jails	73	2838	2839	2912
13	2202	General education	30036	208710	208714	238750
14	2203	Technical education	673	1105	1105	1778
15	2210	Medical and public health	7787	58658	58670	66457
16	2211	Family welfare	603	11996	11999	12602
17	2406	Forestry and wild life	181	14764	14840	15021
18	2415	Agricultural education & research	3	36	36	39
19	3425	Other scientific research	53	99	99	152
20	3454	Census surveys and statistics	118	627	628	746
21	2403	Animal husbandry	1921	11138	11138	13059
22	2250	Other social services	20	502	502	522
Mostly Capital –intensive						
23	2059	Public works	1193	8243	8243	9436
24	2705	Command area development	790	5308	5314	6104
Total			**47944**	**447757**	**448913**	**496857**

Source: Budget Document Schedule 4A (2004-05).

The methodology for constructing the uniform per staff non-salary expenditure norm for the 42 amenable departments is as follows:

Step 1*:* For this analysis, per staff non-salary expenditure in each department has to be calculated. However, the data on department-wise salary expenditure for 2004-05 does not correspond with the department-wise data on employment.[9] Therefore, the actual salary data was not used for the calculations. Using the data on department-wise revenue expenditure for 2004-05, the non-salary expenditure for each department was derived as follows:

- First, the appropriate aggregate salary expenditure per person was calculated for 2004-05. From the data, the per person salary figure was Rs.1.01 lakh for 2004-05. However, instead of this figure, which is a Revised Estimate, the figure of Rs. 1.10 lakh was used as the average per staff salary expenditure figure across all departments.

- Next, this average per staff salary expenditure was multiplied with the total number of employees in each department to get the salary expenditure in each department for 2004-05. The weakness of this method is the implicit assumption that the distribution of A, B, C, D and Casual employees is similar in each department such that the per-staff salary expenditure in each department is very close to the average per-staff salary expenditure across all departments. This need not be the case. In fact, departments whose per-staff salary expenditure is lower than the average will have a salary expenditure lower than our calculated figure. Therefore, this method will underestimate the non-salary expenditure and overestimate the number of redundant employees in those departments.

- Thereafter, the non-salary expenditure in each department is calculated by subtracting salary expenditure from the revenue expenditure of each department. The per staff non-salary expenditure in each department is derived by dividing the non-salary expenditure by the number of employees in each department.

[9] There are 65 Departments in the salary data provided by the Finance Department, with no information on the salary expenditure in Budget heads 2810, 3054 and 4711 and with salary information on Budget head 2700 which is not mentioned either in the Finance Accounts or the Budget Document 4A, 2004-05. Due to this incompatibility with the data on employees in each Budget head, actual salary data has not been used for the calculations.

Step 2: The total employee strength in each department is grouped into (A+B), (C+D) and (C+D+Casual) categories. The average per staff non-salary expenditure is Rs. 46.30 lakh for group (A+B), Rs. 3.00 lakh for the (C+D) category and Rs. 2.96 lakh for the (C+D+Casual) category. These numbers are assumed to be the norms for judging overstaffing in the departments. Departments with per staff non-salary expenditure below these norms are assumed to be overstaffed as the level of activity handled by them are lower than the average level of activity handled in the aggregate.

For simplicity, the amenable departments have been grouped as follows:

I. Amenable departments that are overstaffed, with per staff non-salary expenditure below the average for that group.

II. Amenable departments that are not overstaffed, with per staff non-salary expenditure higher than the average for that category.

Appendix table 4A.1 lists the departments in group II (those departments that are not overstaffed). Tables 4.6, 4.7 and 4.8 show the analysis for group I alone (the overstaffed departments). For this group, the extent of redundancy has been explicitly assessed by subtracting the desired employment from the actual employment. The desired staff strength has been calculated using the following formula:

$$E^d_{it} = n_{it} / psn\sim$$

where

E^d_{it} : desired number of employees for the i^{th} department at time 't'

n_{it} : non-salary expenditure for the i^{th} department at time 't'

psn~ : uniform per staff norm of non-salary expenditure

Labour redundancy is computed by deducting the desirable size of employee strength (E^d_{it}) in each department from the existing employee strength (E_{it}):

$$E^r_{it} = E_{it} - E^d_{it}$$

The per staff non-salary expenditure norm is set at the averages for each of these categories, i.e it is Rs. 46.30 lakh for category (A+B), Rs. 3.00 lakh for (C+D) and Rs. 2.96 lakh for (C+D+Casual) category. These numbers are ad-hoc and one can simulate other cases with different uniform norms for per staff non-salary expenditure.

Using these norms (psn~ in the formula), the extent of redundant employment in 42 amenable departments is calculated in tables 4.6 to 4.8 and is summarized in box 4.1.

Box 4.1: Summary of Employment in Departments

	(A+B)	**(C+D)**	**(C+D+ Casual)**
Total number of departments	**67**	**67**	**67**
Subtracting Flood Control Projects Department with employees in the Capital Account exclusively	**1**	**1**	**1**
Effective total number of departments	**66**	**66**	**66**
Total non-amenable departments	**24**	**24**	**24**
Total amenable departments	42	42	42
Number of departments not overstaffed (by norm)	16	17	17
Overstaffed departments (by norm)	26	25	25
Number of redundant employees	3441	57,234	58,105
Percentage of total employment in that category (in 67 departments, including Flood Control Projects)	6.20	10.26	10.37

Source: Authors' calculations based on Budget Document Schedule 4A, 2004-05.

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Table 4.6
Overstaffed Departments Possibly Amenable to Uniform Norm (A+B)

Sl. No.	Demand No.	Budget Head	Category (A+B)	Total employees	Salary expenditure *(in Rs.lakh)*	Revenue expenditure *(in Rs. lakh)*	Non-salary expenditure *(in Rs.lakh)*	(A+B) psn *(in Rs.lakh)*	Desired (A+B)	Redundant (A+B)
1	2853	Non-Ferrous Mining and Metallurgical Industries	222	2605	2865.50	3009.73	144.23	0.65	3	219
2	2230	Labour and Employment	420	3681	4049.10	4373.11	324.01	0.77	7	413
3	2810	Non-Conventional Sources of Energy	1	2	2.20	3.11	0.91	0.91	0	1
4	2251	Secretariat-Social Services	63	424	466.40	561.70	95.30	1.51	2	61
5	2405	Fisheries	32	569	625.90	680.15	54.25	1.70	1	31
6	2205	Art and Culture	136	1142	1256.20	1500.65	244.45	1.80	5	131
7	2435	Other Agricultural Programmes	30	205	225.50	283.46	57.96	1.93	1	29
8	2425	Co-operation	218	1999	2198.90	2968.64	769.74	3.53	17	201
9	3435	Ecology and Environment	4	20	22.00	38.57	16.57	4.14	0	4
10	2802	Petroleum	5	14	15.40	36.80	21.40	4.28	0	5
11	2052	Secretariat-General Services	356	2622	2884.20	4565.74	1681.54	4.72	36	320
12	2051	Public Service Commission	36	223	245.30	431.47	186.17	5.17	4	32
13	2220	Information and Publicity	68	541	595.10	960.78	365.68	5.38	8	60
14	2012	President, Vice President/Governor, Administrator of UT	11	170	187.00	272.65	85.65	7.79	2	9
15	3456	Civil Supplies	153	1423	1565.30	2927.67	1362.37	8.90	29	124
16	2011	Parliament/State/UT/Legislatures	80	592	651.20	1394.85	743.65	9.30	16	64
17	2702	Minor Irrigation	171	4292	4721.20	6422.35	1701.15	9.95	37	134
18	2058	Stationary and Printing	8	1073	1180.30	1260.06	79.76	9.97	2	6
19	2401	Crop Husbandry	788	7974	8771.40	17041.71	8270.31	10.50	179	609
20	2852	Industries	111	1099	1208.90	3486.98	2278.08	20.52	49	62
21	2215	Water Supply and Sanitation	1231	44334	48767.40	75374.20	26606.80	21.61	575	656
22	2070	Other Administrative Services	195	3298	3627.80	8123.25	4495.45	23.05	97	98
23	3452	Tourism	32	206	226.60	1094.88	868.28	27.13	19	13
24	2204	Sports and Youth Services	58	853	938.30	2525.80	1587.50	27.37	34	24
25	2402	Soil and Water Conservation	208	1939	2132.90	8695.63	6562.73	31.55	142	66
26	2217	Urban Development	262	909	999.90	9897.33	8897.43	33.96	192	70
		Total of Overstaffed Departments	**4899**	**82209**	**90429.9**	**157931.27**	**67501.37**		**1458**	**3441**
		Total (Overstaffed+ Not overstaffed)	**6630**	**110287**	**121315.70**	**428254.79**	**306939.09**	**46.30**		

Source: Ibid.

Table 4.7
Overstaffed Departments Possibly Amenable to Uniform Norm ((C+D)

Sl. No.	Demand No.	Budget Head	Category (C+D)	Total employees	Salary expenditure *(in Rs.lakh)*	Revenue expenditure *(in Rs. lakh)*	Non-salary expenditure *(in Rs.lakh)*	(C+D) psn *(in Rs.lakh)*	Desired (C+D)	Redundant (C+D)
1	2853	Non-Ferrous Mining and Metallurgical Industries	2383	2605	2865.50	3009.73	144.23	0.06	48	2335
2	2058	Stationary and Printing	1065	1073	1180.30	1260.06	79.76	0.07	27	1038
3	2230	Labour and Employment	3260	3681	4049.10	4373.11	324.01	0.10	108	3152
4	2405	Fisheries	536	569	625.90	680.15	54.25	0.10	18	518
5	2205	Art and Culture	1006	1142	1256.20	1500.65	244.45	0.24	82	924
6	2251	Secretariat-Social Services	335	424	466.40	561.70	95.30	0.28	32	303
7	2435	Other Agricultural Programmes	175	205	225.50	283.46	57.96	0.33	19	156
8	2702	Minor Irrigation	4121	4292	4721.20	6422.35	1701.15	0.41	567	3554
9	2425	Co-operation	1552	1999	2198.90	2968.64	769.74	0.50	257	1295
10	2012	President, Vice President/Governor, Admin. of UT	155	170	187.00	272.65	85.65	0.55	29	126
11	2215	Water Supply and Sanitation	43087	44334	48767.40	75374.20	26606.80	0.62	8874	34213
12	2220	Information and Publicity	473	541	595.10	960.78	365.68	0.77	122	351
13	2810	Non-Conventional Sources of Energy	1	2	2.20	3.11	0.91	0.91	0	1
14	2052	Secretariat-General Services	1740	2622	2884.20	4565.74	1681.54	0.97	561	1179
15	3435	Ecology and Environment	16	20	22.00	38.57	16.57	1.04	6	10
16	2051	Public Service Commission	179	223	245.30	431.47	186.17	1.04	62	117
17	3456	Civil Supplies	1268	1423	1565.30	2927.67	1362.37	1.07	454	814
18	2401	Crop Husbandry	7185	7974	8771.40	17041.71	8270.31	1.15	2758	4427
19	2070	Other Administrative Services	3096	3298	3627.80	8123.25	4495.45	1.45	1499	1597
20	2204	Sports and Youth Services	795	853	938.30	2525.80	1587.50	2.00	529	266
21	2852	Industries	987	1099	1208.90	3486.98	2278.08	2.31	760	227
22	2802	Petroleum	9	14	15.40	36.80	21.40	2.38	7	2
23	2011	Parliament/State/UT/Legislatures	306	592	651.20	1394.85	743.65	2.43	248	58
24	2216	Housing	989	1002	1102.20	3561.49	2459.29	2.49	820	169
25	3054	Roads and Bridges	6177	6317	6948.70	24260.08	17311.38	2.80	5774	403
		Total of Overstaffed Departments	**80896**	**86474**	**95121.4**	**166065**	**70943.60**		**23662**	**57234**
		Total (Overstaffed+ Not overstaffed)	**102376**	**110287**	**121315.70**	**428254.79**	**306939.09**	**3.00**		

Source: Ibid.

Table 4.8: Overstaffed Departments Possibly Amenable to Uniform Norm (C+D++Casual)

Sl. No.	Demand No.	Budget Head	Category (C+D+ casual)	Total employees	Salary expenditure *(in Rs. lakh)*	Revenue expenditure *(in Rs. lakh)*	Non-salary expenditure *(in Rs .lakh)*	(C+D+ casual) psn *(in Rs .lakh)*	Desired (C+D+ casual)	Redundant (C+D+ casual)
1	2853	Non-Ferrous Mining and Metallurgical Industries	2383	2605	2865.50	3009.73	144.23	0.06	49	2334
2	2058	Stationary and Printing	1065	1073	1180.30	1260.06	79.76	0.07	27	1038
3	2230	Labour and Employment	3261	3681	4049.10	4373.11	324.01	0.10	109	3152
4	2405	Fisheries	537	569	625.90	680.15	54.25	0.10	18	519
5	2205	Art and Culture	1006	1142	1256.20	1500.65	244.45	0.24	83	923
6	2251	Secretariat-Social Services	361	424	466.40	561.70	95.30	0.26	32	329
7	2435	Other Agricultural Programmes	175	205	225.50	283.46	57.96	0.33	20	155
8	2702	Minor Irrigation	4121	4292	4721.20	6422.35	1701.15	0.41	574	3547
9	2425	Co-operation	1781	1999	2198.90	2968.64	769.74	0.43	260	1521
10	2012	President, Vice President/Governor, Administrator of UT	159	170	187.00	272.65	85.65	0.54	29	130
11	2215	Water Supply and Sanitation	43103	44334	48767.40	75374.20	26606.80	0.62	8985	34118
12	2052	Secretariat-General Services	2266	2622	2884.20	4565.74	1681.54	0.74	568	1698
13	2220	Information and Publicity	473	541	595.10	960.78	365.68	0.77	123	350
14	2810	Non-Conventional Sources of Energy	1	2	2.20	3.11	0.91	0.91	0	1
15	2051	Public Service Commission	187	223	245.30	431.47	186.17	1.00	63	124
16	3435	Ecology and Environment	16	20	22.00	38.57	16.57	1.04	6	10
17	3456	Civil Supplies	1270	1423	1565.30	2927.67	1362.37	1.07	460	810
18	2401	Crop Husbandry	7186	7974	8771.40	17041.71	8270.31	1.15	2793	4393
19	2070	Other Administrative Services	3103	3298	3627.80	8123.25	4495.45	1.45	1518	1585
20	2011	Parliament/State/UT/Legislatures	512	592	651.20	1394.85	743.65	1.45	251	261
21	2204	Sports and Youth Services	795	853	938.30	2525.80	1587.50	2.00	536	259
22	2852	Industries	988	1099	1208.90	3486.98	2278.08	2.31	769	219
23	2802	Petroleum	9	14	15.40	36.80	21.40	2.38	7	2
24	2216	Housing	989	1002	1102.20	3561.49	2459.29	2.49	831	158
25	3054	Roads and Bridges	6317	6317	6948.70	24260.08	17311.38	2.74	5846	471
		Total of Overstaffed Departments	**82064**	**86474**	**95121.40**	**166065.00**	**70943.60**		**23959**	**58105**
		Total (Overstaffed+ Not overstaffed)	**103657**	**110287**	**121315.70**	**428254.79**	**306939.09**	**2.96**		

Source: Ibid.

The redundant staff from these departments should be reallocated to other departments with a shortage of workforce. The state has undertaken some redeployment exercises during the last three years whereby staff from the Forest Department and octroi staff of Municipalities have been redeployed as Gram Sevaks in the Panchayats.

However, there is scope for further redeployment from the overstaffed departments to other departments that have a shortfall. For instance, the data collection centres at the borders of the state are severely understaffed and there is a genuine requirement for (A+B) category staff at these centres. Data about the staffing of some of these centres and contiguous check posts in other states are shown in table 4.9.

Table 4.9

Comparative Position of Employment in Document Collection Centres in Rajasthan, 2005

Rajasthan			Other State		
Name of document collection centre	**No. of counters**	**No. of officers posted**	**Name of document collection centre**	**No. of counters**	**No. of officers posted**
Rarah	2	1	Jajam Patti (U.P.)	4	4
Uncha Nangla	2	6	Fatehpur Sikri (U.P.)	4	21
Ratanpur	3	6	Samalaji (Gujarat)	3	24

Source: Commercial Taxes Department, Government of Rajasthan.

For example, Ratanpur post has two officers per counter, whereas the contiguous post in Gujarat (with similar levels of computerization as the Ratanpur post) has eight officers per counter. These contiguous centres handle similar volumes of traffic and require similar levels of infrastructure in order to handle goods traffic, particularly during rush hours. These centres are very important for revenue generation as they are big deterrents to tax evasion. Therefore, (A+B) category staff should be trained and transferred from the overstaffed departments identified in this analysis to these centres.

Although the revenue department has been excluded from the list of amenable departments, and although as just said, there is a need for additional

supervisory staff at the border checkposts, it may still be the case that the department has an excess of staff in the D category, like all departments in the state government. The total revenue expenditure of the revenue department in 2004-05 was 3.81 percent of total revenue collected. The comparable figure for the Government of India is 0.85 percent. Aggregating all staff, the revenue collected in Rajasthan is 0.33 crore. The comparable figure for GoI is 2.5 crore. It should be reiterated once again that these numbers do not necessarily call for an overall reduction in staff size so much as a change in composition towards higher skill level posts, so as to secure higher revenue collections with the existing staff strength.

Finally, there is clearly a great deal of scope for rationalization of the departmental structure, by merging departments performing common functions. Specific suggestions along these lines can only be done by examining the scope of operations of each department, but this is an additional method by which excess staff can be identified for redeployment towards understaffed departments.

4.4 GENERAL EDUCATION: APPLYING THE PTR NORM

For the Budget head General Education, the total employment in the (A+B+C) categories is 2,12,518 in 2004-05. The actual enrolment of children in the age group of 6-14 is 1,26,65,000 in 2004-05.[10] The Pupil Teacher Ratio (PTR) calculated with these figures works out to 60:1 approximately. If a PTR norm of 40:1 is applied, there is a deficit of 1,04,107 teachers.

However, increasing the current ratio of 60:1 to 40:1 at one go will exert an infeasible burden on the salary and pension expenditure of the state. Further, training the new teachers will involve some amount of time. Therefore, the state government should attempt an incremental increase in employment of teachers and should not go in for an immediate increase in the total number of teachers.

In this context, it should be noted that the government has already sanctioned appointments for 38,000 Grade III teachers in 2004-05, all of which have already been filled. Further appointments of Grade II teachers will be made in 2005-06. Assuming basic pay of Rs. 5500 for the Grade III teachers, the annual salary burden

[10] Economic Review, 2004-05.

per new employee will amount to around Rs.1.2 lakh.[11] Therefore, this fresh recruitment of 38,000 teachers will give rise to an additional salary burden of Rs.456 crore annually. Though the teacher deficit will be reduced, the government should be wary of increasing revenue expenditure through fresh employment in this manner, as this will make the possibility of attaining the FRBM targets all the more tough.

4.5 SUMMARY AND RECOMMENDATIONS

This chapter brings to the fore two important aspects of the size of government and the level of provision of governance activities in Rajasthan.

First, Rajasthan is not over-staffed in terms of number of civil servants per capita. The figure for Rajasthan is lower than the all-India figure. Second, the level of activity handled by a large number of departments is too low. These departments are overstaffed in relation to the size of non-salary expenditure handled by them.

Hence, there is considerable scope for staff redeployment from the overstaffed departments to those departments like the Document Collection Centres in the Commercial Taxes Department, where there is a genuine shortage of staff.

There is also scope for further restructuring the composition of (A+B) and (C+D+Casual) category employees. Earlier measures at restructuring have substantially reduced the strength of Casual employees and increased the proportion of (A+B) class employees. However, as on 2004-05, 91 percent of total employees are still (C+D+Casual) category employees. Further restructuring aimed at increasing the numbers in the former category and reducing the numbers in the second category would improve the quality of governance of the state. A possible route for achieving this without incurring fresh employment is to promote some of the experienced and capable C category staff to B category. These employees should be trained and promoted after they clear some examination that checks for competence.

Among other non-fiscal reforms, the state should continue with the freeze on fresh employment so that the burden of salary and pension expenditure (which has been increasing over the last three years upto 2003-04) does not inflate beyond current levels. The recent recruitment of school teachers and the proposed fresh

[11] The monthly salary is assumed to be Rs.10,000 with this basic pay.

employment of 4000 police constables in 2005-06 will inflate the salary and pension bill and increase the difficulty of attaining the FRBM targets.

From a fiscal point of view, there is no further scope for expenditure reduction from staff restructuring in government departments.

Appendix to Chapter 4

Table 4A.1

Departments that are Not Overstaffed

(A+B)		(C+D)		(C+D+Casual)	
Sl. No.	**Budget Head**	**Sl. No.**	**Budget Head**	**Sl. No.**	**Budget Head**
1	Other Fiscal Services	1	Soil & Water Conservation	1	Soil & Water Conservation
2	Other General Economic Services	2	Other General Economic Services	2	Other General Economic Services
3	Social Security & Welfare	3	Social Security & Welfare	3	Social Security & Welfare
4	Housing	4	Tourism	4	Tourism
5	Nutrition	5	Nutrition	5	Nutrition
6	Elections	6	Elections	6	Elections
7	Welfare of SC/ST and other backward classes	7	Welfare of SC/ST and other backward classes	7	Welfare of SC/ST and other backward classes
8	Major and Medium Irrigation	8	Major and Medium Irrigation	8	Major and Medium Irrigation
9	Roads and Bridges	9	Other Fiscal Services	9	Other Fiscal Services
10	Compensation and Assign-ments to Local Bodies and Panchayati Raj Institutions	10	Compensation and Assign-ments to Local Bodies and Panchayati Raj Institutions	10	Compensation and Assign-ments to Local Bodies and Panchayati Raj Institutions
11	Secretariat-Economic Services	11	Secretariat-Economic Services	11	Secretariat-Economic Services
12	Village & Small Industries	12	Village & Small Industries	12	Village & Small Industries
13	Other Rural Development Programmes	13	Other Rural Development Programmes	13	Other Rural Development Programmes
14	Miscellaneous General Services	14	Miscellaneous General Services	14	Miscellaneous General Services
15	Relief on account of Natural Calamities	15	Relief on account of Natural Calamities	15	Relief on account of Natural Calamities
16	Council of Ministers	16	Council of Ministers	16	Council of Ministers
		17	Urban Development	17	Urban Development
Total Employment: 28078		**Total Employment: 23813**		**Total Employment: 23813**	
Total (A+B): 1731		**Total (C+D): 21480**		**Total (C+D+Casual): 21593**	

Source: Authors' calculations based on data from Budget Document Schedule 4A (2004-05).

5. REVENUE RESTRUCTURING

5.1 STRUCTURE OF OWN REVENUES

In this chapter, the past and current own-revenue position of the state are assessed, to provide a basis for recommendations on directions in which the state can improve its own revenue effort. In chapter 2, the State FRBM scenario was simulated with own tax buoyancy assumed at 1.2 (as suggested by the TFC), which gives a rate of growth of 12 percent with a 10 percent assumed rate of growth of nominal GSDP. Non-tax revenues were taken at the absolute figures projected by the TFC. In order to meet the targets of the State FRBM, these projections will have to be realised.

Table 5.1 shows that the compound growth rate of own revenue over 2000-05 was 10.75 percent per year. Own taxes grew at an impressive annual average of 12.93 percent, although own non-tax revenue grew at only 5.62 percent over 2000-05, thereby bringing down the growth rate of total own revenue. The historical growth rate of own tax revenue suggests that the projected rate of tax revenue growth over 2000-05 of 12 percent falls in the feasible range.

The shares of own revenues and receipts from the Centre in the total revenue receipts of Rajasthan at five-year intervals since 1990-91 are shown in table 5.2. These will change at the margin, in accordance with the changed share of Rajasthan in statutory shares of Central taxes; the actual Central tax collections realized, as distinct from those projected by the TFC; the share of Rajasthan in the other ten grant categories prescribed by the TFC; and own revenue collections of Rajasthan. The last column of table 5.2 shows the possible percentage configuration of these various categories, under the assumptions made for the projections in chapter 2.

Own revenue was close to 60 percent of total revenue receipts and own-tax revenue was approximately 48 percent of total revenue in 2004-05. With the assumptions about own revenues in chapter 2, own revenue will be close to 58 percent of total revenue and own-tax revenue approximately 49 percent of total revenue by 2009-10. These are not very big changes in the relative shares of own revenue and own-tax revenue in total revenues compared to 2004-05.

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Table 5.1

Compound Growth Rates of Macroeconomic and Fiscal Variables

	2000-05	1999-04	1998-03	1997-02	1996-01	1995-00	1994-99
Nominal GSDP	6.79	6.46	5.91	8.98	10.88	13.62	17.29
Total revenue receipts	11.38	12.45	9.25	9.96	10.20	9.14	8.92
Own revenue receipts	**10.75**	**11.98**	**9.48**	**9.87**	**6.98**	**11.12**	**11.07**
Own tax	12.93	12.96	11.61	12.67	14.18	14.45	15.10
Own non-tax	5.62	8.89	2.86	2.08	-5.64	3.97	2.76
Central transfers	**12.39**	**13.19**	**8.92**	**10.10**	**15.43**	**6.27**	**5.92**
Statutory share of taxes	12.85	12.98	11.11	10.30	13.85	11.08	11.22
Grants	11.07	13.62	6.24	9.82	17.33	1.00	0.17
Non-interest revenue expenditure	6.67	8.56	12.39	11.92	10.51	13.18	13.24
Capital expenditure	21.76	12.85	2.05	3.55	-2.15	5.17	13.00

Source: Authors' calculations based on data from Finance Department, Government of Rajasthan.

Table 5.2

Structure of Total Revenue Receipts in Rajasthan

	1990-91	1995-96	2000-01	2004-05	2009-10
Own tax revenue	33.35	35.79	42.74	47.64	48.95
Own non tax revenue	22.48	29.58	13.61	12.03	9.48
Own revenue	**55.83**	**65.37**	**56.35**	**59.68**	**58.43**
Shared taxes	20.80	19.44	22.87	24.63	29.79
Grants from the Centre	23.37	15.19	20.78	15.69	11.78
Total transfers	**44.17**	**34.63**	**43.65**	**40.32**	**41.57**
Total revenue receipts	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: Ibid.

Table 5.3 shows the shares of the components of own revenue from 1981-82 to 2004-05 at five year intervals.

Table 5.3

Structure of Own Revenue of Rajasthan

	1981-82	1985-86	1990-91	1995-96	2000-01	2004-05
I. State's own tax revenue	**53.72**	**65.34**	**59.73**	**54.75**	**75.84**	**79.83**
Taxes on income	2.25	1.80	1.78	0.68	0.64	0.96
Taxes on property & capital transactions	3.24	3.16	4.10	4.57	6.25	7.67
Taxes on commodities & services						
Sales tax	*34.37*	*38.71*	*32.11*	*28.06*	*40.37*	*43.00*
State excise	*3.14*	*9.75*	*12.79*	*14.15*	*16.01*	*12.70*
Taxes on vehicles	*3.25*	*7.62*	*5.28*	*4.94*	*7.32*	*7.72*
Electricity duty	1.24	2.20	2.63	1.61	3.60	4.23
Land building tax	0.00	0.00	0.43	0.26	0.46	0.05
Entertainment and luxury tax	1.71	1.37	0.61	0.47	0.76	0.50
Goods and passenger tax	0.00	0.00	0.00	0.00	0.28	1.97
Profession and service tax	0.00	0.00	0.00	0.00	0.22	0.02
II. State's own non tax revenue	**46.28**	**34.66**	**40.27**	**45.25**	**24.16**	**20.17**
Total own revenue (I+II)	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: Ibid.

The share of own-tax revenue has risen steadily to an approximately 80 percent share in total own revenues in 2004-05. Within own-tax revenue, the most important contribution comes from sales taxes, which accounted for 43 percent of total own revenue in 2004-05.

The revenue position of Rajasthan compared to 28 states is shown in table 5.4 for the year 2002-03. Rajasthan had an own tax/GSDP of 7.2 percent in 2002-03, as against an average of 6.1 percent across the states. Own revenue as a percentage of GSDP was 9 percent as against an average of 12.5 percent. However, cross-state comparisons carry the limitation that the composition of GSDP by sector of origin determine the taxable capacity of the state.[1] Of greater relevance than cross-state comparisons is the trend over time within any state. Table 5.5 shows the percent increase in own tax revenue, non-tax revenue and own revenue in recent years.

[1] The share of agriculture in Rajasthan is about 1.5 percentage points above the national average, which in 2003-04 was 22.8 percent of GDP at current price factor cost. Agricultural income falls under the taxable purview of the states, but has been ineffectively exploited because of inherent limitations; see Indira Rajaraman, (2003) A Fiscal Domain For Panchayats (Oxford University Press).

Table 5.4

Rank of Rajasthan by Revenue Effort Across States, 2002-03

Own-tax revenue as a percentage of GSDP		
Rank	**State**	**Own tax/GSDP %**
1 (Highest)	Tamil Nadu	9.3
9	Rajasthan	7.2
21 (Lowest)	Mizoram, Nagaland	1.5
Own-revenue as a percentage of GSDP		
Rank	**State**	**Own revenue/ GSDP %**
1 (Highest)	Sikkim	23.3
13	Rajasthan	9.0
26 (Lowest)	Nagaland	2.5

Source: Reserve Bank of India.

Notes: There are 28 states in the data. However, some of them have the same rank (e.g, Mizoram and Nagaland both have rank 21 for own-tax revenue as percentage of GSDP). Therefore, the total numbers of ranks collapse to 21 for own-tax as a percentage of GSDP and to 26 for own revenue as a percentage of GSDP.

Table 5.5

Annual Growth Rate of Own Revenue

(%)

	Own revenue	**Own tax Revenue**	**Own non-tax revenue**
1994-95	14.87	18.30	9.21
1995-96	38.64	18.35	74.92
1996-97	-10.07	14.40	-39.69
1997-98	10.88	15.58	0.10
1998-99	6.43	9.11	-0.66
1999-00	15.34	15.02	16.28
2000-01	14.47	16.97	7.26
2001-02	2.74	7.00	-10.64
2002-03	8.95	10.27	4.01
2003-04	19.12	15.88	32.04
2004-05 BE	11.96	14.94	1.55

Source: Finance Department, Government of Rajasthan.

Own-tax revenue in Rajasthan has risen steadily at rates greater than 10 percent for most of the years since 1994-95 to 2004-05. Own non-tax revenue growth rate on the other hand has been very volatile, ranging from 75 percent in 1995-96 to (–)40 percent in 1996-97. The overall growth rate of own revenue, therefore, has been somewhat volatile. The most recent growth rates of own

revenue have been much above 10 percent (in the last two years). What is at issue is whether these rates can be sustained up to 2009-10, enough to justify, and if possible improve upon, the revenue projections performed in chapter 2 to simulate the impact of the fiscal correction envisaged under the FRBM.

The next section 5.2 discusses own tax revenues in detail. Section 5.3 examines the revenue generation from non-tax revenue and analyses the potential for revenue generation from recent oil and natural gas finds in the Barmer-Sanchore basin. Revenue generation from urban local bodies is covered in a separate chapter of the report. Section 5.4 summarizes with recommendations.

5.2 STRUCTURE OF OWN TAXES

Subsection 5.2.1 analyses the buoyancy of own tax revenues. Buoyancy of non-tax revenues is not calculated because of the volatility in the non-tax revenue series. Subsection 5.2.2 analyses sales tax collections by zone to determine where anti-evasion efforts should be concentrated. Subsection 5.2.3 analyses the other taxes and summarizes the reform measures that have already been undertaken.

5.2.1 BUOYANCY OF OWN TAXES

Own tax revenue, as shown in table 5.3, is the major component of total revenue, contributing almost 80 percent to total own revenue in 2004-05. Table 5.5 shows that the growth rate of own tax revenue was approximately 19 percent in 2003-04 and 12 percent in 2004-05. This achieved rate of growth of own-tax revenue is higher on average than the required 12 percent for the simulations of the State FRBM in chapter 2, where the buoyancy of own-tax revenue was assumed to be 1.2 and growth rate was assumed to be 10 percent over the projection period. This impressive rate of growth has to be maintained over 2005-10 in order to satisfy the targets of the State FRBM.

Buoyancy of revenue is a measure of the percent change in revenue to a one percentage change in GSDP. In the very simplest kind of specification, it is the coefficient β in the following estimated equation:

$$\mathbf{L}(r_t) = \propto + \beta\, \mathbf{L}(g_t) + u_t \quad \text{.....(1)}$$

where $L(r_t)$ = log of (nominal) revenue in year t
$L(g_t)$ = log of (nominal) GSDP in year t
$\propto$ = intercept
β = buoyancy estimate
u_t = error term in year t.

Buoyancies of own tax are calculated with and without structural breaks in the data, which range from 1980-81 to 2003-04. Alternate regression specifications, incorporating the share of industry as an independent regressor along with the structural break, are also estimated. Inclusion of the structural break and the share of industry as an independent regressor improve the model specification substantially, as shown by the measures of goodness of fit from the different regression models. These are shown in table 5.6.

Further, the estimated buoyancy of 1.44, after controlling for the share of industry and with the structural break in 1996-97, is highly significant.

Table 5.6

Own Tax Buoyancy Estimates (1980-81 to 2003-04)

Reg. no.	Period	Without Break	Break year	Before break	Change	After break	Log of % industry share	Durbin Watson	LM test on residuals: 2 lags	Goodness of Fit	
									P-value	AIC	SBC
1	1981-04	1.09 (t= 56.22)	None					1.30	P=0.12	-1.92	-1.83
2	1981-03		1986-87	1.23 (t=8.58)	-0.25 (t=-1.74)	0.98	0.68 (t=2.34)	1.41	P=0.46	-2.06	-1.81
3	1987-03		1996-97	0.95 (t= 18.00)	0.49 (t=2.48)	1.44	0.53 (t=1.85)	2.06	P=0.65	-2.26	-2.01

Source: Indira Rajaraman, Rajan Goyal and Jeevan Khundrakpam, 2005 "Tax Buoyancy Estimates for States"; mimeo.
Notes: The buoyancy estimates in the source go up only to 2002-03 for all states. Re-estimation upto 2003-04 was done for regression no. 1, using revenue and provisional GSDP figures for 2003-04 from state sources.
AIC : Akaike Information Criterion.
SBC :Schwarz Bayesian Criterion.

The first regression is the simple regression expressed in equation (1), without any structural break or control for the share of industry. The buoyancy estimate is 1.09 with a very significant t-statistic (t = 56.22). The low value of the

Durbin-Watson (DW) statistic (a value of 2 signifies zero serial correlation) and the low p-value of 0.12 for the Lagrange Multiplier (LM) test statistic for serial correlation (with 2 lags) indicates that there is serial correlation in the residuals.

Regression 2 introduces a structural break to the data in 1986-87 and introduces another regressor: the share of industry in GSDP. This specification of the regression model reduces the problem of serial correlation to some extent as the value of the DW statistic increases to 1.41 from 1.30. Before the break, the buoyancy is 1.23 with a significant t-statistic. After the break, the buoyancy falls to 0.98, as the impact of the break on the buoyancy is (–)0.25.

Regression 3 is a better fit to the data than regression 2 or regression 1, as the parameters of goodness of fit are higher in absolute value in regression 3 than in the other two regressions. In this regression, the horizon is over 1987-03 (i.e. after the first break in 1986-87) with a structural break in 1996-97 along with the control for the share of industry. Before the break in 1996-97, the estimated buoyancy is 0.96 and it has a significant t-statistic. After the break, the buoyancy increases to 1.44, as there is a significant positive impact (0.49) of the structural break. The large buoyancy estimate of 1.44 in this regression is probably because the estimation period of this regression starts at a later date compared to the second regression and isolates the large positive impact of the second structural break.

Given this buoyancy estimate, our assumption of 1.2 for own taxes over the projection period seems to be very realistic. The recent good revenue performance, with an estimated 15 percent increase in own tax revenue from 2003-04 to 2004-05, is in line with the high buoyancy estimate from regression 3. Sales tax alone has grown by 21 percent from Rs.3800 crore in 2003-04 to Rs.4800 crore in 2004-05. The increase in revenues from stamps and registration was also an impressive 19 percent over 2002-03 to 2003-04.

Buoyancy can also be obtained for each year of a period, by simple division of the (nominal) revenue growth rate by the (nominal) GSDP growth rate. These are in general useful supplements to the revenue buoyancy estimates for a whole period. The purpose is to identify years in which there have been upward shifts (or spikes), and to discover the policy and/or administrative changes underlying these revenue gains. Charts 5.1 and 5.2 present the year-to-year response of sales tax to GSDP and state excise GSDP respectively.

Chart 5.1

Buoyancy of Sales Taxes (1981-82 to 2004-05)

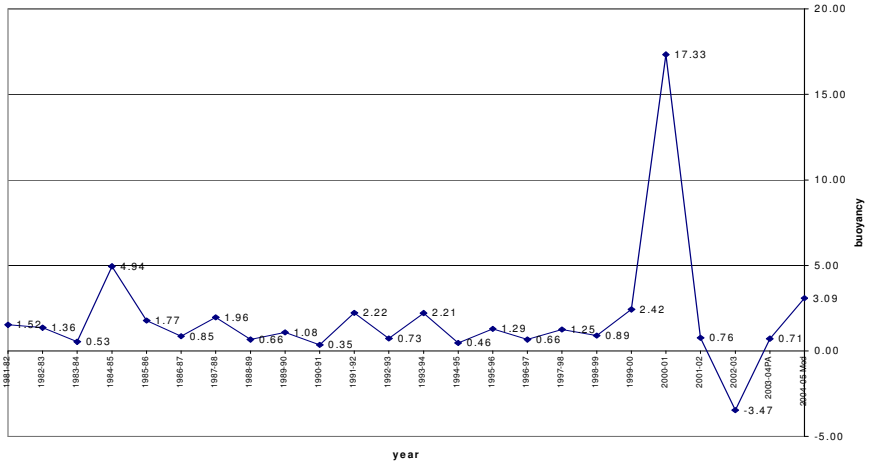
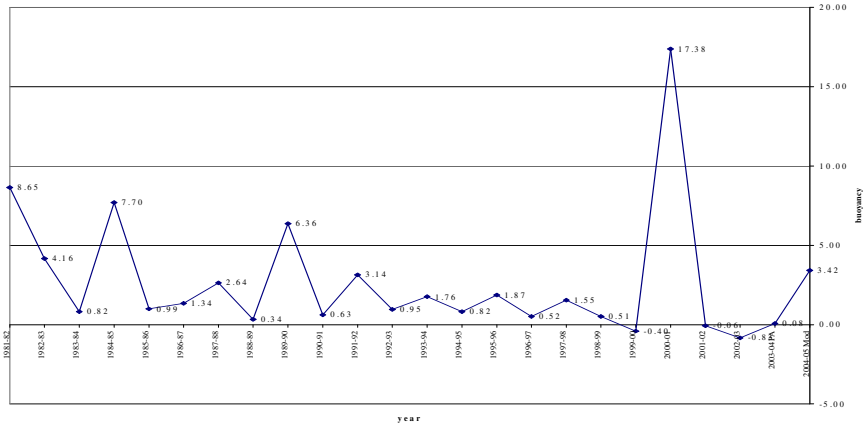


Chart 5.1 shows that the growth rate of sales tax was quite steady until 1998-99. This increased volatility from 1998-99 to 2004-05 is more an outcome of the extreme volatility in nominal GSDP growth rates in the recent years, than of volatility in annual rates of increase of sales tax. There is a steady annual increase in sales tax, largely independent of the underlying GSDP performance, which suggests steady progress over the years in improving tax design and administration.

Chart 5.2

Buoyancy of State Excise (1981-82 to 2004-05)



State excise shows much higher volatility than sales tax from 1981-82 to 1992-93, which can be attributed to the volatility of the excise growth rate in this period rather than the volatility in the GSDP growth rates. However, the volatility from 1998-99 to 2004-05 is similar to the volatility of sales tax and is caused by the volatility of the GSDP growth rate over this period.

The good revenue performance in recent years is a result of improvements in the tax administration and simplification of the tax structure, which has increased tax compliance. Some of the reform measures in sales taxes are:

- Allotment of nationally compatible Tax Identification Numbers (TIN) to all registered dealers.
- Simplification of forms ST 5A, 5B and 5C, which the traders have to submit to the Commercial Taxes Department. This was announced in the 2004-05 Budget and is a welcome initiative as this will make the system of self-assessment more effective. An IT-based risk audit model for checking the records of 5 percent of the dealer population randomly on the basis of the parameters of the model has been implemented in 2004-05.
- Creation of a special cell for the 90 large taxpayers who account for more than 50 percent of revenues of the Commercial Taxes Department. Around 1200 dealers paying more than Rs.100 million a year are also tracked on a special basis. A Gold Card scheme was proposed in the 2003-04 Budget in order to give some additional benefits to regular taxpayers.
- Reduction of the interaction between the taxpayers and the tax officials in order to reduce corruption and improve the efficiency of tax collection. The filing of tax returns can be done without the physical presence of the dealer and taxes can be deposited in the authorized banks. Grievance redress cells at the zonal level have been proposed in the 2004-05 budget to address the problems at the district level.
- Reduction of the 15 tax slabs in sales tax to 11 slabs proposed in the 2005-06 Budget in order to simplify the sales tax structure.
- Computerization up to the circle level for collection of sales tax, which allows the daily monitoring of revenue collection.
- Document collection centres at the borders, which collects documents of all incoming, outgoing and out-to-out traffic for assessment by the relevant authorities.

Among these reforms, the document collection centres have increased taxpayer compliance since their computerization in 2002. As mentioned in table

5.5, the development of these centres explains the jump in the growth rate of own taxes from 10.27 percent in 2002-03 to 15.88 percent in 2003-04. Rajasthan has 69 such border centres, out of which 7, which have been fully computerized and are to be connected by a VSAT network sometime soon,[2] handle 90 percent of the total traffic handled by all centres. The total value of goods transiting through these centres in recent years is shown in table 5.7. It is in this connection that the need for additional staff in these centres, highlighted in chapter 4, assumes additional urgency.

Table 5.7

Value of Goods Reported at the Document Collection Centres, 2002-05

Year	Value (Rs. crore)	% change
Import		
2002-03	66,395.08	-
2003-04	1,49,729.96	125.51
2004-05	1,54,375.88	3.10
Export		
2002-03	31,022.05	-
2003-04	40,780.70	31.46
2004-05	38,912.17	-4.58

Source: Commercial Taxes Department, Government of Rajasthan.

Some other reform measures in the tax structure, announced in the last two Budgets (2004-05 and 2005-06), are expected to further simplify the tax administration and improve the efficiency of collection in the near future. Notable among these are:

- Abolition of turnover tax (proposed in the 2004-05 Budget), which were being levied in addition to sales tax, in order to simplify the tax structure and reduce cascading of taxes.
- Consolidation of the different entry tax rates on industrial fuels and a uniform rate of 3 percent has been proposed in the 2004-05 Budget, with the exception of LNG. This entry tax will not be applicable if sales tax has already been paid.
- Amnesty Schemes for sales taxes, land and house tax and stamps and registration (proposed in the 2004-05 Budget) in order to reduce litigation cases. Demands on outstanding sales tax, which are more

[2] However, as noted in chapter 4, the number of officers and counters at these posts are much lower than that in other contiguous check posts in other states.

than 10 years old or where the total amount is less than Rs.20,000, have been proposed to be written-off in the 2005-06 Budget. This last measure will solve around 15,000 pending cases.

- New composition scheme for bullion and saraffa dealers has been introduced in 2004, in order to increase bullion trade in the state and thereby increase revenue collection from bullion and saraffa.
- Tabulation of items which have been declared tax-free by the State at different points in time for the ready reference of taxpayers. This has been proposed in the latest Budget.
- Most importantly, taxation on maximum retail price has been proposed on 12 items in the 2004-05 Budget. The list has been extended in the 2005-06 Budget to include a further 11 commodities (mobile phones, branded electrical fittings, branded cosmetics, branded biscuits, foreign liquor etc.). This reform explains the impressive revenue growth rate in 2004-05, as it has enabled the government to capture some of the downstream revenues, which could not be taxed due to the existing system of first point taxation.
- Reduction in the tax rate on aviation turbine fuel from 28 percent to 20 percent (declared in the 2005-06 Budget). This will attract private aviation companies to Rajasthan and boost the revenues from the tourism sector.

5.2.2 ANALYSIS OF SALES TAX COLLECTIONS

As in any other state, the major share of sales tax revenue is collected from large assessees. Assessees paying one lakh or more per year accounted in 2001-02 for 85 percent of total revenue and those paying ten lakh or more accounted for 70 percent.

Commodity-wise data are available on revenues collected from large assessees paying ten lakh or more per year for recent years. The cumulative shares by commodity ranked in descending order of importance show (table 5.8), once again, a high degree of commodity concentration in terms of collections. Sales tax on petroleum products alone account consistently for more than half of total revenue. Sales of petroleum have however grown at lower rates than the growth of motor vehicles registered in the state, and this is thought to be because the sales tax rate in Rajasathan, at 28 percent on petrol, and 20 percent on diesel,[3] is higher than the rates of levy in neighbouring Haryana and Delhi (12.5 percent), and Punjab (8 percent). Petroleum and automobiles and automobile parts together

[3] There is also a 50 paise cess on diesel and petrol to finance the Road Fund.

contributed nearly two-thirds of total revenue in the most recent fiscal year, 2004-05. The ten most revenue productive items accounted for more than 90 percent of total collections.

The impressive buoyancy recorded in official figures is clearly an outcome of the yield from petroleum and the transport sector, in a state largely reliant on tourism. But such a high degree of revenue concentration suggests that the tax net is not as widely cast as it should be, and particularly does not extend to sales of products produced within the state. Rajasthan has not moved to a destination-based VAT, so that sales of the minerals and metals produced within the state are still liable for levy of the sales tax, over and above royalties, which feed into non-tax revenues. But minerals and metals together account for well under one percent of total revenues (not shown in the table). This is a trivial contribution to the exchequer in a state famous for its minerals and minor metals. Marble is included under the minerals head rather than under construction materials, which include principally cement, bricks and iron and steel. Marble sourced from Rajasthan is used all over the country, and under the present sales tax regime, should be making a far higher revenue contribution than it does. Jewellery, another famous product of Rajasthan, is not listed among the principal revenue-contributing products in the set subject to sales tax. Jewellery exports are exempt from the sales tax, and this may be the avenue through which domestic sales escape payment of sales tax.

Table 5.8

Cumulative Percent Share of Sales Tax Revenue by Product

Product	2000-01	2001 – 02	2002 -03	2003-04	2004-05
Petroleum	53.14	51.99	52.05	53.73	52.04
Automobiles & parts	63.10	64.52	65.23	68.30	67.48
Construction materials	72.96	74.95	75.69	77.83	77.08
Pharmaceuticals	76.22	78.00	78.61	80.70	80.20
Electrical & electronic goods	79.70	81.11	81.99	83.62	83.48
Oil seeds & oils	82.89	84.36	85.10	86.73	86.98
Soap & washing powder	84.77	86.03	86.83	88.25	88.34
Fertilizer	86.75	88.30	88.80	89.71	89.60
Foodgrains	88.36	89.93	90.25	91.15	91.08
Miscellaneous goods	89.99	91.15	91.70	92.55	92.61
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: Ibid.

Notes: 1. Automobiles and parts include tyres and tubes; construction includes iron and steel.
2. This table is based on sales tax revenues from assessees making annual payments of ten lakh or more. At a median sales tax rate of 8 percent, the set includes assessees with an annual turnover of 1.2 crore or more.

It is impossible to make an assessment of the relative levels of evasion across products without an independent source of detailed product-specific information on the volume of sales subject to the sales tax. Such data are not available from the GSDP accounts of the state. What is possible, however, is to examine the zonal data on collections, for clues as to the zones where evasion may be higher than in others.

Before going to the zonal data, mention should be made of the impressive anti-evasion drive launched in the state through the anti-evasion cell of the department of commercial taxes, and through surprise checks by flying squads. Table 5.9 below gives figures of additional revenues yielded through these two new initiatives. Although the direct revenue yield is not a very high fraction of the total own tax revenue, which is of the order of 3000 crore, the deterrent effect of these new initiatives should be reflected in higher voluntary compliance, and indeed that is what the high buoyancy estimates for Rajasthan show.

Table 5.9

Direct Revenue Additionality from Anti-evasion Initiatives

(Rs. crore)

	2000-01	**2001-02**	**2002-03**	**2003-04**	**2004-05**
Anti evasion	16.75	23.02	19.57	23.47	25.86
Flying squad	11.85	10.2	8.49	11.04	13.95
Grand total	37.47	40.98	34.7	47.56	50.55

Source: Ibid.

In Rajasthan as in other states, appeals against revenue demands placed upon assessees clog the courts, and can balloon over the years into large stocks of arrears. The Department of Commercial Taxes has been making impressive efforts to unclog this unresolved backlog. At the end of fiscal year 2004-05, the backlog of pending appeals cases was 11306, down from 17011 at the end of 2002-03. It is only during the two-year period 2002-04 that such a sharp decline is seen in the number of pending cases. Prior to that, the decline was more gradual, such as from 18375 at the close of 2001-02, and that figure in turn was actually higher than the figure of 18103 at the close of 2000-01. A comparable breakup by appellate authority is not possible across these years, because the earlier zonal breakup has been further subdivided into a larger number of zones, with smaller jurisdictions. Jaipur I and II have been broken up into four zones (table 5.10). This subdivision in itself is likely to have been a major contributor towards the marked reduction of pending cases.

It is clear that a great deal has been done in Rajasthan towards improving revenue performance, but a great deal more has to be done to tackle sales tax evasion in the state.

Table 5.10

Disposal of Appeals and Pending Cases

	Name of Appellate Authority	Total cases disposed of during 2004-05	Total pending cases as on 1.4.05
1	ACCT Appeal	389	1015
2	Jaipur I	452	995
3	Jaipur II	595	999
4	Jaipur III	233	1107
5	Jaipur IV	274	594
6	Jodhpur	466	1493
7	Ajmer	427	971
8	Bhilwara	488	567
9	Udaipur	807	653
10	Kota	757	869
11	Bikaner	339	700
12	Bharatpur	422	1343
	Total	5649	11306

Source: Ibid.

Table 5.11 below shows for each of the 11 sales tax zones in the state, along with the anti-evasion cell which functions on a state-wide basis across all zones, the percent of revenue recovery from additional demands made during the two years 2003-04, and 2004-05. In both years, the additional demand is net of reductions after appeals and adjustments.

The percent recovery even after adjusting down the revenue demand for appeals and adjustments, is as low as 14.03 percent across all zones in 2003-04, and 6.99 percent in 2004-05. These low percentages are sharply suggestive of non-compliance, and insufficient departmental action in pursuit of the additional demands. Without quick concurrent action, the uncomplied demand simply passes over into the next fiscal year as unrecovered old demand. The whole exercise of unearthing evasion then becomes largely revenue-unproductive.

Table 5.11

Percent Recovery from Additional Current Demands Net of Appeals and Adjustments

Zone	% Recovery 2003-04	Rank 2003-04	Rank 2004-05
Kota	41.91	1	8
Jodhpur	35.92	2	2
Pali	32.32	3	4
Anti evasion	29.88	4	1
Bikaner	25.15	5	5
Ganganagar	19.37	6	3
Ajmer	15.06	7	7
Alwar	11.27	8	11
Udaipur	10.02	9	6
Jaipur I	7.74	10	9
Bhilwara	7.52	11	12
Jaipur II	3.95	12	10
Total % recovery	**14.03**	**14.03**	**6.99**
Rank Correlation Coefficient: 0.68; t-value: 2.93			

Source: Data for rankings from Department of Commercial Taxes, Government of Rajasthan

Notes: The rank correlation coefficient is calculated with the small sample formula, across eleven zones excluding the anti-evasion cell. Additional current demands are taken net of adjustments and appeals.

Although the ranking of zones in descending order by percent recovery shows some changes between 2003-04 and 2004-05, it shows enough stability that the rank correlation coefficient has a value of 0.68, and is statistically significant. The two zones Jaipur I and Jaipur II are consistently at or near the bottom of the ranking in both years. This stability in ranking is a matter of some significance, suggesting as it does a systematic zonal pattern of non-compliance. If there had been shifting ranks from year to year, there would have been no basis for identification of particular zones as the required focus for anti-evasion efforts.

It is clear that the more revenue-productive zones like Jaipur I and II, which have the densest concentration of taxable consumption and production, are those where non-compliance is highest, and that in the lower revenue-yielding zones in the rest of the state non-compliance is lower. This inverse relationship is demonstrated in table 5.12 below, where the eleven sales tax zones, excluding the anti-evasion cell which is not a regional zone, are ranked in term of both sales tax collections in 2004-05, and by percent recovery of additional demands for the same year 2004-05. The rank correlation coefficient has a value of -0.78 and is statistically significant.

Table 5.12

Revenue Collected by Sales Tax Zone and Percent Recovery of Additional Demands, 2004-05

Zone	2004-05	Rank 04-05 by	
	Revenue collected (Rs crore)	Revenue collected	Percent recovery
Jaipur-II	2691.42	1	9
Jaipur-I	417.39	2	8
Alwar	278.22	3	10
Kota	267.64	4	7
Bhilwara	241.82	5	11
Udaipur	236.44	6	5
Ajmer	197.09	7	6
Jodhpur	180.94	8	1
Pali	93.78	9	3
Ganganagar	84.21	10	2
Bikaner	72.08	11	4
Rank Correlation Coefficient: -0.78; t-value: -3.77			

Source: Ibid.

Notes: The rank correlation coefficient is calculated with the small sample formula.

Jaipur II is the most revenue-productive circle, yielding of the order of 56 percent of the total sales tax revenue in the state. At the same time, its rank is ninth among eleven zones in terms of percent recovery from additional current demands. Clearly this is the zone in which to concentrate anti-evasion efforts. Zones at the other extreme include Jodhpur, Ganganagar, Pali and Bikaner, where percent recovery from additional demands is highest, are also those where the revenue base is very narrow.

The four zones with the lowest ranks in terms of compliance with additional demands are Bhilwara, Alwar, Jaipur II and Jaipur I in that order, with appallingly low percent recovery falling in the range 3.67 to 5.43 percent. These are the zones in which to concentrate anti-evasion efforts, with a particular focus on Jaipur II. The two Jaipur zones, with the densest concentration of large assessees will also be the most revenue-productive. But clearly, the Bhiwadi industrial area in Alwar, and the textile activity in Bhilwara, are also high non-compliance zones where additional tax collection efforts should be concentrated.

Total additional demand, net of adjustments and appeals, amounted to 1097.78 crore in 2004-05. The unrecovered amount, at 93 percent of the total, is

1020.93 crore. This is around 20 percent of the total realised sales tax revenue, of 4795.46 crore in 2004-05. Even if all 20 percent is not recoverable in the first year, an annual increase in revenue of at least 2000 crore, should easily be possible from this untapped tax base.

5.2.3 OTHER TAXES

After sales tax, excise, motor vehicle tax and stamps and registration are the most important sources of revenue. As shown in Table 5.3, excise contributed around 13 percent of the total revenue and the other two taxes contributed close to 8 percent each in 2004-05.

Chart 5.2 showed that excise collections were highly volatile. In particular, the volatility of state excise up to 1998-99 is mostly attributable to the volatility in the excise collections itself rather than the volatility of nominal GSDP. The main problem with the current tariff structure of excise duty structure is that it is extremely complicated. For instance, there are separate permit fees grouped into 10 categories (eg. bhang, country liquor etc.) for importing, exporting and transport within the state. Of these, Indian made foreign liquor (IMFL) has two separate rates for bottled and bulk and permit fees on these items alone are charged when the retailer purchases goods. There are separate rules for country liquor, heritage liquor, bhang etc making the structure of permit fees extremely complicated.

One reform measure, proposed in the 2005-06 Budget, is the reduction in the permit fees for export of denatured spirit from Rs.10 per bulk litre to Rs.5 per bulk litre. The earlier rate was apparently one of the highest rates in the country and this rate reduction is expected to improve export competitiveness and revenue collections. However, this is an incremental measure of reform and the main issue that remains to be addressed in terms of reforms is the simplification of the current structure of excise duties. Such a measure will increase compliance and increase the transparency of the system greatly.

Regarding motor vehicle taxes, the annual growth rate of realized revenue is shown in table 5.13. The basis was switched from a specific duty to ad valorem on the value of the car in the year 2000. Correspondingly, there is some evidence of reduction in volatility in annual growth rates of revenue after 2000.

Table 5.13

Annual Growth Rate of Motor Vehicle Taxes

Year	Annual growth rate (%)
1997-98	25.37
1998-99	4.94
1999-00	24.99
2000-01	12.26
2001-02	10.74
2002-03	14.10
2003-04	12.56
2004-05	12.36

Source: Transport Department, Government of Rajasthan.

Motor vehicle tax is a one-time payment in Rajasthan, at the time of purchase for non-commercial vehicles, though not for commercial vehicles. Since non-commercial vehicles are the dominant category, at or slightly higher than 90 percent of total vehicles, and this pattern holds across zones, a reliable cross-zone comparison is possible by dividing zonal total revenue by zonal vehicle registrations. The average revenue realized per registered vehicle was Rs.19.8 thousand in 2002-03. Six zones were above average, and five zones were below (table 5.14). The noteworthy contrast is between Jaipur, which collected 14.5 thousand per vehicle, and Alwar, which collected more than double that. This is attributed to the high share of low-value two-wheelers in Jaipur, although the percent of non-commercial vehicles in the two-wheeler category, at 84 percent, is actually one percentage point below that in Alwar. Vehicles registered in Alwar, because of its proximity to Delhi, are compliant with Euro II norms and are therefore higher valued. This however could not account for the wide disparity between Jaipur and Alwar. Further, the percentage of commercial vehicles, which yield higher revenue than non-commercial vehicles, is actually lower in Alwar, at 4.7 percent, as opposed to 7.1 percent in Jaipur. It remains probable that evasion is higher in Jaipur than in other zones in the state.

The rate structure of stamps and registration was reformed in the 2004-05 Budget. The duty was reduced from 11 percent to 8 percent (which is more in line with the stamp duty rates in other states as shown in table 5.15) and the rate for registering property in the name of women was reduced further to 5.5 percent. The purpose of this policy initiative was to incentivise ownership of property by women. Table 5.16 shows annual rate of growth of revenue from stamps and registration, with a rural/urban breakdown. In response to the rate reduction, there was a rise in revenue from stamp duty by 33 percent in 2004-05 (not shown in the table because the urban/rural breakdown was not available). There has been

considerable revenue realization from transfer of agricultural land deeds in the name of women family members, as summarized in table 5.17.

Table 5.14

Ranking of Zones in Motor Vehicle Tax Collection, 2002-03

Sl.No.	Region	Revenue realized (Rs.lakh)	Number of vehicles registered	Revenue per registered vehicle (Rs.'000)
	(1)	**(2)**	**(3)**	**(4) =** ((**2**)*100)/(**3**)
Above Average				
1	Alwar	8690.15	25152	34.55
2	Pali	4710.05	14401	32.71
3	Bikaner	6523.42	23372	27.91
4	Sikar	3173.92	13837	22.94
5	Chittorgarh	4781.57	21044	22.72
6	Udaipur	6271.18	30561	20.52
Below Average				
7	Jodhpur	4635.60	28253	16.41
9	Jaipur	8767.57	60647	14.46
8	Dausa	1507.78	10593	14.23
10	Ajmer	4486.33	33259	13.49
11	Kota	3676.00	27951	13.15
Average across all zones				**19.80**

Source: Ibid.

Table 5.15

Comparative Tariff Structure of Stamps and Registration in Rajasthan, 2004-05

Gujarat	8%
Haryana	8%
Uttar Pradesh	Urban: 10% Rural:8%
Rajasthan	**General: 8%** **Women: 5.5% (from January, 2004)**
Madhya Pradesh	7.5%
Punjab	6%
Delhi	5%

Source: Stamps and Registration Department, Government of Rajasthan, Ajmer.

Table 5.16

Annual Growth Rate of Rural and Urban Stamp and Registration Revenue Collection

Year	Urban (Rs.crore)	Annual rate of growth (%)	Rural (Rs.crore)	Annual rate of growth (%)	Total collection (Rs. crore)	Annual rate of growth (%)
1998-99	151.12	-	163.85	-	314.97	-
1999-00	161.43	6.82	171.68	4.78	333.11	5.76
2000-01	199.68	23.69	194.95	13.55	394.63	18.47
2001-02	219.15	9.75	206.20	5.77	425.35	7.78
2002-03	251.51	14.77	197.64	-4.15	449.15	5.60
2003-04	308.76	22.76	218.13	10.37	526.89	17.31

Source: Ibid.

Table 5.17

Zonewise Registration of Agricultural Land in Favour of Women, January 2004-February 2005

Sl. No.	Zone	No. of agricultural land deeds transferred in favour of women	Revenue from these registrations (Rs. lakhs)	Revenue per registration (Rs. thousand)
1	Jaipur-I	791	370.18	46.80
2	Hanumangarh	7816	1457.89	18.65
3	Jaipur-II	8832	1548.89	17.54
4	Bhilwara	7675	1095.41	14.27
5	Udaipur	2338	311.74	13.33
6	Alwar	13698	1499.71	10.95
7	Bharatpur	14474	1519.95	10.50
8	Kota	12757	1221.14	9.57
9	Bikaner	5859	549.54	9.38
10	Pali	7559	626.98	8.29
11	Ajmer	18588	1353.19	7.28
12	Jodhpur	11051	564.98	5.11
	Average	**9287**	**1009.97**	**10.88**

Source: Ibid.

Among other measures, the Department of Stamps and Registration is planning to introduce a scheme of registration anywhere in the state. At present,

this scheme has been activated within 11 circles within Jaipur. The Department has also prepared an internet-based registration form and is planning to compile all records into a GIS-integrated database through the 'Sarathi' scheme. Outsourcing of collections through franking using banks is also being contemplated.

A commendable measure introduced in the 2004-05 Budget has helped reduce revenue leakage. A large number of property transactions are made through the power of attorney route, whereby the state government loses out on revenue. In order to prevent this leakage, a tax on such sales at the rate of 2 percent was proposed on the market value of all power of attorney sales of property (except in the case of blood relations) in the 2004-05 Budget. This provision was in line with similar legislation already passed in Madhya Pradesh and Andhra Pradesh.[4]

It is difficult to make a judgement on whether a further reduction in stamp duty rates would bring about added buoyancy in revenues. Duty reductions certainly create an enabling framework for complete declaration of the value of a transaction, but there are limitations posed to full declaration by the corresponding income tax liability for the seller. Comparisons with other states across rate reductions do not yield satisfactory answers. The Punjab reduction from 12.5 percent to 6 percent in October 1995 yielded a 42 percent revenue increase the next year. On the other hand, the rate reduction from 8 to 5 percent in Delhi in May 2003 yielded only a 6 percent increase in revenue in 2003-04. Given the sharp rise in property values in some urban agglomerations of Rajasthan, it is possible that a further fall to parity with the 5 percent rate in neighbouring Delhi would provide a spur to land sales in Rajasthan. The preferential rate for women could then be set at 4 percent.

A number of taxes (profession tax, luxury tax on tobacco and land and building tax) have recently been repealed. Profession tax, introduced in 2000-01, was removed in 2004-05. This tax was a buoyant source of revenue and should have been retained for greater revenue realization. Similarly, land and building tax was repealed on 1 April 2003. However, around Rs.94 crore of the latter tax was still outstanding in 2004-05. There are no further possibilities of recovery of unpaid dues regarding the land and building tax as the 2005-06 Budget has written off all outstanding demands.

[4] In the next Budget, a provision for offsetting this tax against the 8 percent stamp duty payable against registration of the sales deed has been made, in case the registration occurs within 3 years of the sale.

A revenue enhancing provision in the 2004-05 Budget allowed electricity duty to be charged on captive power plants with capacity 125 KVA or more. For units producing up to 500 lakh units, the rate was 20 paise per unit (reduced to 15 paise per unit in the 2005-06 Budget) and for units producing more than 500 lakh units per year, the rate was 15 paise per unit (reduced to 10 paise per unit in the 2005-06 Budget). This measure helped raise around Rs.36 crore in the last quarter of 2004-05 and was proposed to be disbursed to the electricity distribution companies in the form of subvention so that these companies could cover the loss arising from increases in the cost of diesel and coal.

The Budgets of 2004-05 and 2005-06 have also introduced some changes in the entry tax regime of the state. As per the 2004-05 Budget, only three categories attract entry tax: (i) fuels used for industrial consumption, (ii) instances where entry tax would help protect domestic industries in Rajasthan and (iii) commodities which attract additional excise duty. In case sales tax is paid on any of the commodities, then entry tax is offset against the sales tax. However, in the following Budget of 2005-06, entry tax has been levied on air-conditioners, refrigerators, aerated drinks, motor vehicles and mineral water to generate additional revenue from these items. Per se, the levy of entry tax is a good idea from the point of incentivizing tax–payers' compliance and reducing tax evasion. Thus, entry tax, which is currently levied on 33 commodities, is a measure that should be retained on these commodities for additional revenue generation and increasing compliance.

5.3 STRUCTURE OF NON-TAX REVENUE

Non-tax revenues are much more volatile than own tax revenues of the State. Therefore, the buoyancy of non-tax revenues was not estimated separately. Further, the contribution of non-tax revenue in total own revenue has been much lower than that of tax revenue. From 2001-02 to 03-04, non-tax revenue accounted for only around 20 percent of the total own revenue.

For the purpose of our simulations in chapter 2, non-tax revenue was assumed to be the same as the absolute amounts simulated by the TFC for Rajasthan over 2005-10. These figures are summarized in table 5.18. The realized compound annual growth rates for non-tax revenue were 3.97 percent over 1995-00 and 5.98 percent over 2000-05. These projections imply that the compound annual growth rate for non-tax revenue should be 6.19 percent, which is higher than the earlier rates of growth achieved.

Table 5.18

Non-Tax Revenue Projections

Projected Non-Tax Revenue *(Rs.crore)*				
2005-06	**2006-07**	**2007-08**	**2008-09**	**2009-10**
1638.77	1886.74	2167.34	2481.53	2840.82
Compound Annual Growth Rates (%)				
1995-00		**2000-05**		**2005-10 (projected)**
3.97		5.98		6.19

Source: Authors' calculations based on data from Finance Department, Government of Rajasthan.

The share of the components of non-tax revenue in total own revenue is shown in table 5.19.

Table 5.19

Share of Components of Non-Tax Revenue in Total Own Revenue

	1997-98	**1998-99**	**1999-00**	**2000-01**	**2001-02**	**2002-03**	**2003-04**
Interest receipt	12.03	11.88	10.98	8.44	8.13	7.76	7.35
Police	0.38	0.36	0.76	0.82	0.68	0.74	0.50
Sale of land	0.68	0.78	2.12	0.72	0.41	0.40	0.53
Education	0.34	0.15	0.13	0.35	0.48	0.22	0.85
Medical	0.34	0.28	0.20	0.23	0.34	0.29	0.17
PHED	1.95	2.30	2.06	1.99	1.95	1.83	1.57
Forest	0.37	0.34	0.38	0.53	0.62	0.53	0.42
Irrigation	0.49	0.44	0.67	0.52	0.26	0.27	0.46
Ground water dept.	0.32	0.35	0.15	0.31	0.27	0.34	0.20
Mines	5.89	5.75	5.73	5.30	5.75	5.74	5.51
Other receipts	4.60	2.95	2.61	4.95	2.13	1.94	4.67
Non-tax revenue	***27.40***	***25.57***	***25.78***	***24.16***	***21.01***	***20.06***	***22.23***
Tax revenue	***72.60***	***74.43***	***74.22***	***75.84***	***78.99***	***79.94***	***77.77***
Total own revenue	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: Ibid.

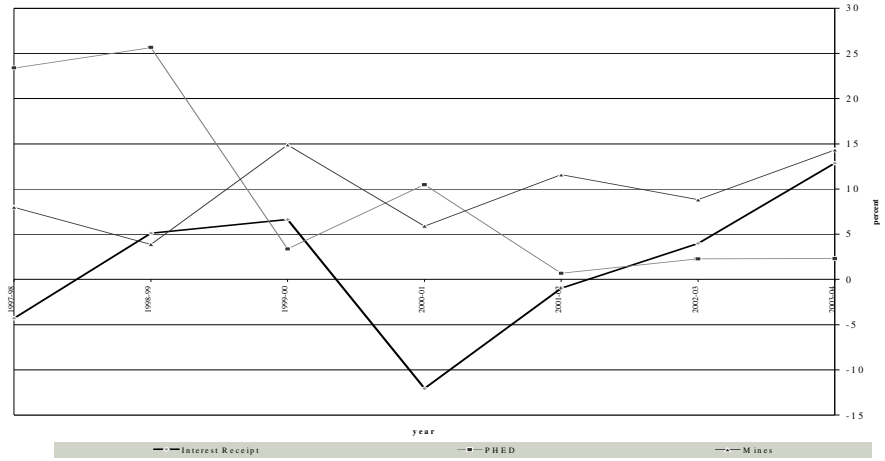
Of the components of non-tax revenue, interest income accounts for the largest share (7.35 percent of total own revenue in 2003-04) of own revenue. Mines, other receipts and PHED receipts are among the other significant contributors to own revenue. However, since 1998-99, the rate of growth of PHED receipts has fallen quite sharply as shown in chart 5.3. On the other hand,

interest receipts have been growing steadily since 2000-01, whereas the rate of growth of receipts from mines has been more or less constant.

Non-tax revenue from dividends and interest paid by PSUs is covered in chapter 3. The revenue generation possibilities from PHED are discussed in chapter 6. This section analyses the potential for further revenue generation from minerals and oil.

Chart 5.3

Rates of Growth of Non-Tax Revenue from Mines, PHED and Interest



Rajasthan has very rich reserves of limestone, gypsum and copper and is the only state in India that produces wollastonite, a mineral required in very high quality polishing. As of 2003-04, 39 major minerals and 22 minor minerals are being produced in Rajasthan.[5] The total revenue generated from major minerals (excluding sales taxes on minerals) in 2003-04 was approximately Rs.292 crore, of which lead zinc alone contributed Rs.103 crore and limestone contributed Rs.95 crore. Revenue from minor minerals (excluding sales taxes on minerals) was Rs.221 crore in 2003-04.

Marginal changes in the rates of royalties on those minerals whose rates are decided by the state government might yield increases in revenue collection. However, concentrating efforts on eradicating unauthorized mining would not only yield higher revenues with the current tariff structure, it would help conserve mineral resources of the state.

[5] Mines and Geology Department, Udaipur, Rajasthan.

The greatest potential for revenue (tax as well as non-tax) generation possibly lies in the area of oil and gas. According to the Department of Petroleum, Rajasthan, there are four potential petroliferous sedimentary basins[6] covering an area of 1.5 lakh square kilometers (see map of oil and gas reserves at the end of the chapter). Of these, the Barmer-Sanchore basin seems to be the most promising. Cairne Energy, which has drilled 77 wells in this basin, has found 300 million tonne of oil reserves, making it the biggest oil find in India over the last two decades. Sweet crude production from this basin is expected from 2005-06, with a production capacity of 5 million tonne crude per annum (around 15 percent of the total crude oil production in the country at present). The Department is considering future plans for the establishment of a wellhead refinery and subsequently, petrochemical industries.

The projected revenue from petroleum by the Department of Petroleum is shown in table 5.20.

Table 5.20

Projected Revenue from Petroleum

Year	Expected production (barrels of oil per day)	Royalty		Sales tax (@11.5% of sale price + 0.5% surcharge) (Rs.crore)	Projected revenue (Rs.crore)
		Rate (%)	Revenue (Rs.crore)		
2005-06	3,000 – 5,000	20	64.00	46.00	110.00
2006-07	10,000	20	128.00	132.00	260.00
2007-08	20,000	18.5	237.00	183.00	420.00
2008-09	30,000	17	331.00	274.00	605.00
2009-10	50,000	15.5	510.00	456.00	966.00

Source: Department of Petroleum, Government of Rajasthan.

It should be noted here that the Joint Venture Blocks, which are on a tapering royalty rate, have not been accorded the same status as NELP blocks and therefore, are not eligible for sharing profit from petroleum in the ratio of 50:50 with the Centre.[7] According to the Department of Petroleum, Rajasthan, the bidding for these blocks followed the same procedure as NELP blocks and therefore should be accorded the same status as NELP blocks. This is a legitimate

[6] Rajasthan Shelf basin (Jaisalmer and a part of Bikaner), Bikaner-Nagaur basin (Bikaner, Nagaur, Ganganagar and Churu), Barmer-Sanchore basin (Barmer and Jalore) and the Vindhyan basin (Dholpur, Karauli, Baran and some surrounding areas in Bundi, Jhalawar and Sawai Madhopur).
[7] Recommendation in the TFC Report, para13.35.

demand of the state government and should be honoured by the Central Government. This will help buoy up the non-tax revenues of the state further.

In addition to the oil discovery, good quality gas has been discovered by ONGCL recently in the Jaisalmer basin and coal bed methane gas has been found in the Barmer-Sanchore basin (two blocks of this basin is currently being explored by Reliance Industries for coal bed methane -see map in the Appendix). With this rich cache of oil and natural gas in the four basins, it is expected that the target for tax and non-tax revenue shall be met over the projection horizon.

However, the state government shall do well to keep in mind the cost of infrastructure and water that will have to be provided in order to unleash the true revenue potential from these oil and gas reserves. The establishment of the refinery and petrochemical industries will ensure greater buoyancy in revenue collection, as the revenue potential from processed oil and oil products is much greater than that from unprocessed crude. However, these industries will require continuous supply of electricity until these industries can establish their own captive generation plants. Most importantly, these industries will require access to water, which is a scarce resource in Rajasthan. Development of the refinery in Barmer, which is a desert area, will require heavy investments in infrastructure, in particular good roads and water supply. For instance, in order to supply IGNP water to the Barmer-Sanchore oil field, pipelines will have to be laid over a 200 kilometer stretch. The cost of laying the water pipeline is an estimated Rs.1 crore per kilometer.

5.4 SUMMARY AND RECOMMENDATIONS

In conclusion, the targets laid down in the enacted State FRBM require both increased revenue effort and expenditure compression. The recent good performance of sales tax collections and the revenue generation possibilities from oil and indicate a positive outlook for revenue generation. However, in order to unleash the potential of revenue generation from oil, the state government must encourage the establishment of the oil refinery and petrochemical industries. The revenue potential from processed oil and its by-products is much greater than that from simple crude oil generation. These industries will require very large investments in infrastructure, particularly power, roads and water. In order to release resources for these purposes, the state government will have to adopt measure to curtail excess expenditure as already pointed out in chapters 3 and 4.

Although the very high buoyancy of 1.44 recorded by own tax revenues in Rajasthan over the period 1996-97 to 2003-04 suggests that the state is well-poised in terms of the own-tax underpinnings of the FRBM, the state held only rank 9 among 25 states in 2002-03, with an own-tax/GSDP ratio of 7.2 percent, as against 9.3 percent in the top ranked state. Since non-tax revenue accounts for only 20 percent of total own revenue, and is furthermore a volatile and declining component over time, it is own taxes where the state has to look for consolidation and improvement of its impressive gains since 1996-97.

The reform measures already undertaken in sales taxation and other spheres such as stamps and registration have been listed in the chapter in detail and will not be repeated here. The principal recommendation is that these impressive gains need to be consolidated by holding to the policy changes undertaken, and not repealing any under pressure from affected parties.

Rajasthan has not joined the set of states which moved to a VAT from 1 April 2005. It is inevitable that, later if not sooner, Rajasthan will have to move to the VAT along with other states. A timetable for elimination of the CST has already been drawn by the national committee in charge of the move to a state-level VAT. In the interim, some features of the VAT can already be incorporated in the present taxation regime. In manufacturing, a system of input duty offset within the present sales tax regime will simulate the efficiency aspect of the VAT, and eliminate the cascading feature of a sales tax system with input duty offset. This has already been done for 23 items. The administrative difficulty posed by the VAT really arises only among traders, where VAT calls for a greater degree of monitoring and follow-up than under the present regime. The gain from this additional administrative effort, of course, will be the higher revenue realization possible, provided VAT fraud is successfully confronted and overcome.

Pending the move to a VAT, there is considerable room for additional revenue gains from reducing evasion in sales tax, which accounts for more than half of total own tax revenues. There is a high degree of revenue concentration by product, with petroleum and automobiles and automobile parts together contributing nearly two-thirds of total revenue in 2004-05. Rajasthan has not moved to a destination-based VAT, so that sales of the minerals and metals produced within the state are still liable for levy of the sales tax, over and above royalties, which feed into non-tax revenues. But minerals and metals together account for well under one percent of total revenues. This is a trivial contribution to the exchequer in a state famous for its minerals and minor metals.

It is impossible to make an assessment of the relative levels of evasion across products without an independent source of detailed product-specific information on the volume of sales subject to the sales tax. Such data are not available from the GSDP accounts of the state.

However, the zonal data on percent of revenue recovery from additional demands provide some clues. The percent recovery is appallingly low overall, at 6.99 percent of demand in 2004-05, even after reduction due to adjustments and appeals. Further the two zones that are consistently at or near the bottom of the ranking in both years are Jaipur I and Jaipur II. This clearly identifies a systematic zonal pattern of non-compliance. There is an inverse relationship between the zonal pattern of recovery from additional demands, and rank by revenue collected. The more revenue-productive zones like Jaipur I and II, which have the densest concentration of taxable consumption and production, are those where non-compliance is highest. In the lower revenue-yielding zones in the rest of the state, non-compliance is lower.

Therefore, the zones in which anti-evasion efforts will prove most revenue productive are Jaipur II, Jaipur I, the Bhiwadi industrial area in Alwar, and the textile centre in Bhilwara, in that order.

With motor vehicle taxation again, there is the same cross-sectional variation across zones. Revenue realisation per registered vehicle in Alwar was more than twice that in Jaipur zone, even though the percentage of commercial vehicles, which yield higher revenue than non-commercial vehicles, is actually lower in Alwar, at 4.7 percent, as opposed to 7.1 percent in Jaipur. The percent of non-commercial vehicles in the two-wheeler category, at 84 percent, is also one percentage point below that in Alwar. Vehicles registered in Alwar, because its proximity to Delhi, are compliant with Euro II norms and are therefore higher valued. This however could not account for the wide disparity between Jaipur and Alwar. All evidence points to the zone around Jaipur as the principal zone for concentration of incremental tax effort.

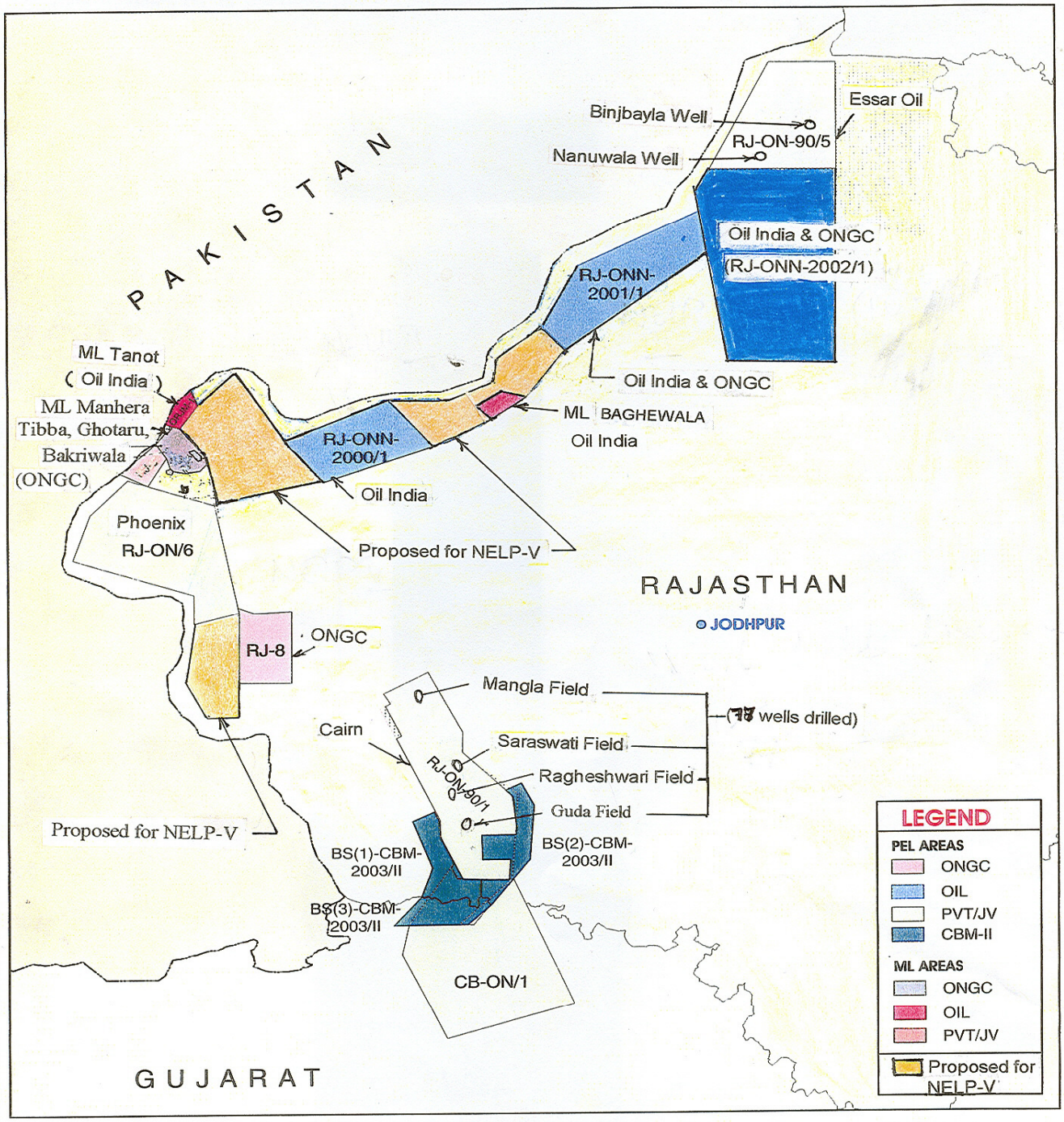
The present structure of excise duty on liquor and intoxicants is excessively complicated, with a multiplicity of types of levy, leviable goods, and rates. These need to be simplified and rationalised.

The lowering of stamp duty rates to 8 percent for men, and further to 5.5 percent for women, from January 2004, has led to greater buoyancy of revenues. Further lowering to parity with the 5 percent rate in Delhi could encourage further land development in the state. The rate for women could correspondingly be reduced to 4 percent.

Of the components of non-tax revenue, interest income accounts for the largest share (7.35 percent of total own revenue in 2003-04) of own revenue. Non-tax revenue from dividends and interest paid by PSUs is covered in chapter 3. Mines, and PHED receipts are among the other significant contributors to own revenue. The revenue generation possibilities from PHED are discussed in chapter 6. Royalty rates on some minerals are determined by the Centre, not by state governments. However, a number of revenue-generating measures are possible at state level. Eradication of unauthorized mining would not only yield higher revenues with the current tariff structure, but would help conserve mineral resources of the state. The scope for non-tax revenue from oil and gas is enormous but may not be realised in the next five years. There are some issues with respect to equal treatment of NELP and Joint Venture blocks, which fall within the discretionary jurisdiction of the Central government, and have important implications for the non-tax revenues of a state like Rajasthan.

The Document Collection Centres constitute an important anti-evasion mechanism for sales tax collection. However, better infrastructure is required within the Commercial Taxes Department for analysis of the vast amount of data being collected from these Centres. Institution of a Tax Research Cell in the Commercial Taxes Department will help in the systematic evaluation of the data and foster research in tax related matters. Such an institution will also help in-service training of officers on specific matters related to sales tax collection, which is important for improving human capital formation in the Department.

BLOCKS UNDER PETROLEUM EXPLORATION & EXPLOITATION IN RAJASTHAN



DEPARTMENT OF PETROLEUM

6. AUGMENTATION OF MUNICIPAL FINANCE FOR URBAN DEVELOPMENT

6.1 INTRODUCTION

The finances of municipalities in Rajasthan have historically been in an unsatisfactory state (Pandya: 1993). The initiatives taken as a follow–up to the Constitution (seventy–fourth) Amendment Act, 1992 too do not appear to have made any noticeable impact on their finances. The First State Finance Commission (FSFC)[1] constituted under Article 276–A of the Rajasthan Municipalities Act, 1959 (as amended vide Rajasthan Municipalities Amendment Act, 1994), for instance, observed that "it is a matter of common knowledge that most of the municipalities in Rajasthan are financially weak and not in a position to meet the rising demand for municipal services". The Second State Finance Commission (SSFC)[2] made identical observations: "the financial position of the majority of the urban local bodies is not satisfactory, with the result that they are not in a position to meet the rising demand for municipal services. The municipalities are unable to discharge their obligatory functions, leave aside the discretionary functions. Rapid growth of cities and towns is not matched by a corresponding increase in their revenues".[3] The Second State Finance Commission (SSFC) further observed that the abolition of octroi in the state has seriously eroded the financial autonomy of urban local bodies, and taken away the initiative and discretion which was available to them for expanding the scope of octroi on goods or revising the rates, so as to mobilise additional resources. Abolition of octroi, the Commission noted, has increased the financial dependence of municipalities on state government resources.

What should be done to strengthen the finances of municipalities? What alternatives are open to municipalities for augmenting and restructuring their financial base in order that they are able to meet the increasing demand for municipal services?

This chapter is concerned with these questions. In addressing these questions, this chapter has taken into account the larger context, on the one hand, of the Constitution (seventy–fourth) Amendment, 1992 which aims at enchancing

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[1] N.K. Pandya, 1993, Municipal Finance in Rajasthan, Himanshu Publications, Delhi and Udaipur.

[2] Report of the First State Finance Commission Rajasthan: 1995–2000, Jaipur, December 1995.

[3] Report of the Second State Finance Commission Rajasthan: 2000–05, Jaipur, August 2001.

the role of municipalities in the state set–up, by expanding their expenditure profile and creating an institutional arrangement for balancing the supply of financial resources with that of demand, and on the other hand, of the urban sector reforms that have been initiated by the central government. While the full effect of the measures taken as a part of the implementation of the Constitution amendment is still to be known, it is important to assess if the fiscal environment within which the municipalities operate is conducive for them to manage their resources efficiently. There is also a growing concern about the impact of the abolition of octroi on the state resources. The historical imbalances between revenue resources and expenditure responsibilities and their impact on state resources are well understood, but the imbalances owing to the abolition of octroi carry important implications for state resources and deserve special attention. Likewise, the emerging context of the urban sector reforms as embodied in the National Urban Renewal Mission (NURM) throws up fresh challenges for municipalities and the state government in term of their readiness to be able to undertake urban sector reforms and access funds for infrastructure development.

The three main sections of the chapter focus on the existing position of the finances of municipalities, the revenue sharing arrangement between the state government and municipalities, and on ways of mobilising and restructuring the finances of municipal governments in Rajasthan. The alternatives considered include reform of property taxation, and a surcharge on sales tax (and VAT when it is levied), besides readjustment of fees, rent on municipal properties, and land auctions. Non–fiscal reform agenda is also indicated. These are preceded by a brief account of the demographic and other pressures that directly bear on the demand for financial resources.

6.2 DEMOGRAPHIC CONTEXT OF MUNICIPALITIES

Municipalities in Rajasthan have, in recent years, encountered increasing demographic pressures. Urban population in the state has risen from 4.5 million persons in 1971 to a little over 13.2 million in 2001, at average annual rates ranging between 2.72 percent and 4.62 percent. Although the average growth rate in the most recent decade (1991–2001) has dipped to 2.7 percent which incidentally is in line with the countrywide trends, the high growth, registered in the previous decades, has placed enormous strain on municipalities in matters of service provision.

Table 6.1

Demographic Pressures on Municipalities

Year	Urban population (million)	Percent of urban to total population	Annual exponential growth rate 1971–2001 (%)
1971	4.54	17.63	-
1981	7.21	21.05	4.62
1991	10.07	22.88	3.34
2001	13.21	23.39	2.72

Source: Census of India, relevant years.

Demographic pressures have been particularly severe on larger municipalities (cities with over 100,000 population) whose population registered an average annual growth of 4.16 percent during 1991–2001, compared with 2.93 percent for municipalities in the size category of 50,000–100,000 persons. Many cities registered during the decade an average growth in excess of 4 percent (see Annex table 6A.1), and are consequently faced with the need to raise additional resources for extending service networks.

Table 6.2

Urban Population Growth in City–Size Groups

Size Group	Population (million)		Annual exponential growth rate (%) [4]
	1991	2001	
> 100,000	4.99	7.56	4.15
50,000–100,000	1.37	1.84	2.95
20,000–50,000	2.19	2.75	2.28
10,000–20,000	1.31	.91	–3.64
5,000–10,000	.20	.13	–4.31
< 5,000	.007	.014	6.93
Total	**10.07**	**13.21**	**2.71**

Source: Ibid.

Population projections place Rajasthan's urban population at 18.42 million for 2011 and 21.18 million for 2021 A.D. – an assumed secular growth of

[4] The average annual growth rates are calculated on the basis of 1991 and 2001 population in the different size groups, without any adjustment for the new entrants.

about 2.7–2.8 percent annually.[5] It is this demographic growth profile that will need to be kept in view in the formulation of any agenda for restructuring the finances of municipalities.

Table 6.3

Projected Urban Population for Rajasthan

Year	Urban population (million)	Percent of urban to total population
2001	13.21	23.39
2005	15.53	26.54
2011	18.43	28.22
2016	21.18	29.66

Source: Population Projections for India and States, 1996–2016.

6.3 EXPENDITURE PROFILE OF MUNICIPALITIES

Sections 98 and 101 of the Rajasthan Municipalities Act 1959 (as amended upto 1994) define the primary and secondary functions of municipalities in Rajasthan. The primary functions (obligatory) comprise wide–ranging spending responsibilities, as may be seen in box 6.1. Provision of sufficient water, street lighting, cleaning public streets, garbage removal, fire protection, regulation of offensive or dangerous trades are among the key expenditure responsibilities of municipalities in Rajasthan.

The secondary (discretionary) functions, as laid down Section 101, are also wide–ranging, and cover such subjects as laying out of new roads, construction and maintenance of parks, libraries, construction of latrines for the poor and the like. The list of secondary functions has, however, been expanded to include one of the Schedule 12 functions, i.e., preparation of plans for economic development and social justice; besides, there are the following two additional entries:

(i) "the performance of functions and the implementation of the schemes that may be entrusted by the State government to it, including those in relation to the matters listed in the Twelfth Schedule of the Constitution of India;

(ii) any other matter not herein before specially named which is likely to promote education or the public health, safety or convenience or the advancement of economic condition of the inhabitants".

[5] Not all urban centres in Rajasthan have municipalities. According to the Census 2001, out of the 222 towns and cities, 38 are Census towns without having been given a statutory status, and are governed by Panchayat set–up.

Box 6.1: Primary Functions of Boards[6]

Duties of Boards: It shall be the duty of every Board to make reasonable provision for the following matters within the municipalities under its authority, namely:–

(a) lighting public streets, places and buildings
(b) watering public streets and places;
(c) cleaning public streets, places and sewers, and all spaces, not being private property, which are open to the enjoyment of the public, whether such spaces are vested in the board or not, removing noxious vegetation and abating all public nuisances;
(d) removing filth, rubbish, night–soil, odour, or any other noxious or offensive matter from privies, latrines, urinals, cess–pools or other common receptacles for such matter in or pertaining to a building or buildings;
(e) extinguishing fires and protecting life and property when fire occurs;
(f) regulating offensive or dangerous trades or practices;
(g) removing obstructions and projections in public streets or places and in spaces, not being private property which are open to the enjoyment of the public, whether such spaces are vested in the board or belong to the State Government;
(h) securing or removing dangerous buildings or places & reclaiming unhealthy localities;
(i) acquiring, maintaining, changing and regulating places for the disposal of the dead and of the carcasses of dead animals;
(j) constructing, altering and maintaining public streets, culverts, municipal boundary marks, markets, slaughter–houses, drains, sewers, drainage–works, sewerage–works, baths, washing places, drinking fountains, tanks, wells, dams and the like;
(k) constructing public latrines, privies and urinals;
(l) obtaining a supply or an additional supply of water, proper and sufficient for preventing danger to the health of inhabitants from the insufficiency or unwholesomeness of the existing supply;
(m) naming streets and numbering houses;
(n) registering births and deaths;
(o) public vaccination;
(p) suitable accommodation for any calves, cows or buffaloes required within the municipality for the supply of animal lymph;
(q) arranging for the destruction or the detention and preservations or such for dogs within the municipality as may be dealt with under section 208 of this Act;
(r) printing such annual reports on the municipal administration of the municipality as the State Government by general or special orders, requires the Board to print;
(s) paying the salary and the contingent expenditure on account of such police guards as may be required by the Board for the purposes of this Act or for the protection of any municipal property and providing such accommodation as may be required by the State Government under the law in force relating to police;
(ss)[7] raising volunteer force with such functions and duties in relation to the protection of persons, the security of property and the public safety as may be prescribed;
(t) making arrangements for preparation of compost manure from night soil and rubbish;
(u) establishing and maintaining cattle ponds; and
(v)[8] promoting population control, family welfare and small family norm.

[6] The Rajasthan Municipalities Act, 1959 uses the term "Board", for all urban local bodies, including municipal corporations.
[7] Added by Raj. Act No. 8 of 1963.
[8] Ins. By Raj. Act No. 13 of 1992.

Box 6.2: Secondary Functions

Secondary powers of expenditure of Boards:– Boards may, at their discretion, provide out of the municipal property and fund, either wholly or partly, for–

(a) laying out, whether in areas previously built upon or not, new public streets and acquiring land for that purpose, including land required for the construction of buildings or cartilage thereof, to abut on such streets;

(b) constructing, establishing, maintaining, or contributing to the maintenance of public parks, gardens, libraries, museums, reading rooms, radio receiving stations, lunatic asylums, halls, offices, dharmashalas, rest houses, encamping grounds and other public buildings and places;

(c) constructing and maintaining, where necessary, suitable sanitary houses for the habitation of the poor and granting loans for the construction of such houses or for effecting necessary improvements connected therewith;

(d) providing accommodation for any class of servants employed by the Board or granting loans to such servants for construction of houses subject to the rules prescribed in this behalf;

(e) planting and maintaining road side and other trees;

(f) taking a census and granting rewards for information which may tend to secure the correct registration of vital statistics;

(g) securing or assisting to secure suitable places for the carrying on of the offensive trades mentioned in section 248;

(h) supplying, constructing and maintaining receptacles, fittings, pipes and other appliances whatsoever, on or for the use of private premises, for receiving and conducting the sewage thereof into sewers under the control of the Board;

(i) establishing and maintaining a farm or factory for the disposal of sewage;

(j) providing music for the people;

(k) promotion of public health or infant welfare;

(l) contribution towards any public fund raised for the relief of human suffering within or without the municipality;

(m) by a resolution passed at a general meeting and supported by one–half of the whole number of members, any public reception, ceremony, entertainment, or exhibition within the municipality

(n) the organisation or maintenance of shops or stalls for the sale of necessities of life during scarcity;

(o) holding fairs and exhibitions;

(p) supply of milk;

(q) establishing labour welfare centres for its employees and subsidising the activities of any association, union or club of such employees by grant of loan for its general advancement;

(r) organising or contributing to a Municipal Board Union;

(s) maintenance of ambulance service;

(t) establishing and maintaining public hospitals and dispensaries and providing public medical relief;

(u) providing facilities for anti–rabic treatment and meeting the expenses of indigent persons undergoing anti–rabic treatment within or outside the municipal limits;

(v) housing and maintaining destitute orphans and cripples and maintaining maternity centres and child welfare clinics;

(w) establishing and maintaining primary schools;

(ww(i))[9] preparation of plans for economic development and social justice;

(ii) the performance of functions and the implementation of the schemes that may be entrusted by the State Government to it, including those in relation to the matters listed in the Twelfth Schedule of the Constitution of India.)

(x) any other matter not hereinbefore specifically named which is likely to promote education or the public health, safety or convenience or the advancement of economic condition of the inhabitants or the Board or which is necessary for the carrying out of this Act, expenditure whereon is resolved by the Board by the votes of not less than two–thirds of the whole number of members and with the approval of the State Government to be an appropriate charge on the Municipal Fund.

[9] Ins. by Raj. Act 19 of 1994.

The secondary functions are shown in box 6.2.

Rajasthan is one of the few States, which has not incorporated the Schedule 12 functions into the primary expenditure portfolio of municipalities. Similarly, even with modifications in the list of secondary functions, the *de facto* functional profile of municipalities has not been altered, and the current practices have not caught up with the 1992 Constitutional provisions. The role of municipalities in Rajasthan thus remains unaffected by the Constitutional changes and many of the important local functions, e.g., town planning, land use, water supply, urban forestry, upgradation of slums, poverty alleviation, and safeguarding the interests of the handicapped and mentally retarded remain outside the ambit of municipalities.

6.4 TRENDS IN MUNICIPAL EXPENDITURES AND REVENUES

The finances of municipalities in Rajasthan have, in recent years, been reviewed by the First and Second State Finance Commissions. Below is an update on the key findings of a fresh review of their finances.

6.4.1 MUNICIPAL EXPENDITURES

Table 6.4 sets out the size of the municipal sector in Rajasthan for three years,[10] using two measures of municipal expenditures: (i) per capita expenditures – higher levels of municipal spending are taken as a proxy for better services; and (ii) municipal expenditures as a percentage of gross state domestic product (GSDP), reflecting the importance of the municipal sector in the overall economic activity of the state. A second stage analysis relates to the structure of expenditure. Here, three measures are used: (i) expenditure on administration, i.e., wages and salaries component, and (ii) operation and maintenance of services, and (iii) interest burden on municipalities.

In 2001–02, the per capita expenditure of municipalities in Rajasthan was placed at Rs. 521.55. Over a three year period, it has increased at impressive rates – 17.48 percent during 1999–00 and 2000–01, and 8.6 percent during 2000–01 and 2001–02. Municipal government expenditures in Rajasthan are 0.59 percent of GSDP in 2001-02.

[10] The year 1999–00 was taken as the base year for this study for the reason that **octroi** was abolished in August 1998, making finance data for earlier years non–comparable.

Table 6.4

Levels of Municipal Spending (Recurring)

Year	Per capita expenditure (Rs)	Percent change	Municipal expenditures percent GSDP
1999–00	408.79	–	0.52
2000–01	480.26	17.48	0.60
2001–02	521.55	8.60	0.59

Source: Government of Rajasthan.

Table 6.5 indicates the relative importance of expenditures by functions for three years. Expenditure on services comprising public health and sanitation which includes garbage collection, maintenance of facilities, gardening, street lighting, dispensaries, and public safety accounted for 61.38 percent of the total expenditure, followed by expenditure on general administration and tax administration (21.22 percent), and the balance of 17.40 percent on miscellaneous activities in 2001-02. Over the three year period (1999-00 to 2001-02), the structure of expenditure has changed, at best, marginally, as can be noted from table 6.5.

Table 6.5

Structure of Municipal Expenditure (Recurring)

Functions	1999–00	2000–01	2001–02
Municipal services (operation and maintenance)	60.67	61.02	61.38
General administration including expenditure on recovery of taxes	24.86	23.49	21.22
Miscellaneous activities	14.47	15.49	17.40
Total	**100.00**	**100.00**	**100.00**

Source: Ibid.

Capital expenditure comprising expenditure on development works and loan repayment accounted for 28.9 percent of the total municipal expenditure in 2001-02. Capital expenditure as a proportion of total expenditure has been registering an increase over the years, from 23 percent in 1999–00 to 28.9 percent in 2001–02. The loan repayment burden is relatively small but has seen a moderate upswing over the years.

Table 6.6

Municipal Capital Expenditure

Year	Capital Expenditure (Rs crore)	Annual change (%)	Percent of total expenditure
1999–00	119.4	–	23.3
2000–01	168.5	41.3	27.3
2001–02	198.9	18.0	28.9

Source: Ibid.

Table 6.7

Loan Repayment as a Percentage of Capital Expenditure

1999–00	2000–01	2001–02
4.5	4.9	5.2

Source: Ibid.

A number of observations may be made here:

(i) the classification of municipal expenditure does not match with the functional categories specified under the Rajasthan Municipalities Act, 1959. Thus, the expenditure classification does not permit any assessment of the adequacy (or otherwise) of expenditure incurred on such activities as lighting public streets, places and buildings; cleaning public streets; removing, rubbish, night soil, odor, and other noxious or offensive matter; and construction, alteration or maintenance of public streets. This is a major drawback in the current system of maintaining accounts. Taking note of this deficiency, which is observed in several states, the Eleventh Finance Commission (EFC) had proposed restructuring of the heads–subheads of municipal accounts, emphasizing countrywide and statewide uniformity in the classification system. The Government of Rajasthan is still to restructure the budget heads.

(ii) The above tables provide a clear evidence of insufficient expenditure levels at the level of municipalities. Compared with the country–wide averages, the levels of municipal expenditures in Rajasthan are low. According to a recent study conducted for the Twelfth Finance Commission (TFC), the average countrywide per capita municipal

expenditures were about 46 percent higher than that in Rajasthan in 2001-02.[11] Similarly, Rajasthan municipalities expenditure as a percent of GSDP is lower by 0.08 percentage points from the country–wide average in 2001-02, clearly indicating that municipal activities have weak links with the state economy.

(iii) The average growth of municipal expenditures in Rajasthan is also lower compared to the growth rate of such expenditures nationwide in 2001-02. In the same year, growth rate of municipal expenditure is also lower than the growth rate of state government's combined tax and non–tax revenues for these years, suggesting that in comparison with taxes levied at the level of States, municipal tax domain is far less buoyant.

(iv) Establishment and administration costs among municipalities in Rajasthan accounted for 28 percent of the total municipal expenditure in 2001-02 and can not be said to be an "overload" on the finances of municipalities.[12] Compared with the nationwide average too, these are on the lower side. Moreover, these have shown a declining trend, and constitute a positive aspect of the finances of municipalities.

(v) Increasing capital expenditure is yet another positive aspect of the finances of municipalities in Rajasthan. Municipalities in Rajasthan do not have the problem of debt, which is a fraction of the total capital expenditure. It also shows that municipalities in Rajasthan are still to begin using debt financing in an effective manner as an instrument for infrastructure development.

6.4.2 FINANCING OF MUNICIPAL EXPENDITURES: TRENDS IN MUNICIPAL REVENUES

Municipal expenditures in Rajasthan are financed from three sources: (i) revenues raised by municipalities with revenue–raising powers enjoined upon them under the Municipalities Act, (ii) intergovernmental transfers, and (iii) loans raised from the financing institutions including multilateral organisations or directly from the market. The revenue–raising powers of municipalities are defined under Articles 104 and 105 of the Rajasthan Municipalities Act, 1959. Article 104 enumerates the obligatory taxes, while other taxes that may be imposed by them are listed in Article 105. The latter are discretionary in nature.

[11] Mathur,O.P. and Sandeep Thakur: India's Municipal Sector: A Study for the Twelfth Finance Commission, 2004, NIPFP.

[12] Wages and salaries component as a proportion of total expenditure is significantly higher in smaller municipalities compared to larger ones.

There are two remaining obligatory taxes under Article 104 of the Rajasthan Municipalities Act after repeal of octroi: (i) a tax on the annual letting value of buildings or lands, or both, situated within the municipalities; (ii) a tax on professions and vocations.[13] In addition, there are discretionary taxes such as a tax on vehicles, excepting those vehicles which are mechanically propelled, a tax on dogs and other animals, toll on vehicles, a scavenging tax, sanitary tax, water tax, lighting tax and the like. In this set–up, municipalities in Rajasthan levy a tax on land and buildings, and several minor taxes like tax on animals, non–motorized vehicles, and the like. Municipalities in Rajasthan do not levy a tax on professions and vocations. The provisions of the Act entail that taxes other than profession tax can be levied on artisans. Box 6.3 presents the complete tax domain of municipalities. In addition, they charge a fee for the various services like building plan fee, fines and penalties, and rent on municipal properties.

Box 6.3: Tax Domain of Municipalities

(i)	a tax on vehicles and other conveyances plying for hire or kept within the municipality;
(ii)	a tax on dogs kept within the municipality;
(iii)	a tax on animals used for riding, driving, draught or burden when kept within the municipality;
(iv)	a toll on vehicles and other conveyances and on animals entering the municipality;
(v)	a tax on boats moored within the municipality;
(vi)	a scavenging tax;
(vii)	a tax for the cleansing of private latrines or privies;
(viii)	a general sanitary tax for the construction or maintenance or both of public latrines and for the removal and disposal of refuse;
(ix)	a lighting tax;
(x)	a water tax for water supplied by the board, which may be imposed in the form of a rate assessed on the annual letting value of buildings or lands or both or in any other form;
(xi)	a tax on trades and callings carried on within the municipality and deriving special advantages from, or imposing special burden on, municipal services;
(xii)	a tax on artisans (other than profession tax), and
(xiii)	any other tax which the State Legislature has powers to impose under the Constitution

Three measures are used for assessing the revenue performance of municipalities: (i) per capita own revenues comprising both the tax and non–tax

[13] The Rajasthan Municipalities Act, 1959 lays down that municipalities may be exempted from levying of a tax, at the request of the municipality seeking justification for special circumstances (Article 104 (3) sub–para (c).

revenues; (ii) growth rate of own revenues, i.e., the extent to which it is able to adjust for inflation and meet the needs of the increasing population, and (iii) dependency of municipalities on external resources. The dependency ratio is an important indicator for assessing the extent to which municipalities in Rajasthan rely on state transfers. Tables 6.8 and 6.9 below gives the relevant data.

Table 6.8

Sources of Financing Municipal Expenditures (1)

Year	Per capita own revenues (Rs.)		Annual change (%)		Transfers per capita (Rs.)	
	Tax	Non–tax	Tax	Non–tax	Amount	Annual change (%)
1999–00	11.78	20.69	–	–	315.76	–
2000–01	16.07	26.20	36.42	26.61	354.58	12.29
2001–02	18.29	42.97	13.80	64.00	391.54	10.42

Source: Ibid.

Table 6.9

Sources of Financing Municipal Expenditures (2)

Year	Own revenues percent of total revenue receipts		Transfers as a percent of total revenues
	Tax	Non–tax & others	
1999–00	3.3	8.1	88.6
2000–01	4.0	8.7	87.3
2001–02	3.9	12.8	83.3

Source: Ibid.

The total yield from own tax and non–tax sources is abysmally low, accounting for 16.7 percent of the total revenues in 2001-02, which is able to finance 20.6 percent of the total revenue account expenditure. On the one hand, it suggests a narrow and weak fiscal and financial base, and on the other hand, indicates its sub–optimal use and application. One example of such sub–optimal use is tax on property, which is not applied by one–third of municipalities, notwithstanding it being in the list of obligatory taxes.[14]

[14] The Act has a provision that the state government may exempt a municipality from levying a tax. Several municipalities have taken advantage of this provision.

Taxes on land and property form the backbone of revenues for municipal governments. In Rajasthan, the yield from property taxes, however, is unbelievably low; in 2001–02, the total revenues from land and property taxes amounted to Rs. 21.2 crore or an annual per capita of Rs. 16.08! Although comparable data for municipalities in other states are not available, the property tax yield level in Rajasthan would be among the lowest, if not the lowest in the country. Further details on property taxes indicate that 66 out of 183 municipalities in the state including the large municipal corporations of Udaipur and Kota do not levy any form of property taxes. The only three municipalities that appear to have made some efforts in strengthening the property tax regime are Jaipur and to an extent, Jodhpur and Ajmer.

Following the success achieved in states such as Andhra Pradesh, Tamil Nadu, and Gujarat, the Rajasthan government also decided to replace the existing system of property taxation, i.e., the Annual Rateable Value (ARV), by Unit Area Valuation (UAV). Self–assessment by property owners and payment of taxes directly to banks were the other features of the proposed Unit Area Valuation system. This came into effect from April 1, 2003, but with what are so far uniform flat levies differentiated only by class of city.

Notification No.F.3/House Tax/DLB/2000/2370, dated March 31, 2003) under which house tax rates have been set for the different grades of municipalities (table 6.10). The state government has also commended a self-assessment system of properties to all municipalities. The new rules do not make any distinction between the different zones of the city/town, implying that either (i) there are no differences in the quality of municipal services between the different zones or parts of a city, or (ii) the state government does not consider it necessary to factor in the service differentials in house tax estimations.

It is important to point out that the centerpiece of the unit area system lies in dividing a city into zones, according to the levels and quality of services, apart from such other factors as age etc. The system calls for grading of the different zones, and for fixing tax rates for them. The tax rates so chosen should reflect the differences in the quality of services. Use of a single rate of tax for an entire city is incompatible with the basic principle that underlies the unit area system.

The other obligatory tax, i.e., a tax on professions and vocations is not being levied by municipalities. In 2000–01, it was appropriated by the state government with an annual yield estimated at about Rs. 50 crore, but repealed in 2004-05. No separate transfers were being made to municipalities from these yields, but revenues from this tax are added to the pool of shareable state resources.

Table 6.10

Proposed House Tax Rates

Grades of municipality	Annual tax rate	
	Unbuilt part of the plot/sq.yard	Built part/sq.ft.
Municipal Corporation	50 paise	50 paise
Municipality	40 paise	40 paise
Nagarpalika grade II	30 paise	30 paise
Nagarpalika grade III	20 paise	20 paise
Nagarpalika grade IV	15 paise	15 paise

Source: Local Self Govt. Department (GoR), Notification dated March 31, 2003.

Section 138 of the Rajasthan Municipalities Act, 1959 authorises the municipalities to charge a fee for giving licenses for different activities including construction activities, and a hoarding fee for advertisement and several other similar taxes. Such fees are payable only when appropriate bye–laws are formulated. The total income of municipalities from the application of bye–laws and other statutes was at Rs.40.36 crore in 2001–02, having risen from Rs. 12.43 crore in 1999–00, a significant increase of over 220 percent over a two–year period.[15] The fee structure is given in table 6.11.

6.4.3 EFFECT OF OCTROI ABOLITION

The state government abolished octroi in August 1998 – a positive step on economic considerations. Its abolition has, however, crippled the finances of municipalities, and taken away a liquid and buoyant source of revenue from their basket, and seriously impacted on state finances, as the state government is required to compensate them for the loss of revenue. In 2001–02, the state government, applying a surcharge on sales tax, compensated the municipalities to the tune of Rs. 370.4 crore, which formed 71 percent of the total municipal

[15] Licence fee comprises fee from slaughter houses, flour mills, limestone plants, building fee, meat shop, copying fee, advertisement fee, income from projections permissions, birth death registration certificate, fee for registration of carts, rickshaws, cycles etc. animal fares, and others. Income from enforcement of Acts includes income from the Cattle Trespass Act, Prevention of Food Adulteration Act etc.

income, and 6.5 percent of state's total tax revenues.[16] Moreover, octroi receipts during the period 1990–95 registered an average annual increase of about 20 percent, compared with an annual step–up of 8–10 percent which the state government allows in compensating municipalities. This has proved to be inadequate for municipalities. Later in this chapter, we have presented an alternative to the existing system of compensating municipalities for the loss of revenue.

Table 6.11

Structure of Fee

Subject	Rate of Fee
Slaughter house fee	Rs. 5/- animal
Building permission fee	Rs. 0.5 – Rs. 20/- per sq feet
Micro industrial units and flour mills	Rs. 10/- per year
Hoarding or advertisement fee	Rs. 12/- sq feet/year
Hoarding or advertisement mart fees (commercial)	Auction based
Cattle Fee	Rs. 1/- cattle during cattle fair
Sewer tank cleaning fee	Rs. 200–500/tank

Source: Ibid.

6.4.4 SALE OF LANDS

Sale of lands is an important source of non–tax income for municipalities in Rajasthan, particularly for the smaller municipalities. According to the report of the First State Finance Commission, sale of lands accounts for, in the aggregate, 8–9 percent of the total income of municipalities, and it could be as high as 15–16 percent of the income of smaller municipalities. For municipal corporations, however, land sales are not an important source of income on account of their limited jurisdiction over lands and other land–related assets. In all municipal corporations, Urban Improvement Trusts (UIT) hold the statutory responsibility for matters relating to lands. The field evidence suggests that the Urban Improvement Trusts (UIT) do not share the proceeds of land sales with municipalities even when they are statutorily required to do so.

[16] The state government's tax revenues in 2001–02 were placed at Rs. 5671.2 crore. See RBI's State Finances. A Study of Budget of 2003–04.

The UIT's mandate in Rajasthan (as in other states) is to estimate the future land requirements of cities, formulate land use and Master Plans, and acquire, develop, and dispose lands for implementing the land use/Master Plans. The Constitution (seventy-fourth) Amendment, 1992, however, envisages that municipalities should assume responsibility for urban planning including town planning and regulation of land use functions. The Government of Rajasthan has under consideration a draft Municipalities Bill, 2005, which, if enacted in its present form, will enable municipalities to prepare a Master Development Plan and other statutory plans.[17] As the Government moves towards making this change which is also a pre-requisite for accessing funds provided under the recently announced National Urban Renewal Fund, it will require a reexamination of the role of UITs vis-a-vis municipalities. It is important that duality of control over land and land-related matters is done away with for orderly growth of cities and towns.

6.4.5 INTERGOVERNMENTAL TRANSFERS

Intergovernmental transfers have a vital role in meeting the financial needs of municipalities. These transfers to municipalities fall into several categories comprising general purpose grants, compensatory grants from octroi, share of entertainment tax, and grants under the state finance commission, grants under the central finance commission, and special dispensations. The general purpose grant is given on a per capita basis, which is in an inverse proportion to the size of the municipality – i.e., high for a small–sized municipality and low for a larger–sized one. The state government extends grants for specific purposes like construction of roads, drains, and the like; then, there are octroi compensations, which are the single most important grant for municipalities in Rajasthan.

In the case of municipalities in Rajasthan, transfers are their lifeline, accounting for 85 percent of their revenues and covering 76 percent of their revenue account expenditures. Over 75 percent of the state transfers are grants compensating municipalities for the loss of revenues from octroi abolition. General purpose grants was constant at Rs. 21.06 crore over 1999-00 to 2001-02, while other grants concurrently showed a dramatic increase. Municipalities claim that octroi compensations are insufficient and do not represent the buoyancy that revenues from octroi had prior to its abolition in 1998. Even at the cost of

[17] The Master Development Plan, according to the proposed bill, may also define the various zones into which the municipalities shall be divided for the purposes of development and indicate the manner in which the development is to be carried out and the land in each zones is proposed to be used.

repetition, it needs to be stated that municipalities in Rajasthan are almost wholly dependent on state resources; their own efforts in financing expenditures are insignificant. This state of affairs is grossly unsustainable.

The composition of transfers is shown in table 6.12 below.

Table 6.12

Composition of Transfers

Composition	Year (Rs. Crore)					
	1999–00	Percent	2000–01	Percent	2001–02	Percent
General purpose	21.06	5.3	21.06	4.6	21.06	4.1
Miscellaneous grants	53.96	13.6	82.35	18.1	125.61	24.3
Octroi grants	320.65	81.1	352.72	77.3	370.36	71.6
Total	**395.67**	**100.0**	**456.13**	**100.0**	**517.03**	**100.0**

Source: Second State Finance Commission Report.

6.4.6 ARREARS

Until recently, the finances of municipalities were also strapped on account of accumulated arrears in respect of salaries, gratuity, provident fund, and pension fund. Data compiled upto the year 1999–2000 indicated arrears of Rs. 78.46 crore – a figure that appeared to be an underestimate, considering the fact that these arrears were unlikely to have been settled either by the municipalities or state governments on account of octroi abolition and weak finances of the state government. Reports, however, suggest that the arrears have been settled and do not constitute an issue with the finances of municipalities.

Table 6.13

Municipal Outstandings (Rs. crore cumulative until 1999–2000)

Grade	Salary arrears	Gratuity	Provident fund	Pension fund	Total
Corporations	13.05	9.00	–	–	22.05
Municipal Councils	9.74	1.43	0.58	0.57	12.32
Municipalities	24.75	9.91	4.25	5.18	44.09
Total	**47.54**	**20.34**	**4.83**	**5.75**	**78.46**

Source: Ibid.

In relative terms, the burden of outstanding payments is far greater on smaller municipalities who are often unable to meet even the establishment costs. Most evidence suggests that such arrears are assumed by the state government directly impacting on their finances.

Several observations are offered here. One: the overall design of municipal revenues in Rajasthan does not provide much incentive to municipalities to maximize own revenues or to be accountable for their financial management. This is reflected, for instance, in the relative low use made of user fees and of property taxes. In specific terms, municipalities in Rajasthan do not use their revenue base appropriately in that the key revenue resource, i.e., tax on land and property is not even applied uniformly across municipalities, and the existing fee and fine structure do not bear any relationship with the cost incurred on service provision. Similarly, the potential income from the sale of lands is strapped on account of jurisdictional issues. Two: the budget process provides no information on the limits that are placed by state governments on municipalities in making use of extra–budgetary sources of revenues. The existence of a large indirect administration and scant information available on its financial management adds to the opacity of municipal financial management and adequacy of municipal expenditures. CRISIL, a credit rating agency, for instance, while giving a BBB+/Stable rating to a Rs. 50 crore tax–free bond issues of the Jaipur Municipal Corporation (JMC) observed that its rating was constrained by the Corporation's low self–reliance in terms of revenues and its unfavorable legal and administrative framework. "The Government of Rajasthan contributes more than three–fourths of JMC's revenues in the form of grants. Since the Government of Rajasthan does not have a strong fiscal profile, such dependence reflects unfavorably on the Corporation. Moreover, JMC's large component of committed expenditure in terms of employee costs constrain its flexibility to spend on the provision of services".

Box 6.4: Constraining Features of the Finances of Municipalities

(i) Poor utilisation of revenue sources;
(ii) Wastage and leakage of revenues;
(iii) Poor recovery efforts;
(iv) Lack of cost consciousness in expenditure;
(v) Spiraling establishment expenditure;
(vi) Absence of a mechanism for periodic revision of fees, charges, fines and penalties to bring them in line with changing times;
(vii) Lack of will to use hard options for augmenting revenues; and
(viii) Inadequate financial support from the state government.

Reports of the First and Second Finance Commission

6.5 THE IMPACT OF SFCS ON THE FINANCES OF MUNICIPALITIES

The mandate of the State Finance Commission (SFC) is established, and need not be repeated in this chapter. As its mandate, the Government of Rajasthan has had the benefit of the recommendations of two State Finance Commissions. The recommendations of the First State Finance Commission related to the period 1995–2000, while the Second State Finance Commission gave recommendations for 2000–05.

Noting that the finances of municipalities were in an unsatisfactory state, and that transfers from the state government were unpredictable, the First State Finance Commission *inter–alia* recommended that instead of giving grants under different heads and sharing some of the state–level taxes with shares being either changed too frequently or often even negotiated, the state government should create a divisible pool of the proceeds of its tax revenues, and 2.18 percent of such tax proceeds (net) should be devolved on all local bodies, i.e., both rural local bodies and urban local bodies. These proceeds should be divided between rural and urban local bodies in the ratio of 3.4:1. The State Finance Commission also gave its recommendations on the principles of allocating the urban share of devolution between the different classes of municipalities and for different purposes and objectives. It recommended an incentive grant in the form of cash awards for municipalities, using performance in revenue earnings as a criterion.

The Second State Finance Commission followed broadly the same approach in addressing the issue of devolution from the state government to municipalities with some amendments. In specific terms, it –

(a) raised the local bodies share of the divisible pool from 2.18 percent to 2.25 percent;
(b) redefined the composition of the divisible pool to consist of all taxes levied by the state government, excluding, however, the proceeds of entertainment taxes;
(c) recommended that 15 percent of revenues from entertainment tax should be devolved on municipalities;
(d) laid down criteria for allocating the devolved share between the rural and urban local bodies.

The recommended year–wise share of urban local bodies is shown in table 6.14.

Table 6.14

Devolution to Municipalities as Recommended by the Second State Finance Commission (Rs. crore)

Year	Share in state taxes	Incentive grant	Share in entertainment taxes	Total
2000–01	24.70	0.56	4.45	29.71
2001–02	28.59	0.65	4.88	34.12
2002–03	33.09	0.75	5.35	39.19
2003–04	38.29	0.87	5.87	45.03
2004–05	44.32	1.01	6.44	51.73

Source: Ibid.
Notes: Figures given above are the SSFC recommendations on the basis of projections of state revenue and not the actual devolution to the municipalities.

The approach of the State Finance Commissions has brought about predictability to the finances of municipalities in Rajasthan, marking a sharp departure from the erstwhile system where-under transfers were discretionary and formed part of a negotiation between municipalities and the state government. The impact of the recommendations of the two Finance Commissions has, however, been significant only in ensuring predictability rather than impacting on the quantum of grants. The volume of grants that flow to municipalities under the new devolution dispensation is reported to be only marginally higher compared with the earlier system, explained by the difficult resource situation of the state government.

6.6 RESTRUCTURING THE FINANCES OF MUNICIPALITIES

Municipalities in Rajasthan have a limited expenditure portfolio and an equally narrow and constricted fiscal profile. Compared with most states in the country, municipalities in Rajasthan have not been assigned a role that the Constitution envisages for them. As pointed out earlier, the state government has not incorporated the 12th Schedule functions into the primary expenditure portfolio of municipalities. Likewise, with the exception of a procedural shift in the method of allocation of state government grants – unquestionably an improvement over the earlier method – no other change has been made in the fiscal profile of municipalities. Octroi compensations too are routinely arranged, with no attempt to assign to municipalities a tax object which would enable them

to capture the buoyancy of the state economy. Municipalities are in a financial crisis, and it needs to be explicitly recognised. This section looks at the state–municipal fiscal relations, followed by proposals for reforming property taxation and user charge component of municipal revenues. It also outlines reform measures undertaken by the government for improving the accounting and budgeting standards and for revamping the finances of weaker municipalities.

6.6.1 STATE APPROACH TO THE FINANCES OF MUNICIPALITIES: A SURCHARGE ON SALES TAX TO SUBSTITUTE FOR THE LOSS OF OCTROI REVENUES

The state government's approach to the finances of municipalities is defined in the Rajasthan Municipalities Act, 1959 which gives, under separate sections, a list of primary and secondary functions, and a list of taxes and revenue sources that the municipalities are empowered to make use of for fulfilling their functional mandate. The Municipalities Act of 1959 does not contain any provision that provides for statutory transfer of funds or any statutory revenue–sharing arrangement between the state and municipal governments, excepting what the State Finance Commission under its mandate may recommend. For this reason, state transfers to municipalities were a matter of discretion, and bore little relationship with the vertical imbalance that arose between what the municipalities were able to raise and what they needed to meet their spending obligations. The control and regulation of state government over municipal tax bases and rates did not provide any leverage to municipalities in adjusting the rates to meet their expenditure needs. Notwithstanding the constitution of the State Finance Commission, this fiscal apparatus remains unchanged and is clearly unsustainable.

The approach of state government to the finances of municipalities has shifted in matters relating to the **sharing** of state–level taxes. In view of the fact that the State Finance Commission is a Constitutional body, this section does not refer to their mandate. Nor does it offer any suggestions how the future finance Commissions may address their mandate. However, this section addresses the issue of octroi compensation which, as is argued in the previous section, is crucial for the survival of municipalities, and which places a noticeable impact on the finances of the state government.

The current system of octroi compensation is to transfer a specific amount, equivalent to the aggregate octroi earnings,[18] with a provision to adjust it with an assumed inflation factor. A key argument of municipalities has been that octroi revenue growth was far greater than 8–10 percent growth rate that is used by the state government for determining the quantum of octroi compensation, and municipalities in the state have suffered on account of the inability of the state government to use a higher inflation or adjustment factor.

Notwithstanding the fact that octroi has cascading effects and an adverse economy–wide impact, octroi – an indirect tax – was a preferred revenue source on account of its elasticity, ease of application, buoyancy, and liquidity. No other revenue source matched these characteristics. It is imperative that municipalities are given access to a source that gives to them a level of buoyancy that octroi had, if not all the other benefits such as liquidity. The only tax which has somewhat similar qualities is sales tax (or a Value Added Tax, when it is introduced) which represents the economy–wide movements. It is suggested that municipalities be permitted to levy a surcharge of 10 percent on sales tax receipts as a compensation for the abolition of octroi. It is necessary to point out that it is a **surcharge** to be levied by municipalities (and not by the state government) and does not in any way affect any revenue–sharing arrangement that the State Finance Commission may recommend for municipalities. Access to sales taxes via such a surcharge (or a VAT upon its introduction) will give to municipalities a viable and buoyant source of revenue which is linked with the state economy. Also, it will not affect the finances of state governments as long as it is termed and applied as a municipal tax, substituting octroi levies. Evidently, the current surcharge on sales tax levied by the state government will be need to be done away with, when it comes into effect.

6.6.2 ACTIVATING LOCAL REVENUE BASE

(a) Property taxation

The financial health of municipalities is best reflected in the efficient management of the statutory resource base. As indicated, property taxation constitutes the main source of revenue for municipalities, the proceeds of which are expected to finance at least the joint services, i.e., those services which can not be financed via user charges. For this to take place, periodic revisions in

[18] Prior to octroi abolition. Note should be made of the fact that the state government began to levy a surcharge on sales tax, in order to compensate the municipalities for the loss of octroi revenue.

property values and selection of the rate at which property values are to be taxed, are crucial for the fiscal strength and viability of municipalities.

The unit area system, already adopted as on 1 April, 2003, relies on the proposition that there are important intra–city differences in the quality of services including non–municipal services, and should be reflected in property values. Many states and city governments in India have, in recent years, opted in favour of the unit area system, under which a city is divided into zones according to the characteristics of the zones measured in terms of access and quality of services, including such services as banking and financing services, parks etc. Capital valuation is yet another method for valuing properties, the use of which is found in countries where property transactions are substantial.

It is important to give attention to the following in putting in place a unit area system which differentiates within cities:

(i) choice of criteria for dividing and grading the city into zones, including assignment of weights, if criteria need to be differently weighted;

(ii) monetary value/per sq. meter for the different zones. It is important that monetary values are so chosen that they reflect the differences in the quality of services between different zones.

(iii) Rate of tax; here too, it is important that it is so chosen that when applied to the different zones, the proceeds are able to meet the cost of maintaining joint services.

These issues are best settled at the level of cities or groups of cities instead of being determined by the state government.

In addition, property tax reform must ensure that exemption of properties from payment of taxes is avoided, and the burden of payment of taxes is shifted from owners to occupants. Necessary statutory amendments are required to be undertaken to ensure that occupancy and payment of property taxes does not, in any way, give any property rights to occupants.

(b) ***Non–tax component of municipal revenues***

Along with a change in the assessment system of property taxes, it is essential to revisit the non–tax component of municipal revenues in Rajasthan. The non–tax component of municipal revenues in Rajasthan is a mix of charges, fees, fines, and earnings from the sale of lands. The rates of various charges, fees and fines have stayed at the existing levels for several years, while the costs involved in providing services such as a building permit have risen several–folds. Such subsidies in respect of service provision are unwarranted in any healthy

economic system. Their periodic revision to account for rising costs is indispensable for any municipal system to remain viable.

Sale of lands is an important source of income for municipalities in Rajasthan, particularly smaller municipalities. In larger municipalities, proceeds from the sale of lands accrue to the Urban Improvement Trusts who, under the statues, are required to acquire and develop lands, and release them into the market for housing and commercial purposes. Fifteen percent of the proceeds of the sale of lands is expected to be given to municipal corporations; however, reports suggest that even this share is not being credited to municipalities. Likewise, smaller municipalities are said to face procedural problems in selling lands.

Land sales are an important source for financing municipal infrastructure and services. It is important that matters relating to land, including land use, are dealt with by municipal corporations. Such a provision will be consistent with the Constitution (seventy–fourth) Amendment Act, 1992, and dual control over land including its use, development and sale will be eliminated.

6.6.3 FINANCING MUNICIPAL INFRASTRUCTURE AND SERVICES

Most of the evidence would suggest that municipalities in Rajasthan, in financial terms, are weak and would not be able to secure a stable credit rating. The earlier section has given an extract from the report of CRISIL on the proposal of Jaipur Municipal Corporations (JMC) to issue tax–free bonds. Other municipalities will not be able to secure even BBB+ rating, meaning that they would not be able to raise resources in the capital markets. In order to deal with financially weak municipalities, it becomes essential to channel investment in urban infrastructure through municipal governments and strengthen their capacity in the process. There is sufficient experience in India (as also in other countries) with Municipal Development Funds and Urban Infrastructure Corporations, which consist of a pool of resources operated at a level above that of the individual municipality for investment in urban infrastructure and service through municipal governments. These are intended to combine lending with the promotion of municipal capacity via incentives. The Government of Rajasthan has constituted an urban infrastructure finance corporation (Rajasthan Urban Infrastructure Finance and Development Corporation RUIFDCO) for providing funds to support weak urban local bodies. The Corporation is in an infant stage; however, effective use of such a corporation requires that it should be strengthened to a point where it is able to leverage funds from the market for financing urban infrastructure development. The corporation needs to be

visualized and developed as a Fund that will enable municipalities to pool their financing requirements and use the channel of the corporation for raising resources for meeting their requirements. It should impart fiscal discipline and prudence within municipalities. The corporation may be organised as a public–private venture on the lines of the Tamil Nadu Urban Development Fund (TNUDF).

6.6.4 ACCOUNTING AND BUDGETING REFORMS

The need to undertake accounting and budgeting reform has been underlined by the Eleventh Finance Commission and by the Central Ministry of Urban Development. The state government has taken a policy decision to switch over from the present cash based single entry accounting system to an accrual based double entry accounting system in all municipalities in Rajasthan. A state level steering committee has been constituted for monitoring the process of changing over to the new accounting system. A policy decision has also been taken to adopt the National Municipal Accounting Manual circulated by the central government with some necessary modifications. The process of preparing accounting manuals for the different municipalities has started. Computerization of budget and accounts has started in 6 major towns (Jaipur, Jodhpur, Kota, Udaipur, Ajmer and Bikaner). Urban local bodies in other cities are being computerized under the 'e-Nagar Mitra' project supervised by RUIFDCO.

In this connection, it needs to be pointed out that the recently announced National Urban Renewal Mission (NURM) aims to assist cities undertake reforms in three spheres (i) revenue generation, (ii) accounting system and (iii) governance referring to public disclosure of municipal budgets and participation of civil society in local decision–making. The proposed Rajasthan Municipalities Bill can be recast in ways that it is compatible not only with the Constitution (seventy-fourth) Amendment Act, 1992, but also with the new norms of financial viability, community participation in local decision making, and governance as embodied in the National Urban Renewal Mission (NURM)

In conclusion, the major drawback in revenue generation efforts by the municipalities of Rajasthan needs to be highlighted. These municipalities have not levied most of the discretionary taxes that they are empowered to levy under the provisions of Article 105 of the Rajasthan Municipalities Act. Even the obligatory house tax is not levied by a large number of municipalities. The municipalities must levy at least the obligatory house tax for improving their finances. If the targets for house tax collection are met, then they will also

become eligible for incentives from the central government through the Urban Reform Incentive Fund, established through an MoU with the state government.

In addition, the unit area valuation system calls for grading of the different zones, and for fixing tax rates for them. The tax rates so chosen should reflect the differences in the quality of services. Use of a single rate of tax for an entire city is incompatible with the basic principle that underlies the unit area system.

Further, the municipalities should take immediate action on the detailed guidelines for augmenting revenues and improving efficiency sent by the state government to all local bodies (dated 8 September 2004, 2 March 2005 and 4 July 2005). Among these suggestions, the following, if implemented, will alleviate the financial stress of the municipalities to some extent:

- Enlistment and identification of municipal land, properties and assets and utilizing them for funding projects of a permanent nature.
- Increasing income from available land through commercial/residential schemes.
- Revision and rationalization of fees/user charges.
- Levy of a garbage tax on big hotels, marriage halls, hospitals, multi-storeyed buildings and commercial enterprises which produce large quantities of garbage. Further, a tax for collecting garbage from residential houses should be levied.

Finally, the state government should restructure the budget heads of municipal expenditure as proposed by the Eleventh Finance Corporation for attaining state-wide and country-wide uniformity.

Annexure to Chapter 6

Annex 6.1

Cities in Rajasthan

Class I City/UA	Population 1991	Population 2001	AAGR
Ganganagar UA	161,482	222,858	3.22
Hanumangarh M	82,773	129,556	4.48
Bikaner M.Cl	416,289	529,690	2.41
Churu UA	82,852	101,874	2.07
Jhunjhunun M	72,187	100,485	3.31
Alwar UA	210,146	266,203	2.36
Bharatpur UA	156,880	205,235	2.69
Gangapur City UA	68,886	105,396	4.25
Sawai Madhopur UA	77,690	101,997	2.72
Jaipur M.Corp	1,518,235	2,322,575	4.25
Sikar UA	148,272	185,925	2.26
Jodhpur UA	666,279	860,818	2.56
Pali M.Cl	136,842	187,641	3.16
Kishangarh M	81,948	116,222	3.49
Ajmer UA	402,700	490,520	1.97
Beawar UA	106,721	125,981	1.66
Tonk M.Cl	100,235	135,689	3.03
Bhilwara M.Cl	183,965	280,128	4.21
Udaipur M.Cl	308,571	389,438	2.33
Kota UA	537,371	703,150	2.69

Source: Primary Census Abstract, Final Population Totals, Provisional Population Totals, Rajasthan, Census of India, 1991 and 2001.

Appendix to Chapter 6

Table 6A.1

Revenue Receipts of Municipalities

Year	Revenue Receipts (Rs. crore)				Total
	Tax	Non–tax	Miscella-neous revenues	Transfers including grants	
1997–98	277.00	24.81	11.87	110.41	424.10
1998–99	106.52	27.81	25.31	312.71	472.35
1999–00	14.76	25.93	10.04	395.68	446.42
2000–01	20.67	33.70	11.97	456.13	522.48
2001–02	24.15	56.74	22.51	517.03	620.42
Annual exponential growth rate (%)	–61.00	20.68	15.99	38.60	9.51

Source: Government of Rajasthan.

Table 6A.2

Per Capita Revenue Receipts of Municipalities

Year	Per Capita Revenue Receipts (Rs.)				Total
	Tax	Non–tax	Miscella-neous revenues	Transfers including grants	
1997–98	233.1	20.9	10.0	92.9	356.8
1998–99	87.3	22.8	20.7	256.2	387.0
1999–00	11.8	20.7	8.0	315.8	356.3
2000–01	16.1	26.2	9.3	354.6	406.2
2001–02	18.3	43.0	17.1	391.5	469.8
Annual exponential growth rate (%)	–63.63	18.1	13.4	36.0	6.9

Source: Ibid.

Table 6A.3

City Size Distribution of Revenue Receipts, 2001–02

City Size	Revenue Receipts (Rs. crore)				Total
	Tax	Non–tax	Miscella-neous revenues	Transfers including grants	
Municipal Corporation (3)	15.71	23.18	7.10	159.26	205.25 (30.2%)
Municipal Councils (11)	4.00	8.88	2.61	126.00	141.50 (21.6%)
Municipalities (39) Grade II	2.61	12.44	5.23	103.87	124.16 (22.0%)
Municipalities (58) Grade III	1.43	6.50	4.22	74.89	87.05 (15.5%)
Municipalities (72) Grade IV	0.39	5.74	3.34	53.00	62.46 (10.8%)
All urban local bodies	24.14	56.74	22.51	517.03	620.42 (100.0%)

Source: Ibid.

Table 6A.4

City Size Distribution of Municipal Revenues, 2001-02

City size	Per Capita Municipal Revenue Receipts (Rs.)				Total
	Tax	Non–tax	Miscella-neous revenues	Transfers including grants	
Municipal Corporation	40.64	59.96	18.36	411.95	530.92
Municipal Councils Grade I	13.40	29.70	8.74	421.27	473.10
Municipal Councils Grade II	9.98	47.50	19.99	396.76	474.24
Municipal Council Grade III	8.06	36.62	23.80	421.94	490.42
Municipal Council Grade IV	2.67	39.63	23.05	366.01	431.37
All Municipalities	19.02	44.68	17.73	407.17	488.60

Source: Ibid.

7. FUNDING FOR ROAD DEVELOPMENT

7.1 BACKGROUND

Road infrastructure is an important component of the overall infrastructure requirements of the state of Rajasthan, particularly in light of the fact that the state has one of the lowest road lengths per unit area among the major Indian states. In 2005, 42 percent of villages remain unconnected to road networks.[1] Further, 84 percent of the total road network in the state is single lane, facing an increasing traffic load (which grew at more than 10 percent per annum over the last decade).

Notwithstanding the significant multiplier effects of road development on the domestic economy, the initial cost of financing road infrastructure and its maintenance is very high. While there is a pressing need to develop road infrastructure in Rajasthan, the issue must be viewed in the context of the constraints on capital expenditure imposed by the FRBM as discussed in chapter 2 of the Report. For instance, even without factoring in the FRBM constraints, the current capital outlays on road development and maintenance fall short of actual requirements. In 2005-06, Rs.205.90 crore is available from a number of sources, covering routine maintenance and periodic renewals of State Highways and Major District Roads, but not augmentation of existing capacity.[2] Thus, new approaches are required for developing and maintaining road networks in the state, without increasing the fiscal burden on the exchequer.

Section 7.2 summarizes the recent policy initiatives and institutional developments in the road sector in Rajasthan. Particular attention is given to the Road Fund, established in September 2004.

Section 7.3 analyses a particular road upgradation and maintenance initiative, the Mega Highways Project that has been concessioned to RIDCOR, a joint venture partnership between the state government and Infrastructure Leasing and Financial Services Ltd. (IL&FS), in the backdrop of recent developments and country experiences with public private partnership (PPP) models. Subsection 7.3.1 discusses the main requirements for a successful PPP in roads. Important

[1] Statement on Sector Issues and Future Agenda relating to the Road Sector contained in the World Bank Report on 'Rajasthan: Closing the Development Gap' – and comments of the Public Works Department on the same.
[2] Ibid.

features of some of these contract mechanisms are discussed and their risk allocation and incentive properties are evaluated. The parameters dictating the choice of the appropriate contract are also highlighted, along with country experiences with different kinds of contract. Subsection 7.3.2 details the particular PPP model adopted in Rajasthan for developing the Mega Highways project, with partial reference to Tamil Nadu which has adopted a similar mechanism for small road projects. Section 7.4 summarizes with recommendations.

7.2 RECENT POLICY INITIATIVES AND INSTITUTIONAL DEVELOPMENTS

The most important policy initiatives in the road sector in recent times in Rajasthan are the 2002 modification of the Rajasthan Road Development Policy, 1994 and the enactment of the Rajasthan Road Development Fund Act, 2004. As per the provisions of the second Act, a non-lapsable State Road Fund was immediately established in September 2004. The proceeds from a 50 paise cess on petrol and diesel feed into this fund and these resources are to be exclusively used for the development of state roads (construction, maintenance, upgradation, strengthening, widening and also to provide support to BOT projects in the road sector).

The Road Development Policy, 1994, was modified with the enactment of the Rajasthan Road Development Act, 2002 in order to encourage private sector participation in the development of the road sector. Since then, the most significant private sector involvement in roads has been the formation of Road Infrastructure Development Company of Rajasthan Ltd. (RIDCOR) in 2004, a 50:50 joint venture of the government of Rajasthan and IL&FS. Currently, RIDCOR is involved in the implementation of the Mega Highways Project. This is discussed in detail in subsection 7.3.2. The Rules of the 2002 Act, which were notified by the Public Works Department on 20 February 2002, specifies in an annexure the norms for project formulation. Some of these norms are summarized in table 7.1, and are binding for all projects undertaken in the road sector since 2002, including the Mega Highways Project.

The other major development in this sector is the enactment of the Rajasthan Road Development Fund Act, 2004, in order to fund the gap in financing road development. The actual collection in the State Road Fund was Rs.105 crore from 7 September 2004 (date of notification), to 31 March 2005. The estimated collection in 2005-06 is Rs.200 crore. In this context, it should be

mentioned that the traditional role of a road fund, as mooted by the World Bank, was for the purpose of maintenance of existing roads alone. Rajasthan envisages leveraging the road fund for both construction and maintenance of roads. A State Road Development Fund Management Board will manage the fund.

Table 7.1

Norms for Project Formulation as per the Rules of the Rajasthan Road Development Act, 2002

Maintenance	i. 0-5 years: 1.5 % of project construction cost ii. 6-10 years: 2% of project construction cost iii. 11 years and above:2.5% of project construction cost
Projected traffic increase	i. National Highway: 7.5% ii. State Highway: 6% iii. Major District Roads: 5%
Fee recoverability from traffic	95%
Fee collection and establishment cost	7.5%. This might be inadequate, but the provision of rounding off fees to the nearest multiple of Rs.5.00 would supplement it.
Interest rate	15%
Profit	15%
Discount rate	PLR+1% to1.5%

Source: Rules of the Rajasthan Road Development Act, 2002 (20 February 2002).

Apart from the cess on petrol and diesel, the state government should also consider other methods of financing the Road Fund. Two such measures are summarized in box 7.1.

7.3 PRIVATE PUBLIC PARTNERSHIPS IN ROAD DEVELOPMENT: RIDCOR

Financing road infrastructure has traditionally been the exclusive domain of the government. In most industrialized countries, 90 percent or more of highway kilometers are publicly funded and in developing countries, governments often bear the entire cost. However, increasing budget deficits and competing needs for financing have recently given rise to non-traditional ways of financing roads. In developing countries, interest in developing private public partnerships (PPPs) of some sort for financing road infrastructure started in the

1980s. The rationale for involving the private sector in road development is threefold:

- First, the funding requirements for roads are very big in any country at any point in time. According to Klein and Roger, 1994, governments worldwide spend an average of 4 percent of GDP annually on transportation infrastructure. Involving private sector funds in road development would allow public sector funds to be leveraged to a much larger extent than what is feasible currently. Public resources, which are freed up from the road sector, can then be utilized in other pressing requirements of the country.

Box 7.1: Supplementary Funding Possibilities for the Road Fund

The Road Fund is an important initiative for financing road network in Rajasthan. It is important that the state government begins to explore and experiment with additional fiscal instruments by capturing the addition to land values that occur as a result of public investments particularly in road infrastructure. We outline here the basic features of two such instruments, namely (i) Development Impact Fee, and (ii) Betterment Levy. Development impact fee which is applied in several countries and which has a wider appeal, is a one-time charge applied to offset the additional public service costs of new developments. It is usually applied at the time a license or permit for new development is granted, and is dedicated to the provision of services such as water and sewer systems, roads, parks, and the like. The fee is in the nature of a charge in anticipation of use, and meant to cover the cost for expanding the service network. The amount of the fee is linked to the additional service cost, and is not arbitrarily determined.

The premise on which the impact fee is based is that new development should pay the marginal cost of providing infrastructure and services, necessary to accommodate growth. It is designed to neutralise subsidies that often accompany new developments and which often produce leapfrog urban sprawl on the periphery of cities. By levying an impact fee, the burden of new infrastructure is absorbed by residents and businesses of new developments, without affecting the existing population.[3] For a state which is experiencing considerable development around its cities, levy of an impact fee should be able to meet a substantial portion of the cost of public facilities.

A second instrument currently in use in several countries including some states in India is the betterment levy. A betterment levy is defined as the capitalised value of urban externalities (facilities and services) and un-priced social infrastructure. The rationale for betterment levies springs from the fact that major public infrastructure development, including road development, in and around cities, produce large windfall surpluses to owners of lands close to such investments. In cities such as Delhi, development of highways is said to have resulted in 60-100% increase in values for properties around them. Betterment levies, if levied to capture such enhanced values, would seek to recover a part of the value that major public investment confer on private land assets. Betterment levies are focused on value added by public interventions at regional and state-levels. Taxation of betterment represents a tool for urban development. When effectively administered, betterment levies may also help to check land speculation in cities.

[3] Since the amount of the fee is location-specific, it could result in some inequity, and it should be acceptable to the administration prior to its levy.

- The private sector can probably arrange for debt finance at a cheaper cost than the public sector, if the creditworthiness of the latter stands suspect because of high levels of deficits.
- The public sector can unbundle and share the risks in road construction and maintenance with the private sector for more efficient outcomes.

There are various mechanisms whereby the government can engage the private sector in road development. Subsection 7.3.1 discusses the main requirements for a successful PPP in roads. Important features of some of these contract mechanisms are discussed and their risk allocation and incentive properties are evaluated. The parameters dictating the choice of the appropriate contract are also highlighted, along with country experiences with different kinds of contract. Subsection 7.3.2 details particular PPP model adopted in Rajasthan for developing the Mega Highways project, with reference to Tamil Nadu which has adopted a similar mechanism for small road projects.

7.3.1 PPP: REQUIREMENTS AND DIFFERENT MECHANISMS

A public private partnership (PPP), in infrastructure projects, is a contractual relationship between the government and a private agency, such that risk is shared between the private and the public entities. The different PPP models differ in the manner in which this is done, and the context in which each is applicable. The risk borne by the private party has to be configured in such a way that a quality incentive is built in. **In other words, a well-designed PPP leaves room for the private party to lower his own risk by improving his own quality of delivery.** Though there are various ways in which the contract can be written, there are some standard requirements for a successful PPP in infrastructure projects. These conditions are:[4]

- Stable macroeconomic framework
- Efficient and well-developed financial sector
- Sustainable project revenues (cost recovery)
- Sound regulatory framework
- Clearly laid out arbitration procedures/dispute resolution mechanism
- Well-developed bankruptcy laws

[4] Michael F.Carter 'Public Private Partnerships in Infrastructure Financing'; FICCI Presentation, September 2003.

In the absence of these enabling conditions, the obvious benefits of the PPP, as noted earlier would not materialize as in the case of the 6000 km. long privately financed toll road programme in Mexico that has recently come unstuck.[5] The main reason for this was the lack of a clear legal and regulatory institutional arrangement, which discouraged lenders and investors from respecting agreements. Further, the 'conflicting dual role of the Secretariat for Communications and Transport as part regulator part concession partner sent conflicting signals to the concessionaires', according to the World Bank.

In fact, poor performance in earlier PPP projects and demands for accountability and transparency in public spending led the UK government to enact a specific legislation in the 1990s, which provided for the development of a Public Sector Comparator (PSC) for every PPP on the basis of a highly prescribed process. The PSC is a method used to calculate the 'in-house' cost of delivering a project and comparing this with a private finance option. The PSC helps determine the economic viability of a PPP project and demonstrates clearly the value-for-money from the PPP venture. The responsibility for designing and implementing the PSC remains with the public sector agency involved with the project and the signing authority for the PPP has to satisfy themselves about the validity of the PSC and that the PSC clearly indicates a preference for the PPP option.

Regarding the different forms of PPP, different countries have entered into different kinds of contracts with the private sector for funding roads. In general, there are four generic models for contracts. These are:

IA. **The Build-Operate-Transfer (BOT) Framework:** This contract has many variants like BOOT (build-own-operate-transfer), ROT (rehabilitate-operate-transfer), BLT (build-lease-transfer), LRO (lease-rehabilitate-operate) etc. An up- front capital grant fee, which is the bid parameter, is paid to the concessionaire before the construction phase. The building, maintenance and the tolling contracts are combined together. The concessionaire also has the right to operate the road and collect tolls on it for the period of the contract, which incentivizes the quality of the road.

IB. **The Least Present Value of Revenue (LPVR) Framework:** This is a variant of the BOT model, where the contract is designed to convert the traffic risk borne by the concessionaire in the BOT model into uncertainty about the duration of the contract. The bid parameter is the present value of the toll revenue i.e. the concessionaire bidding the lowest present value of toll revenue wins the contract. The contract ends when the present

[5] World Bank 'India Financing Highways', Report No. 30363-IN, 2004.

value of toll revenue equals the concessionaire's bid. Therefore, the contract term lengthens if the traffic volume is lower than projected and vice-versa.

II. **The Annuity Framework:** This contract is based on a fee-for-service contract. No up-front payment is made to the concessionaire in the construction phase by the government/public agency. The building and the construction contracts are combined. The tolling contract is completely separate. A fixed annuity payment, which is the bid parameter, is made bi-annually to the concessionaire once the road becomes operational. The annuity payments are linked to the quality of the road. Various objective measures (number of potholes per km., smoothness of the road) are used to assess road quality and adjust annuity payments according to the quality of the road.

III. **The Joint Venture Partnership:** Road concessions being implemented in India in partnership with IL&FS follows this framework. This contract interposes an intermediate joint venture partnership, which is the concessionaire, but not the ultimate construction or possibly even maintenance agency. Thus, it offers the possibility of unbundling risk, although the manner in which this is done is built into the fine print of each such contract. The manner in which net returns on equity are configured can vary. There can be some where net returns are capped, others where there is a floor, and still others where net returns are fixed. Clearly, the sharing of risk between government and the joint venture concessionaire will be a function of the financial design of the contract.

These contract frameworks differ in the manner in which risk is shared between the public and the private sector and the nature of incentives for making quality roads. The main risks in road development are construction, maintenance and revenue/traffic, which together translate into an overall financial risk. Apart from these, there are force-majeure risks, political risks and legal risks.

Incentive for quality road construction is built into the annuity model by linking the annuity payment to the quality of construction explicitly in the contract. In the BOT model, there is an indirect incentive for the concessionaire to build a quality road, because the toll revenues collected by him in the operation phase are partly dependent on road quality. The manner in which the incentive for quality is built in the other two models depends on the fine print of the contract design.

In the annuity model, the concessionaire does not share the traffic risk at all, whereas the entire risk arising from traffic projection, construction and operation (until transfer) is borne by the concessionaire in the BOT model. Depending on the fine print of the contract design, the joint venture offers a possibility of sharing traffic risk between the government and the concessionaire.

Thus, it is evident that the greatest advantage of an annuity model lies in its incentive mechanisms for ensuring quality road construction, whereas the greatest strengths of the joint venture model lie in unbundling and allocating risks to the most appropriate entity. However, the quantum of annuity can serve to distribute risk disproportionately between public sector and concessionaire. For instance, parts of the Golden Quadrilateral project and the Tambaram-Tindivanam project were constructed by the NHAI using the annuity model, with a total annuity amount of Rs. 2878 crore.[6] Ex-post financial analysis of these projects found that, though the NHAI's cost of funds were around 11 percent per annum, (using NHAI's debt-structure for 2002-03), the effective cost of annuity borrowing for NHAI turned out to be 17-18 percent per annum.[7] This difference crept in mostly because the concessionaire had to bear the construction and maintenance risk without any explicit upfront cash flow from the NHAI during the construction phase. This additional risk increased the premium built into the annuity charged by the concessionaire.

This is overcome in the BOT model by the upfront capital grant to the concessionaire, before the commencement of civil works. In fact, the most common contract in PPP model implemented world-wide is the BOT model. Some examples are:

1. Chile's South Access to Concepcion (Forestry Road)
2. Columbia's Buga-Tuluá highway
3. Mexico's Mexico City – Toluca toll road
4. China's Guangzhou-Shenzen super highway
5. Malaysia's North-South expressway
6. Hungary's M1/M15 Motorway
7. The U.K.'s Dartford bridge

Even within the standard BOT model, there can be various innovations to handle risk sharing, particularly traffic and revenue risk[8]. In the case of the Dartford bridge, the M1/M15 motorway and the Guangzhou-Shenzen project, full traffic and revenue responsibility was allocated to the private partner. On the

[6] World Bank, India – Financing Highways, Report No. 30363-IN, 2004
[7] Ibid.
[8] Gregory Fisher and Suman Babbar, Private Financing of Toll Roads, RMC Discussion Paper Series 117.

other hand, the Mexico City – Toluca toll road provided for a minimum traffic guarantee in the form of a flexible concession term, which was extendible if traffic fell below minimum levels. The South Access to Concepcion (Forestry Road) used a minimum revenue guarantee model, with cash compensation in case revenue fell below a certain minimum level. The Buga-Tuluá highway on the other hand, included a minimum traffic guarantee, with cash compensation and a maximum traffic ceiling, above which all revenues were transferred to the Government. In the case of the North-South access way, standby government loans were provided to support traffic and revenue risk.

Regarding other risks, in most of these projects, the private sector assumed primary responsibility for construction period risk and used fixed price construction contracts to protect investors. However, in the case of China and Malaysia, there were substantial cost overruns due to delays. Particularly, in the Malaysian case, the project cost increased by more than 70 percent for design changes and soil conditions. Extensive government support was required, even though there was no explicit assumption of construction risk. Legal risks, mostly in the form of tort liability was borne by the private concessionaire and was covered by private insurance. Political risks, on the other hand, were mostly borne by the public entity. The risk of financial viability of the project was mostly the responsibility of the private sector, even though the government provided various kinds of guarantees (debt guarantees, equity guarantees, cash grants, subordinated loans etc.) in order to improve the expected return on capital invested. The Guangzhou-Shenzen project included a government cash flow deficiency guarantee for the $800 million senior project debt. In Chile, the government provided an up-front cash grant of $5 million, or almost one-quarter of the total project costs, while in Malaysia the government provided $634 million in loans, or about one-quarter of the project's total debt.

The nature of the contract selected for a particular PPP model depends on the extent to which the concessionaire is willing to share risk with the public sector agency. Typically, on roads which have captive traffic, and hence with lower revenue risk, a BOT type of contract is appropriate. The requirement for the upfront capital grant is lower compared to a road with greater traffic variability, as there is greater certainty about traffic volumes. In the absence of captive traffic on the road/bridge, an annuity contract, or the joint venture model would be more appropriate. Of the two, the incentive for quality road construction is higher in the case of the annuity model, since the quantum of the annuity is a function of the quality of the road. However, if the generalized risk premium is built into the annuity in such a way as to disproportionately benefit the concessionaire, the allocation of risk could devolve more on the public party than the initial design might suggest. The final choice of contract, and the final

design of the fine print, will determine the risk allocation between the public and private parties, and the incentives embodied in that allocation.

7.3.2 THE PPP FRAMEWORK ADOPTED IN RAJASTHAN: RIDCOR

Rajasthan has entered into a PPP arrangement with IL&FS in 2005 for a Mega Highways Project, whereby 5 existing North-South corridors, with a total length of 1053 km. will be upgraded to two lane paved shoulder configuration with additional value-added features (bus shelters, reflectors and illuminated guide-posts for night driving, outsourced ambulance and patrolling services etc.). A formal Partnership and Development Agreement (PDA) was signed for the project on 7 August 2005, detailing the rights and obligations of the two parties. The PDA document is not available in the public domain. Therefore, the following analysis of the financial structure of RIDCOR is written without access to the fine print of the PDA document.

The institutional arrangement for this PPP is the Rajasthan Road Infrastructure Development Company of Rajasthan Limited (RIDCOR), a 50:50 joint venture company set up with equal equity contribution from the Government of Rajasthan and IL&FS. This particular JV model has an ingenious financial structure for financing the upgradation and maintenance of an inherently risky project.

The construction period is 2 years, after which there is a 30-year concession period during which upgradation in stages and routine maintenance will be carried out. The cost of the project has been estimated at Rs.1200 crore,[9] on the basis of initial feasibility studies. This figure may increase. However, the liability of the state government is asserted to be capped at Rs.365 crore (Rs.25 crore in equity, Rs.240 crore in interest-free subordinate debt and a contingent liability of Rs.100 crore in the form of a Financial Security Fund [FSF]). All withdrawals from the FSF bear interest and are capped at Rs.100 crore. This facility is akin to a partial guarantee, since the state government stands ready to supply funds in the event of the project falling short for meeting O&M expenses or taxes and debt servicing in the first five years of operation. The detailed financing plan, assuming Rs.1200 crore to be the project cost, is given in table 7.2.

[9] A project cost of Rs.1200 crore for upgrading and maintaining 1053 km. of roads translates to a cost of Rs. 1.14 crore per km.

Table 7.2

Financing Plan for the Mega Highways Project

(Rs.crore)

Govt. of Rajasthan equity	25
IL&FS equity	25
Subordinate debt from Government of Rajasthan	240
Debt arranged by IL&FS	910
Total	**1200**

Source: IL&FS.

Notes: The total of Rs.1200 crore does not include the FSF provision by the Government of Rajasthan of Rs.100 crore as contingent support.

This is a partnership model with the government, and there are no explicit concessions given to the private sector. The returns on equity are capped cumulatively in the following manner:

- Years 1-24: if there is a loss, then nothing will be paid.
- Year 25: if there are profits, then the 15 percent return from years 1-24 will be paid cumulatively.

There are two safeguards for the state government in the agreement:

- In year 25, if profits are greater than 15 percent, then the surplus is taxable by GoR as JV fee.
- Casting vote lies with the Chief Secretary in the Board.

The subordinate debt of Rs.240 crore provided by the state government is interest-free. The subordinate debt is treated as equity for senior debt to be arranged by IL&FS for financing the project, although equity, as a riskier financial stake than debt, is entitled to a greater, not a lower return. It should be noted that in all the international BOT experiences summarized in the earlier section, subordinate debt, whenever provided, actually earned interest.

However, it may be noted that in the case of the Mega Highways project, the sub-debt is being provided in lieu of an up-front capital grant/viability gap funding. The advantage of offering sub-debt in this manner is that the amount of sub-debt would be returned to the state government, whereas the up-front capital grant is an outgo, which is not returned to the state government. The effective cost of the viability gap funding, in this instance, is the interest foregone on the sub-debt by the state government. The sub-debt, by virtue of being interest-free,

therefore, simultaneously provides comfort to senior lenders and provides an alternative for funding the viability gap.

Without access to the fine print of the PDA, no further comment or assessment is possible regarding other possibly beneficial features of the project, as they bear upon the finances of the Government of Rajasthan.

The debt–equity ratio for the Mega Highways project is quoted as 3:1 (as Indian banks treat subordinate debt as equity for the purpose of calculating debt-equity ratios). This is a fairly high gearing level, by standards of norms in countries where financial markets are not very highly developed, as in India. The accepted norm in this case is in the range of 1.5:1 to 2.2:1.[10] However, there are instances where the debt-equity ratio has been much higher, as in the case of Mumbai-Pune Expressway, where the ratio was 4.5:1. The litmus test will, of course, be if the project reaches financial closure, indicating that the lenders (banks and financial institutions) have accepted and/or can live with such high debt-equity ratios.

Another feature of the RIDCOR model is the stage construction of the 5 corridors, in order to reduce initial cost of construction. The roads will be constructed with an initial life of around ten years over a two-year period, at an estimated cost of around Rs.1200 crore. After two years, the roads will enter the improvement and maintenance stage. Over the next five years (upto the seventh year of the life of the project), improvement and maintenance work will be undertaken by the contractor who built the road. At the end of the seventh year, the roads will again be contracted out, possibly to a different agency, for improvement and maintenance for a further period of five years. Thus, the road improvement and maintenance work will be undertaken in cycles of five years. The cost of routine maintenance per annum is estimated to be around 1 percent of the construction cost.

RIDCOR intends to rigorously monitor the quality of the road in the construction stage, during which the contractor will be paid according to his actual cost of construction at particular deadlines as set in the fine print of the contract between RIDCOR and the contractor.[11] The Integrated Improvement-cum-Maintenance contract is designed in impressive detail, in order to make payment a function of the quality of the road (based on objective rules like

[10] World Bank, India – Financing Highways, Report No. 30363-IN, 2004

[11] The contractor will have to submit a bank guarantee of 5 percent of the construction cost in order to get an initial advance of the same amount for initiating construction and a further bank guarantee of 5 percent of the construction cost in order to qualify for a further advance of the same amount after three months, when the equipment is in place.

number of potholes, roughness of the road etc.). A performance guarantee, to the extent of 10 percent of the construction cost, will have to be deposited by the contractor at the beginning of the construction period. This guarantee amount will be forfeited if the contractor does not maintain the prescribed standards of quality.

In order to unbundle construction risk from the traffic risk, the imposition of tolls has been separated from the construction and maintenance contract. The imposition of tolls is to be staggered in time, depending upon the time taken for traffic to ramp up on the roads after they become operational. Therefore, the imposition of tolling might happen at different points of time on the 5 different stretches of roads under construction. Once the traffic on these roads stabilizes, RIDCOR proposes either to securitize the revenues from tolls or auction the toll collection rights. These revenues are expected to meet the cost of financing the project through debt. In case of a cash shortfall of upto Rs.100 crore in the first five years of operation, the guarantee of the government from the FSF, by way of interest-bearing loans, will be invoked. RIDCOR is also contemplating commercialization of land bordering the roads under upgradation in order to upgrade the revenue stream from tolls. However, the returns from such revenue mobilization is not contemplated to be as much as the revenue from tolls, which is expected to meet almost all the debt servicing requirements.

The net return from a road project depends upon the function of the road. Roads can be broadly classified as congestion relievers, inter-city arteries, development roads, or bridges and tunnels. Of these roads, congestion relievers are relatively short stretches of roads, with captive traffic. Therefore, the overall expense on these roads is less compared to the others. Inter-city arteries improve access between major metropolitan areas, and costs of construction are typically high due to the length and the high capacity of these roads, though traffic is more or less captive on these roads. Development roads link relatively remote areas to urban centres for economic development and have high traffic risk associated with them. Economic viability of these roads requires substantial future economic development to generate sufficient traffic. Most of the roads selected under the Mega Highways project fall in this category, and therefore carry substantial project viability risk with them. Finally, bridges and tunnels are much shorter constructs than roads, but are much more expensive per kilometer due to engineering difficulties.

The physical characteristics of a project also determine the cost of the project, and hence the net return from the project. These characteristics deal with whether the project is a new facility or an upgradation of an existing facility, as well as its length and capacity (number of lanes, RoBs etc.), geography and toll

collection mechanism. New facilities have much higher costs per kilometer compared to rehabilitations of already existing roads. Further, wide roads across difficult terrains (mountains, rivers etc.) are more expensive than narrower roads across flat, dry terrain. The roads considered under the Mega Highways project are all upgradations of pre-existing roads and not new facilities. However, a large number of bypasses and RoBs (Rail-over-bridge) are to be constructed on these roads, which will impact the cost of construction. These are summarized in table 7.3.

Table 7.3

By-passes and RoBs Required for the Mega Highways Project

Road	By-passes	RoBs
Phalodi to Ramji-ki-Gol	2	1
Hanumangarh to Kishangarh	7	Maximum 9
Alwar to Sikandra	2	4
Lalsot to Kota	5	3
Baran to Jhalawar	6	nil

Source: Ibid.

Currently, the cost of the project is estimated to be Rs.1.14 crore per km. which may go up, if there are delays and changes of plans.

Market demand, measured in terms of actual or expected traffic levels, predictability of expected traffic and the willingness of users to pay tolls, determines the revenue stream of tolled facilities. Traffic levels (assuming constant toll rates) are affected by the cities connected by the road length, the competing non-tolled alternatives and the road's links to broader transportation systems. Predictability of traffic is one of the most difficult variables to measure. It can be based on an assessment of the existing traffic levels (for an already existing roads) or on the estimated traffic on alternative roads. Most of the roads considered under the Mega Highways project do not carry very high traffic, though most form links to National Highways (NH) and State Highways (SH) and pass through some city centres. This is summarized in table 7.4.

Given that the toll rates will be governed by the provisions of the Rajasthan Road Development Act, 2002, RIDCOR does not have the flexibility to charge toll rates that would ensure financial viability. Therefore, the viability of the project will depend on the amount of traffic that can be diverted onto these roads. These roads will be competing presently with non-tolled National

Highway stretches and the extent of traffic that will get diverted onto these roads is uncertain and will be a function of the quality of these roads.

Table 7.4

Links to Major Transportation Routes and Cities in the Mega Highways Project

Road	Route length (km.)	Links to highways	Major cities along the route
Phalodi to Ramji-ki-Gol	292	Bypass to NH 15, alternate route for vehicles travelling on NH 15 from Punjab and Haryana to Kandla port.	Dechu, Shergarh, Pachpadra, Balotra, Sindhri, Gudamalani
Hanumangarh to Kishangarh	407	Connects SH7 with NH8, alternate route for vehicles travelling on NH8 and NH10 through Delhi and Ambala	Rawatsar, Pallu, Sardarshahr, Sujangarh, Didwana, Makrana
Alwar to Sikandra	81	Connects Alwar-Delhi road to NH11 at Sikandra, planned as a feeder link to NH8	Rajgarh, Bandikui
Lalsot to Kota	195	Connects NH11A with NH12	Baroti, Sawai Madhopur, Indergarh, Laban
Baran to Jhalawar	78	Connects NH76 with NH12	Khanpur, Mandawar

Source: Ibid.

Table 7.5 works out the number of trips required per highway per hour over a ten year period in order to enable simple repayment of the principal of Rs.910 crore of the total debt proposed to be undertaken, without factoring any of the other current costs of maintenance and interest servicing of debt. The exercise takes Rs.910 crore as the present value of debt at the initial time period, and works out what the required undiscounted stream of payments over a ten-year period equal to this present value. We wish to stress that the calculation is kept simple by:

1. Keeping the toll rates as presently legislated, without factoring any of the legislatively permissible increases. Correspondingly, the time dimension is kept out by not discounting the stream of revenue at the mean toll rate.

2. Assuming that each of the five corridors has a single tolling point on them and that all traffic traverses the entire stretch of these roads.
3. Not including maintenance expenses and interest servicing of debt.

Because of the third simplification, the resulting estimate of required traffic density obtained is a floor estimate. It is clear that, since the mean toll rate is taken across toll-paying vehicles, the required number of trips applies to toll-paying vehicles alone. Clearly, it would exclude exempted vehicles and others availing of passes and concessions.

Table 7.5

Number of Trips Required to Repay Principal of Rs.910 crore

External borrowing	Road length	Borrowing per km.	Rate of toll	Total trips required to finance borrowing	Trips required over 10 years		
					Total trips per day	Trips per day per highway	Trips per day per highway per hour
(Rs.crore)	*(km.)*	*(Rs.'000)*	*(Rs./km.)*	*('000)*			
(1)	(2)	(3)=(1)/(2)	(4)	(5)=(3)/(4)	(6)=(5)/ 10*365	(7)=(6)/5	(8)=(7)/ 24
910	1053	8642	1.33	6498	1780	356	15
			0.95	9097	2492	498	21

Source: Mean toll calculation has been done using the toll rate structure given in the Public Works Department Notification in the Rajasthan Gazette (J.P.C./3588/02/2003-05) dated 5 September 2005.

Notes: (1) The mean toll rate of Rs.1.33 per km. is the unweighted mean of tolls, which vary by class of vehicle. The mean toll rate of Rs. 0.95 per km is generated by the use of weights (see Appendix).

(2) The last column is rounded off.

(3) See text for assumptions underlying this calculation.

The calculations in table 7.5 show that if the mean toll rate is Re.1.33 per km., a number obtained from the unweighted mean across all types of vehicles, then approximately 15 trips will be required per hour per highway over the next 10 years in order to service the Rs.910 crore. On the other hand, with a mean toll rate of Re.0.87 per km., obtained from a weighted mean across vehicles by type, then the number of required trips over the next 10 years increases to 21 trips per hour per highway. The weights used to generate the weighted mean are set out in the Appendix. Any calculation of this kind clearly has to be based on some assumptions. All that can be expected is that the assumptions should be

transparently clear, so that variations could be worked out with alternative assumptions by those interested.

Since the toll rates depends upon the distance covered by a vehicle (there is a flat rate for the first 20 km. stretch and a variable rate per km. for any distance beyond the first 20 km.), the assumption of a single flat rate stretch on each corridor is the lowest possible. Therefore, the mean toll rates as calculated should be treated as floor rates in essence. The actual number of flat rate stretches encountered on a single journey will influence the toll amount paid by a vehicle. For a single car or taxi or tempo or jeep, which will have to pay Rs.14.00 for the first 20 km. and a rate of Rs.0.35 per km. beyond the first 20 kms for a single trip, the cost of travelling the entire 407 km. stretch from Hanumangarh to Kishangarh (under the assumption of a single flat stretch) will amount to Rs.149.45. For a multi-axle truck, the entire stretch will cost Rs.1260.80 paise. (These tolls are over and above the additional cess of 50 paise cess on petrol and diesel that vehicles in Rajasthan have to pay for the Road Fund.) The advantage of smooth riding quality and cost saving in terms of better fuel mileage that the RIDCOR promises on these roads will have to prevail over competition from non-tolled stretches of alternative roads.

With more than one toll point on each of the highways, a single kind of vehicle can enter a toll plaza on the same road more than once. Equation 7.1 specifies the revenue realized per vehicle in the general case of more than one toll point on each stretch being renovated.

$$R = \sum_i [\, s_i f_i w_i + \max(\ 0\ ,\ z_i - 20\ s_i\ ) * (\ v_i w_i\ )] \quad \ldots\ 7.1$$

where,

R: revenue realized per vehicle in a single stretch;
i = 6 in the current toll rate structure
f_i: flat rate for the first 20 km. for the i^{th} vehicle
v_i: variable rate per km. after the first 20 km. for the i^{th} vehicle
s_i: number of times vehicle i^{th} vehicle enters a toll collection point
z_i: average distance travelled by the i^{th} vehicle in a single stretch
w_i: proportion of the i^{th} vehicle in total traffic in a stretch;

$$\sum_i w_i = 1$$

For instance under the current toll structure and traffic weights as assumed in the Appendix table, revenue realized per vehicle will be Rs.110.99 on

average if s_i is set at 2 for all kinds of traffic and z_i is assumed to be 100 km. for all vehicles.

Given that these stretches presently do not have high traffic density, the total cost of travelling on these roads and the competition from non-tolled National Highway stretches, the traffic revenue risk is high and therefore, the overall project economics of the Mega Highways project are in the high-risk category.

Following the notification of the Public Works Department dated 20 February 2002 [No.F.8(56)PW/2001/Part-I] and another notification in the Rajasthan Gazette dated 5 September 2005 (JPC/3588/02/2003-05), tolls cannot be imposed on the following:

1. All permanent bridges, the cost of construction whereof does not exceed 50 lakh rupees and all byepasses, tunnels including their approaches and any section of road which has been constructed, reconstructed, improved or repaired, the cost of construction whereof does not exceed 75 lakh rupees.
2. Vehicles of Defence Department, Vehicles of Police Department, Fire Fighting Vehicles, Ambulances, Funeral Vans, Central and State government Vehicles, Vehicles of Hon'ble Supreme Court and High Courts, Vehicles of Union Public Service Commission, State Public Service Commission, Vehicle of Lok Ayukta, Panchayat Samities and Local Bodies Vehicles, vehicles of sitting Members of Parliament and State Legislation.

Further,

3. In case a vehicle has to cross the facility/construction more than once on the same day, the user shall have the option to pay one and half times the fee.
4. If within a distance of 30 kms on a road there are two or more bridges or tunnels and within a distance of 50 kms on a road there are two or more byepasses or any section of road which has been constructed, re-constructed, improved or repaired, no fee shall be payable on more than one facility.

These conditions will constrain the extent to which toll fees can be collected and thereby affect the financial viability of the project.

In this context, it becomes prudent to discuss the contract structure appropriate for these roads. Given the high traffic risk, a traditional BOT model is

not appropriate.[12] Among the other alternatives, the state government has preferred the joint venture model for constructing these roads. Comparing this model to other possibilities would be very speculative as each such model is specific to the design and fine print of particular PPPs. Therefore, the focus of this section is on the strengths and weaknesses of the structure of this model. The principal differentiating features of the RIDCOR model, as gleaned from sources other than the project document, which was not made available, are as follows:

- Unbundling and allocation of construction risk and revenue risk to the appropriate agency;
- Stage construction to reduce construction cost and staggered tolling in order to allow traffic ramp up on the roads;
- IL&FS participation in the partnership, which has enabled the mobilization of Rs.910 crore of external debt without the provision of explicit guarantees for the full amount.

However, the RIDCOR, and the Mega Highways project currently domiciled under it, also imposes a possible burden of Rs.365 crore on the state government, with Rs.240 crore of subordinate debt, Rs.25 crore equity and Rs.100 crore contingent liability. This burden will have to be factored in by the government while meeting the targets of the enacted FRBM, as mentioned in chapter 2.

The extent of the financial exposure of the state government will depend crucially on the financial viability of the project, which in turn, depends largely on the concentration of traffic on the roads being constructed. The number of trips required per highway per hour (over the next ten years) in order to repay the principal amount of Rs.910 crore, as calculated in table 7.4, varies from 15 to 21 depending on the per km. toll rate. Given that these roads are competing with non-tolled sections of the National Highway and that RIDCOR does not have the flexibility to determine the desired toll rate, the possibility of achieving the required number of trips on these roads is not certain. The overall financial viability of these roads will depend on the extent to which the quality of these roads is able to divert and capture the required amount of traffic within the next ten years, and this obviously cannot be predicted with absolute certainty at this stage. However, the purpose of the calculation of required traffic density is to quantify the targets that need to be reached for financial viability.

IL&FS has also entered into a similar arrangement with the Government of Tamil Nadu, whereby Tamil Nadu Road Development Company Ltd. was

[12] In fact, one project costing Rs.747 crore, which was to be commissioned on a BOT basis ran aground because the investors posted a 'not feasible, no interest' notice in the first tranche of bids for such projects, according to Reuters (6 June 2002).

established in order to execute projects like the East Coast Road and the IT Corridor. However, the total project cost and the absolute risk exposure of the Tamil Nadu government is smaller than in the case of RIDCOR. For instance, the cost of the improvement works undertaken by the TNRDC was only around Rs.61 crore for the 113 km. long East Coast Road connecting Chennai to Pondicherry, with Rs.51 crore in debt and remaining Rs.10 crore in equity. The IT corridor project, which runs from Madhya Kailash junction to Siruseri, a stretch of 22 km., is estimated to cost Rs.149 crore, where the equity capital of Rs.34 crore has been provided by the government of Tamil Nadu as viability gap funding out of the state budget and the ASIDE scheme of the government of India. The concession period for both these projects is 30 years, over which upgradation and maintenance work will be carried out.

Though the concession period of the projects is similar to the Mega Highways project in Rajasthan, the scale of these projects and the absolute financial risk exposure of the government is much higher in the latter case. What matters is absolute exposure, not the ratio/proportion of exposure. It is difficult to pronounce on relative traffic risk without detailed knowledge of the stretches in the two states. In Tamil Nadu, the stretches are coastal routes connecting for example, Mahabalipuram to Pondicherry, one a tourist centre and the other a UT capital. It is possible that the traffic density on some stretches in Rajasthan, like Alwar-Sikandra, may be comparable. Thus, the success of other projects may not be much of a pointer to the viability of the PPP model in Rajasthan. These issues are necessarily context-specific.

7.4 SUMMARY AND RECOMMENDATIONS

This chapter summarizes the recent policy initiatives taken by the state government in the road sector. The most important developments are the 2002 amendment of the 1994 Road Development Act facilitating private sector participation, and the establishment of a non-lapsable road fund in 2004. Two possible supplementary funding mechanisms into the Road Fund are suggested.

The enabling criteria for a successful public private partnership (PPP) are enumerated in the chapter and different contractual frameworks for invoking PPP arrangements are discussed. Country experiences using these different contract forms are summarized and the criteria for choosing an appropriate framework are also discussed.

The RIDCOR joint venture, which has been set up by the government of Rajasthan, for upgrading 1053 km. of pre-existing single lane north-south corridors, is an ingenious financial construct for financing an inherently risky project. At a projected cost of Rs.1200 crore, the cost of the project is Rs.1.14 crore per km. The debt equity ratio is 3:1, with a cumulative cap on returns to equity. The quality of construction is ensured through the detailed provisions of the Integrated Improvement-cum-Maintenance contract. The principal distinguishing features of the model, as best as can be determined without access to the fine print of the project document, are:

- unbundling and allocation of construction risk and revenue risk to the appropriate agency,
- stage construction to reduce construction cost and staggered tolling in order to allow traffic ramp up on the roads,
- IL&FS participation in the partnership, which has enabled the mobilization of Rs.910 crore of external debt without the provision of explicit guarantees for the full amount.

Nonetheless, the overall financial burden for the state government of the Mega Highways project, which is domiciled under RIDCOR, is quite high, at Rs.365 crore, of which Rs.25 crore is equity, Rs.240 crore is interest free sub-debt and Rs.100 crore contingent liability. Using toll rates which are governed by the provisions of the Rajasthan Road Development Act, 2002, the required number of trips per hour per highway over the next ten years in order to repay the principal amount of Rs. 910 crore of external debt ranges between 15 and 21. The reason why the repayment of principal is calculated over a ten-year period (and not the entire 30-year concession period) is because the special feature of the Mega Highways Project is the stage construction of the roads, whereby each phase is targeted for a finite period of ten years, beyond which a further finite upgradation is programmed.

The tolls payable are not trivial, and it has to be remembered that these highways will be competing with presently non-tolled stretches of National Highway. For a single car or taxi or tempo or jeep, which will have to pay Rs.14.00 for the first 20 km. and a rate of Rs.0.35per km. after that for a single trip, the cost of travelling the entire 407 km. stretch from Hanumangarh to Kishangarh (under the aforementioned assumptions) will amount to Rs.149.45. For a multi-axle truck, the entire stretch will cost Rs.1260.80 paise. These payments assume a single flat stretch, and are calculated at present toll rates, which go up by 10 percent every two years. At these rates of levy, the ability of these roads to divert and capture the desired volume of traffic is subject to the relative advantage the improved highways offer.

Some measures that might be contemplated by the state government for improving the financial viability and the transparency of the project are:

- Financial Viability: Exclusive dependence on toll revenues to service the debt on the project appears a bit risky, considering the arithmetic of the required density of traffic, and the likelihood of this density being realized at the tolls levied. Therefore, the project must actively look for supplementary revenues from services provided along the highways to secure the financial viability of the project.
- Improving Transparency: An institution similar to the Public Sector Comparator in the U.K. should be established in order demonstrate the value-for-money from such PPP engagements. At present, it is very difficult to assess the advantage that the government has from this particular format of PPP.
- Securitization of the receipts of the road fund: A more central role can be given to the road fund by securitizing receipts from the fund directly in order to raise further resources for road development. Securitisation of predictable receipts from the cess flowing into the road fund should be possible on better terms, than securitization of uncertain toll receipts. Clearly, the securitisation of road fund receipts and toll receipts are not mutually exclusive, but are in fact complimentary.

In conclusion, although the Partnership model will enable the Government of Rajasthan to mobilize Rs.1200 crore worth of infrastructure investment with a capped exposure of no more than Rs.365 crore, it has to be remembered that the ability of the project to repay this debt will be a function of its ability to reach the required traffic density, at the toll rates leviable, and in the context of competition with what are presently non-tolled National Highway stretches.

Appendix

Table 7A.1

Toll Rate Structure and Calculation of Mean Toll Rate

Toll rate	Tractor	Car/Jeep/ Tempo	Bus/lorry	Truck<=5 tonne	Truck>5 tonne	Multi-axle truck	Total distance (km.)	Mean tariff (un-weighted) (Rs.)	Mean tariff (weighted) (Rs.)
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
Upto 20 km. (Rs.per vehicle per trip)	4.20	14.00	35.00	47.60	71.40	117.60	100	2.42	1.73
Beyond 20 km. (Rs. per km.)	0.112	0.35	0.896	1.176	1.778	2.954	953	1.21	0.87
							1053	**1.33**	**0.95**
Weights	0.1	0.5	0.1	0.1	0.1	0.1			

Source: Toll rate structure is taken from the Public Works Department Notification in the Rajasthan Gazette (J.P.C./3588/02/2003-05) dated 5 September 2005.

Notes: (1) The toll rates will be increased by 10 percent every 2 years, rounded off to the nearest multiple of Rs.5.00, provided that the first revision would be made effective from 01.04.2007, with 10 percent increase only, as per the Notification in the Rajasthan Gazette (25 September 2005). The increases in the toll rates have not been factored into the calculations.

(2) The weights used for the mean tariff calculations in column (9) are shown in the table. 10 percent of all traffic is of the tractor category, whereas 50 percent of the traffic is assumed to be car/jeep/tempo category. Each of the other categories are assumed to be 10 percent of the total traffic.

8. CONCLUSIONS AND RECOMMENDATIONS

This chapter presents numbered recommendations following from chapters 2 – 7, in the order in which they occur.

8.1 The Need for Fiscal Correction: The Twelfth Finance Commission (TFC) provision for an interest rate concession on, and consolidation of, state debt owed to the Centre, is conditional on legislation of a Fiscal Responsibility and Budget Management (FRBM) Act with certain minimum features. The Rajasthan FRBM Act was finalized and enacted after the TFC Report was made public. However, the process of formulating the FRBM Bill was initiated in November 2004, well before the TFC Report was issued in March 2005. Thus the need for fiscal correction was fully recognized by the Government of Rajasthan, well before the introduction of legislation for this purpose was incentivised by the TFC.

8.2 Compatibility Between TFC FRBM Requirements and Rajasthan FRBM Act: The Act targets a zero revenue deficit by the year 2008-09, with an average annual reduction by 3 percent of revenue receipts upto 2008-09. The Act targets a fiscal deficit of 3 percent of GSDP in an unspecified year, with a path commitment of an average annual reduction of 0.4 percent of the fiscal deficit. Both these are perfectly compatible with the minimum requirements stipulated by the TFC, since the TFC permits a targeted fiscal deficit of 3 percent of GSDP in an unspecified year, with no stipulation about the fiscal deficit path other than that there should be a commitment to such a path. The prescription of the paths for both deficits as an average gives room for counter-cyclical flexibility. This is important for a state like Rajasthan which is subject to severe agricultural cycles.

8.3 TFC Debt Write-off Conditionalities: An independent set of conditionalities apply for the write-off of repayments of principal on state debt owed to the Centre. These conditionalities focus on the required absolute revenue deficit reduction in each year, but also include a requirement that the absolute fiscal deficit should be capped at the level reached in fiscal year 2004-05. The tangled TFC conditionalities however permit a full write-off of repayments of principal with retrospective effect in the terminal year 2009-10 if the RD will be reduced to zero by 2008-09.

8.4 The Conformity Formula of the TFC: The TFC prescribes a fiscal deficit correction path in aggregate across all states, with a conformity formula[1] that yields the path for each state compatible with the aggregate path. The TFC suggests the formation of a Loan Council that will prescribe annual comprehensive limits on annual borrowing by each state, presumably on the basis of the conformity formula. This is tantamount to an externally-set limit on the fiscal deficit, which is the net new borrowing in each year. The status of this particular recommendation of the TFC is unclear, since the Action Taken Report does not specifically make a commitment to a Loan Council or any such body. The guidelines issued by GoI under which absolute limits on annual additional net borrowings by states, and hence their annual fiscal deficits, are set under Article 293(3) of the Constitution, will most likely be amended so as to give states the option of exceeding the 2004-05 fiscal deficit cap, at the cost of losing the debt write-off in part or in full.

8.5 Three Fiscal Scenarios for 2005-10: The simulations of the paths of the fiscal indicators over 2005-10 are performed in the chapter for three scenarios:

- Scenario I assumes that the state strictly follows the enacted FRBM.
- Scenario II adds the further constraint of the absolute fiscal deficit cap of 2004-05 to Scenario I.
- Scenario III assumes that the state follows the conformity fiscal deficit path, at the historically-based nominal GSDP growth rate of 10 percent, along with the absolute revenue deficit path required for a full debt write-off each year. The latter is automatically ensured by the FRBM revenue deficit path for 2005-06, but not for 2006-07 and 2007-08. By 2008-09 both are reduced to zero.

8.6 Scenario I: The State Strictly Follows the Enacted FRBM: The state gets the benefit of interest relief on Central loans, by virtue of having enacted an FRBM with the requisite features. However, the RD path in the FRBM (as enacted) is not consistent with the absolute RD path required for full debt relief. The state will therefore get only partial debt write-off in 2007-08 and 2008-09. Of course, the entire repayment will presumably be written off in the terminal year 2009-10 as the RD will be reduced to zero by 2008-09. Nonetheless, the interest payments are higher in this scenario than the scenario where there is full debt write-off in each year.

8.7 Scenario II: Adds the further constraint of the absolute fiscal deficit cap of 2004-05 to Scenario I: The benefit is that the state will become eligible

[1] The conformity formula given in Appendix 4.1 is wrong. The correct formula is given in this Report in chapter 2.

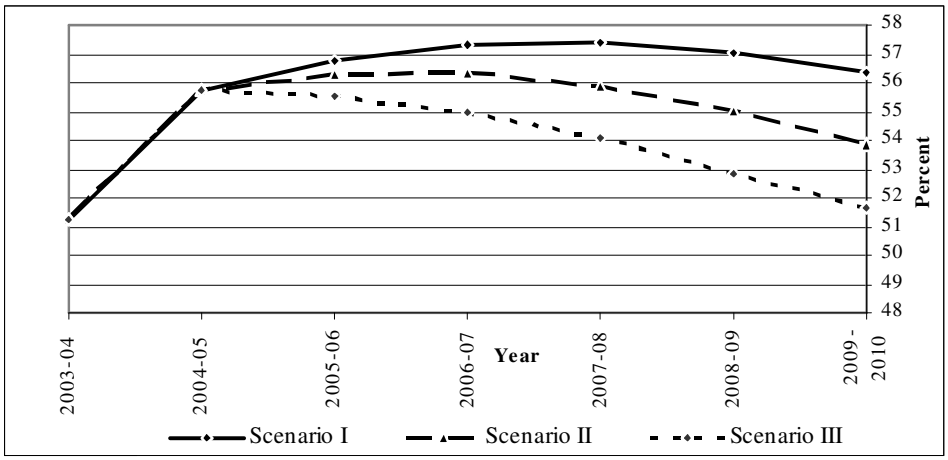
for full debt write-off during the period instead of getting a bunched write-off at the end of the period as in Scenario I.

8.8 Scenario III: The State follows the Fiscal Deficit Path for TFC Conformity and the RD Path for Full Debt Write-Off: The state becomes eligible for full debt write-off each period, but the tighter constraint on the fiscal deficit implies a lower rate of growth of capital expenditure than under Scenario II.

8.9 Fiscal and Revenue Deficit Paths Under the Three Scenarios:

Years	2005-06	2006-07	2007-08	2008-09	2009-10
Fiscal Deficit Path (percent of GSDP)					
Scenario I	6.08	5.68	5.28	4.88	4.48
Scenario II	5.90	5.36	4.87	4.43	4.03
Scenario III	5.16	4.75	4.32	3.88	3.88
Revenue Deficit Path (Rs. crore)					
Scenario I	2334.97	1983.55	1481.54	0.00	0.00
Scenario II	2424.76	1739.87	1053.49	0.00	0.00
Scenario III	2424.76	1739.87	1053.49	0.00	0.00

8.10 Debt and Interest Paths Under the Three Scenarios: The chart below shows the impact on debt as a percent of GSDP under the three scenarios:



The total debt stock comes down to 51.80 percent of GSDP in Scenario III in 2009-10, in contrast with 56.33 percent in Scenario I and 53.86 percent in Scenario II. The table below shows the impact on interest payments as a percentage of revenue receipts:

Scenarios	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
I	30.97	29.64	27.67	27.75	27.76	27.48	26.95
II	30.97	29.64	27.67	27.55	27.32	26.80	26.04
III	30.97	29.64	27.67	27.18	26.69	25.97	25.04

8.11 Expenditure Compression in the Three Scenarios: The following table summarizes the impact on the projected five-year average growth rate of capital expenditure and non-interest revenue expenditure and contrasts them with the growth rates achieved over 2000-05:

Variables	Capital expenditure		Non-interest revenue expenditure	
Year	2000-05	2005-10	2000-05	2005-10
Scenario I	20.67	12.27	7.11	7.94
Scenario II		9.87		8.21
Scenario III		9.06		8.50

The rate of growth of non-interest revenue expenditure is higher over 2005-10 in all the scenarios than the rate of growth over 2000-05. The rate of growth of capital expenditure is, however, much lower over 2005-10 than the rate over 2000-05 in all the cases, with the largest compression in Scenario III and the least in Scenario I. There is clearly a trade-off between a lower interest burden (Scenarios II and III) and a higher rate of growth of capital expenditure (Scenario I). This is an important policy issue, since the permissible rate of growth of capital expenditure impacts on the future growth potential of the state, in a state which has already seen a sharp decline in real growth from 9.66 percent over 1994-99, to 0.95 percent over 1998-03. The choice between the three scenarios lies with the Government of Rajasthan.

8.12 Public Sector Undertakings of the Government of Rajasthan: The 27 non-departmental PSUs in the state fall in five categories: manufacturing (eight), trading and services (three), financial (two), promotional (four) and utility (ten). Though accumulated losses were reduced every year up to 2000, they have started increasing thereafter, possibly due to the unbundling of the power companies into five separate entities in 2000, and subsequent accounting changes. The PSUs of Rajasthan do not in general earn the minimum required rate of return on investment, as specified by the Planning Commission. None, except for Rajasthan State Mines and Minerals Ltd, has paid any significant dividends to the Government in recent years. The transport and power companies are among the largest loss-making PSUs. The study makes a number of recommendations for improving the financial performance of the PSUs in these two critical sectors.

8.13 The Rajasthan State Road Transport Corporation: The (RSRTC) alone had a share of 58.45 percent in aggregate accumulated losses in 2000-01, but receives no explicit subsidies from the revenue account, unlike the power sector companies. Despite a good operational performance record (98 percent fleet utilisation, staff-bus ratio at 4.82 in 2004-05), the financial performance of RSRTC remains poor, for a number of reasons. The seven recommendations listed below should help improve the financial performance of RSRTC.

- **Tariffs:** The new tariff orders of 2 July and 10 September, 2005 have been partially implemented, in order to keep the rates competitive with those of private competitors. However, given that these rates are lower than the pre-revision rates in most other states, there is a case for fully implementing the tariff hike with increased vigilance to check clandestine private operations. The tariff hike required to match the pre-revision rates in U.P. will also contribute towards wiping out the losses of loss-making depots.
- **Loss-making depots:** Twelve depots account for 66.18 percent of the total loss made by the Corporation in 2004-05. The passenger load factor in all depots can be improved through bus redeployment and route rationalization. The frequency of buses plying between district headquarters could be increased, as the concentration of passengers is very high on these routes. Smaller buses like Rural Transport Vehicles need to be assigned to loss making routes, with a staff-bus ratio lower than 4.82.
- **Rotation of staff:** Low paid employees should be shifted to Group C depots. Depots like Jhalana Dungri are overstaffed because employees prefer to be posted in Jaipur. RSRTC might consider compensating postings in outlying areas with a hardship allowance.

- **Net staff freeze across all depots:** Since 1997-98, there has been no new employment in RSRTC. Given the seniority of the age profile of RSRTC employees, there will be a number of retirements in the near future. A net staff freeze will ensure that fresh recruitment will simply fill in the vacancies arising due to retirements, without affecting the existing staff-bus ratio.
- **Compensation for concessional fares:** Instead of equity cover, the State Government should directly compensate the RSRTC for giving concessional fares to students, senior citizens and other such groups. These concessional fares should be granted only on monthly or yearly passes, rather than on a per trip basis, so that the total number of such passengers can be recorded.
- **Taxation of commercial vehicles:** The high rate of taxation of commercial vehicles apart from the Special Road Tax (SRT), coupled with periodic one-time arrear write-offs (conversion of outstanding SRT to equity in 2004-05) complicates the financial relationship between the state government and para-statals like the RSRTC. Lower taxation, with no arrear write-offs for outstanding taxes, should be put in place.
- **Non-operational revenues:** RSRTC has already increased non-operational revenue, through use of land at bus stands/depot offices and other locations, by Rs. 3.53 crore between 2003-04 and 2004-05. The Corporation is also hiring out land to petrol pumps at 24 locations, each of which is expected to yield Rs.5 lakh per year in revenue. However, these lands are being contested by the UITs. Relations between state agencies need to be rationalized, so that RSRTC is able to improve its non-operational revenues.

8.14 The Power Sector: The power sector has been unbundled into one generating company, one transmission company, and three distribution companies. There has been some improvement post-reform in operational parameters relating to generation and rural electrification, but a worsening in T&D losses. Overall, the gap between average revenue realization and average cost has gone up to 114 paise per unit in 2003-04 from the pre-reform 100 paise per unit in 1999-00. An impressive Feeder Renovation Programme, aims to reduce the current T&D levels to 20 percent by 2012. Further reforms are required along the following lines:

- Meterization of agriculture and of 11 K.V. feeders should be taken up on a priority basis, for further reduction of T&D losses.
- Given the cost structure of electricity supply, tariffs will have to be revised very regularly in order to improve the financial viability of the

sector. A multi-year tariff timetable, as suggested by CRISIL, would be a welcome development.

- Introduction of drip irrigation in agriculture will reduce the dependence of farmers on motor sets for irrigation of fields. This will reduce consumption of electricity, and also conserve water, a scarce resource in Rajasthan.

Even if all the above recommendations are implemented, the scope for curtailment of budgetary support to the power sector is limited, since there is a Financial Restructuring Plan of 2003, which makes explicit provisions for yearly financial support by the state government to the power sector going up to 2011-12.

8.15 Electricity Duty on Captive Generation: Given the fiscal burden of budgetary support to the power sector, an electricity duty has been imposed on captive power plants with capacity 125 KVA or more. For units producing up to 500 lakh units, the rate was 20 paise per unit (reduced to 15 paise per unit in the 2005-06 Budget) and for units producing more than 500 lakh units per year, the rate was 15 paise per unit (reduced to 10 paise per unit in the 2005-06 Budget). This measure helped raise around Rs.36 crore in the last quarter of 2004-05 and was proposed to be disbursed to the electricity distribution companies in the form of subvention so that these companies could cover the loss arising from increases in the cost of diesel and coal. This duty acts as a deterrent to IPPs, but is an unfortunate concomitant of the continuing necessity of budgetary support to the power sector.

8.16 Employment in Power Sector PSUs: In the power sector Rajasthan has the best generation MW per employee in generation (0.77) among six selected comparator states. Rajasthan ranks third among the six states in distribution efficiency, with 141 customers serviced per distribution employee. Efficiency in transmission, as measured by transmission lines in ckt-km per transmission employee, is second highest among the six states. Thus, staff efficiency in generation, transmission and distribution, as measured by the relevant parameters, is high in Rajasthan. However, there is the problem of aged linesmen, who cannot perform their function nor be redeployed to other activities due to lack of skill. The retirement age of linesmen should be reduced from 60 to 45. This will enable replacement recruitment of younger staff without further enhancement of the salary bill of power companies.

8.17 Employment in Other PSUs: For PSUs in sectors other than power and transport, a calculation using salary/turnover norms reveals that there does exist excess manpower. The norms used have been explicitly stated, so that any PSU in question may, at its discretion, use other norms judged more suitable to its

particular line of activity. Immediate implementation of VRS schemes will ease the burden of salary expenditure for these PSUs. A VRS has so far been implemented only by Rajasthan Financial Corporation (RFC).

8.18 Other Concerns about PSUs: A more central aspect of the functioning of RFC than staff size is the level of NPA it carries currently. The Annual Report of RFC (2003-04) reveals that NPA for FY 03-04 was 17 percent of outstanding loans. The comparative figure for all public sector banks and all commercial banks for the same year was 7.8 percent and 7.2 percent respectively. The loan portfolio of RFC needs to be urgently restructured using standard banking protocols.

8.19 Budgetary Expenditure on Salaries: The TFC has recommended a target salary expenditure of 35 percent of the revenue expenditure in the budget, *net of pensions and interest payments*. The corresponding figure for 2004-05 (RE) for Rajasthan works out to 46.61 percent.[2] Among the methods suggested by the TFC to achieve its stipulated targets are: (i) reduction in the number of employees in the government departments; (ii) reduction in salary payments per staff. The feasibility of these options is explored in paras 8.20 and 8.21 respectively.

8.20 Staff Size: Staff size in absolute numbers went down from 6.22 lakh in 2001-02 to 6.07 lakh in 2003-04, but went up again to 6.16 lakh in 2004-05. Even so, there has been an absolute decline in total staff size from the peak level attained in 2001-02. The number of casual staff was substantially reduced from 16,414 in 2000-01 to 2,453 in 2004-05. At the estimate for 2004-05, the number of civil servants per capita in Rajasthan works out to 1.09 per hundred population, whereas the corresponding all-India figure, albeit for 1996, is higher, at 1.4. Thus, there are no grounds for further absolute reduction in staff size, which is among the recommended options in the TFC Report. At the same time, there is no case for an absolute increase in staff size. A freeze on total employment with zero net addition every year implies gross annual recruitment equal to the yearly attrition due to retirement. Annual attrition is normally 3 percent of total staff size.

8.21 Salary Payments per Staff: Despite the reduced strength of casual employees, from 15,279 in 1999-00 to 2,453 in 2004-05, and a simultaneous increase the (A+B) class employees, from 48,401 to 55,475, 91 percent of total employees are still (C+D+Casual) category employees, as on 2004-05. There is a need to further upgrade D posts to category C, where the skill requirements are

[2] We assume that the numerator in the TFC target consists of salary expenditure alone as the denominator excludes pension payments.

stipulated and met by fresh inductees. Examples of functions no longer required include posts of Gestetner operators, in a context where cyclostyling is almost obsolete; archival jobs rendered redundant by computerization; and such. These vacancies were provided for in the colonial era, and needed to be phased out in favour of skills needed in the world of today. But this will raise the per employee payment. The workforce reduction from 2001-02 to 2004-05 was accompanied by a 18.67 percent increase in the salary and pension expenditure per head. This option too, among those suggested in the TFC Report, does not therefore lie in the feasible realm.

8.22 Staff Allocation Across Departments: Given that an absolute reduction in the total size of the bureaucracy cannot be justified, there is a need to develop a single uniform measure of scale of activity applicable across departments, such that overstaffed departments can be identified. Excess employees can then be reallocated from these to departments identified as understaffed. This staff restructuring measure in itself will not reduce the burden on the revenue expenditure, but is a very important exercise from a governance perspective. Of the total of 67 departments, 42 departments were considered amenable to the use of non-salary revenue expenditure as a proxy for the scale of activity handled. The excluded departments include education and revenue, for which non-salary expenditure is not a suitable measure of scale of activity handled. The average per staff non-salary expenditure across the 42 amenable departments is Rs.46.30 lakh for group (A+B), Rs.3.00 lakh for the (C+D) category and Rs.2.96 lakh for the (C+D+Casual) category. Other cases can be simulated with different norms for per staff non-salary revenue expenditure. Departments with per staff non-salary revenue expenditure below the chosen norms are identified as overstaffed. There were 26 such departments for (A+B) staff, and 25 for (C+D+Casual) staff. The number of excess staff in these departments worked out to 3441 for A+B staff (6.2 percent of the total staff in these categories across all departments); and 58105 for C+D+Casual (10.4 percent of the total).

8.23 Staff Redeployment: The state has already undertaken some redeployment exercises during the last three years whereby staff from the Forest Department, and octroi staff of Municipalities after abolition of octroi in 1998-99, have been redeployed as Gram Sevaks in the Panchayats. There is considerable scope for further staff redeployment from the overstaffed departments that have been identified, to the Document Collection Centres in the Commercial Taxes Department, where there is a genuine shortage of staff. These centres are very important for revenue generation as they are big deterrents to tax evasion. There is also scope for promotion of experienced and capable C category staff to B category, after suitable training and other safeguards are put in place. Finally, there is clearly a great deal of scope for rationalization of the departmental

structure, by merging departments performing common functions. This is an additional channel through which excess staff can be identified for redeployment towards understaffed departments.

8.24 Staff Norms for the Revenue Department: Although the revenue department has been excluded from the list of amenable departments, and although as just said, there is a need for additional supervisory staff at the border checkposts, it may still be the case that the department has excess staff in the D category, like all departments in the state government. The total revenue expenditure of the revenue department in 2004-05 was 3.81 percent of total revenue collected. The comparable figure for the Government of India is 0.85 percent. The revenue collected in Rajasthan as an average per staff member (aggregating across all categories) is 0.33 crore. The comparable figure for GoI is 2.5 crore. It should be reiterated once again that these numbers does not necessarily call for an overall reduction in staff size so much as a change in composition towards higher skill level posts, so as to secure higher revenue collections with the existing staff strength.

8.25 Staff Norms for Education: Total employment in the (A+B+C) categories in the General Education Department is 2,12,518 in 2004-05. Figures of actual enrolment of children in the age group of 6-14 of 1,26,65,000 in 2004-05, which presumably factors in retention, yields a 60:1 Pupil Teacher Ratio (PTR). The government has already sanctioned appointments for 38,000 Grade III teachers in 2004-05, all of which have already been filled. Assuming basic pay of Rs. 5500 for the Grade III teachers, the annual salary burden per new employee will amount to around Rs.1.2 lakh.[3] Therefore, this fresh recruitment of 38,000 teachers will give rise to an additional salary burden of Rs.456 crore annually. Further teacher recruitment must be subordinated to the discipline of the FRBM Act.

8.26 Revenue Reforms: Since non-tax revenue accounts for only 20 percent of total own revenue, and is furthermore a volatile and declining component over time, it is own taxes where the state has to look for consolidation and improvement of its impressive gains since 1996-97. The non-tax revenue possibilities from oil and natural gas are unlikely to be realised in the course of the next quinquennium. The expenditure compression paths simulated in para 8.8 assume an own tax buoyancy of 1.20, applied to the projected nominal GSDP growth rate of 10 percent. The very high buoyancy of 1.44 recorded by own tax revenues in Rajasthan over the period 1996-97 to 2003-04 suggests that the state might well exceed the own-tax underpinnings of the FRBM. Notwithstanding the good tax revenue performance in recent years, the state held only rank 9 among

[3] The monthly salary is assumed to be Rs.10,000 with this basic pay.

25 states in 2002-03, with an own-tax/GSDP ratio of 7.2 percent, as against 9.3 percent in the top ranked state. Cross-state comparisons have to be treated with caution, because the composition of GSDP matters. But there is clearly room for further tax effort by Rajasthan so as to rise in the state rankings.

8.27 Sales Tax Reform: Sales tax accounts for more than half of total own tax revenues. The reform measures already undertaken in sales taxation and other spheres such as stamps and registration are commendable. A system of input duty offset for manufacturing within the present sales tax regime will simulate the efficiency aspect of the VAT. Preparations could begin on a system of registration, so that the state is well prepared when a VAT is eventually introduced. The administrative difficulty posed by the VAT really arises only among traders, where VAT calls for a greater degree of monitoring and follow-up than under the present regime. The gain from this additional administrative effort, of course, will be the higher revenue realization possible, provided VAT fraud is successfully confronted and overcome. There is a high degree of revenue concentration by product, with petroleum and automobiles and automobile parts together contributing nearly two-thirds of total revenue in 2004-05. The VAT will enable a broader product base.

8.28 Curbing Sales Tax Evasion: The percent of revenue recovery from additional demands made in 2003-04 and 2004-05 is appallingly low overall, even after reduction due to adjustments and appeals. The percentage also varies widely across zones. A zonal ranking by percent recovery shows enough stability between the two years 2003-04 and 2004-05, for which data were available, with a rank correlation coefficient of 0.68, that is statistically significant. This clearly identifies a systematic zonal pattern of non-compliance. There is also a clear inverse relationship between the zonal rank by revenue collected, and the ranking by recovery from additional demands. This rank correlation coefficient has a value of -0.78 and is statistically significant. Thus, the more revenue-productive zones which have the densest concentration of taxable consumption and production, are those where non-compliance is highest in percentage terms. The zones in which anti-evasion efforts will prove most revenue productive have been identified as Jaipur II, Jaipur I, the Bhiwadi industrial area in Alwar, and the textile centre in Bhilwara, in that order. Total additional demand, net of adjustments and appeals, amounted to 1097.78 crore in 2004-05. The unrecovered amount, at 93 percent of the total, is 1020.93 crore. This is around 20 percent of the total realised sales tax revenue, of 4795.46 crore in 2004-05. Even if all 20 percent is not recoverable in the first year, an annual increase in revenue of at least 200 crore, should easily be possible from this untapped tax base.

8.29 Excise Duty: The present structure of excise duty on liquor and intoxicants is excessively complicated, with a multiplicity of types of levy, leviable goods, and rates. These need to be simplified and rationalised. One reform measure, proposed in the 2005-06 Budget, is the reduction in the permit fees for export of denatured spirit from Rs.10 per bulk litre to Rs.5 per bulk litre. The earlier rate was apparently one of the highest rates in the country and this rate reduction is expected to improve export competitiveness and revenue collections. However, this is an incremental measure of reform and the main issue that remains to be addressed is the simplification of the current structure of excise duties.

8.30 Motor Vehicles Taxation: The basis of motor vehicle taxation was switched from a specific duty to ad valorem on the value of the car in the year 2000. Correspondingly, there is some evidence of reduction in volatility in annual growth rates of revenue after 2000. Motor vehicle tax is a one-time payment in Rajasthan, at the time of purchase for non-commercial vehicles, though not for commercial vehicles. Since non-commercial vehicles are the dominant category, at or slightly higher than 90 percent of total vehicles, and this pattern holds across zones, a cross-zone comparison is nevertheless possible in terms of zonal total revenue dividend by zonal vehicle registrations. The average revenue realized per registered vehicle was Rs.19.8 thousand in 2002-03. The noteworthy contrast is between Jaipur, which collected 14.5 thousand per vehicle, and Alwar, which collected more than double that. This cannot be attributed to the share of low-value two-wheelers in Jaipur, because the percent of non-commercial vehicles in the two-wheeler category, at 84 percent, is actually one percentage point below that in Alwar. Although vehicles registered in Alwar, because of its proximity to Delhi, are compliant with Euro II norms and are therefore higher valued, this alone could not account for the wide disparity between Jaipur and Alwar. Further, the percentage of commercial vehicles, which yield higher revenue than non-commercial vehicles, is actually lower in Alwar, at 4.7 percent, as opposed to 7.1 percent in Jaipur. It remains probable that evasion is higher in Jaipur than in other zones in the state

8.31 Stamp Duty: The lowering of stamp duty rates to 8 percent for men, and further to 5 percent for women, from January 2004, has led to greater buoyancy of revenues. A number of other commendable design and administrative reforms have been introduced. It is difficult to make a judgement on whether a further reduction in stamp duty rates would bring about added buoyancy in revenues. Duty reductions certainly create an enabling framework for complete declaration of the value of a transaction, but there are limitations posed to full declaration by the corresponding income tax liability for the seller. Comparisons with other states across rate reductions do not yield satisfactory answers. The Punjab

reduction from 12.5 percent to 6 percent in October 1995 yielded a 42 percent revenue increase the next year. On the other hand, the rate reduction from 8 to 5 percent in Delhi in May 2003 yielded only a 6 percent increase in revenue in 2003-04. Given the sharp rise in property values in some urban agglomerations of Rajasthan, it is possible that a further fall to parity with the 5 percent rate in neighbouring Delhi would provide a spur to land sales in Rajasthan. The preferential rate for women could then be set at 4 percent.

8.32 Capacity Improvement in the Revenue Department: Better infrastructure is required within the Commercial Taxes Department for analysis of the vast amount of data being collected from Document Collection Centres. Institution of a Tax Research Cell in the Commercial Taxes Department will help in the systematic evaluation of the data and foster research in tax related matters. Such an institution will also help in-service training of officers on specific matters related to sales tax collection, which is important for improving human capital formation in the Department.

8.33 Non-tax Revenue: Of the components of non-tax revenue, interest income accounts for the largest share, at 7.35 percent of total own revenue in 2003-04. PSU dividends and interest are constrained by the poor financial performance of these companies, recommendations in respect of which have been listed above. Royalty rates on some minerals are determined by the Centre, not by state governments. However, a number of revenue-generating measures are possible at state level. Control of unauthorized mining would not only yield higher revenues with the current tariff structure, but would help conserve mineral resources of the state. The scope for non-tax revenue from oil and gas is enormous but may not be realised in the next five years. There are some issues with respect to equal treatment of NELP and Joint Venture blocks, which fall within the discretionary jurisdiction of the Central government, and have important implications for the non-tax revenues of a state like Rajasthan.

8.34 Municipal Finances:

- The municipalities of the state are in a pathetic financial condition. Although property tax is an obligatory tax, 66 out of 183 municipal bodies are not levying property tax, which is the main source of income of urban local bodies everywhere.
- Even in municipal bodies which are levying the property tax, revenue recovery is ineffective. Following the success achieved in Andhra Pradesh, Tamil Nadu, and Gujarat, the Rajasthan government replaced the Annual Rateable Value (ARV basis of property taxation), by Unit Area Valuation (UAV). The unit area valuations have been notified on 31 March 2003 but with what are so far uniform flat levies

differentiated only by class of city. However, tax collection in accordance with these notified values has not been widely implemented.

- As a result urban local bodies in Rajasthan are heavily dependent on budgetary support. This is effectively a transfer from the rural areas of the state to the urban rich.

8.35 Restructuring Municipal Finances: There is need for:

- Enforcement of property tax collection as a conditionality for state government grants to municipalities.
- Unit area valuation calls for grading of the different zones, and for fixing tax rates for them. The tax rates chosen should reflect the differences in the quality of services. Use of a single rate of tax for an entire city is incompatible with the basic principle that underlies the unit area system.
- The policy decision already taken to switch over to an accrual system of municipal accounting needs to be implemented in all cities.
- The Rajasthan Urban Infrastructure Finance and Development Corporation (RUIFDCO) already established to support weak urban local bodies should be strengthened to a point where it is able to leverage funds from the market for financing urban infrastructure development.
- A surcharge on sales tax for compensating municipalities for the loss incurred by them upon abolition of octroi.
- Enlistment and identification of municipal land, properties and assets and utilizing them as funding projects of a permanent nature.
- Increasing income from available land through commercial/residential schemes.
- Revision and rationalization of fees/user charges.
- The state government should restructure the budget heads of municipal expenditure as proposed by the Eleventh Finance Corporation for attaining state-wide and country-wide uniformity.
- Levy of a garbage tax on big hotels, marriage halls, hospitals, multi-storeyed buildings and commercial enterprises, which produce large quantities of garbage. Further, a tax for collecting garbage from residential houses should be levied.

8.36 Municipalities and Urban Improvement Trusts: The Constitution (seventy-fourth) Amendment, 1992, envisages that municipalities should assume responsibility for urban planning including town planning and regulation of land use functions. As the Government of Rajasthan moves towards making this change, which is also a pre-requisite for accessing

funds provided under the recently announced National Urban Renewal Fund, it will require a re-examination of the role of Urban Improvement Trusts (UITs) vis-a-vis municipalities. The UITs are mandated in Rajasthan (as in other states) to estimate the future land requirements of cities, formulate land use and Master Plans, and acquire, develop, and dispose of lands for implementing the land use/Master Plans for municipal corporations. It is important that duality of control over land and land-related matters is done away with for orderly growth of cities and towns. The Government of Rajasthan has not yet effected this change in its Municipalities Act. Until this is done, UITs must be required to share the proceeds of land sales with municipal corporations, as statutorily required.

8.37 Public-Private Partnership (PPP) Contracts for Road Development: In general, there are four generic PPP models for contracts. These are:

- **The Build-Operate-Transfer (BOT) Framework:** An up-front capital grant fee, which is the bid parameter, is paid to the concessionaire before the construction phase. The concessionaire also has the right to operate the road and collect tolls on it for the period of the contract, which incentivizes the quality of the road.
- **The Least Present Value of Revenue (LPVR) Framework:** In this variant of the BOT model, the bid parameter is the present value of the toll revenue. The concessionaire bidding the lowest present value of toll revenue wins the contract.
- **The Annuity Framework:** This contract is based on a fee-for-service contract. A fixed annuity payment, which is the bid parameter, is made bi-annually to the concessionaire once the road becomes operational.
- **The Joint Venture Partnership:** Road concessions being implemented in India in partnership with IL&FS follows this framework. This contract interposes an intermediate joint venture partnership, which is the concessionaire, but not the ultimate construction or possibly even maintenance agency. Thus, it offers the possibility of unbundling risk, although the manner in which this is done is built into the fine print of each such contract. Net returns on equity can be configured with a cap, or a floor, or a fixed level. Clearly, the sharing of risk between government and the joint venture concessionaire will be a function of the financial design of the contract.

8.38 The Rajasthan Road Infrastructure Development Company of Rajasthan (RIDCOR): RIDCOR is a joint venture between the Government of

Rajasthan and IL&FS. The Mega Highways project (domiciled under RIDCOR) will upgrade 1053 km. of pre-existing single lane north-south corridors. At a projected cost of Rs.1200 crore, the cost of the project is Rs.1.14 crore per km. The debt equity ratio is 3:1, with a cumulative cap on returns to equity. The principal distinguishing features of the model, as best as can be determined without access to the fine print of the project document, are:

- Unbundling and allocation of construction risk and revenue risk to the appropriate agency. The quality of construction is ensured through the detailed provisions of the Integrated Improvement-cum-Maintenance contract.
- Stage construction to reduce construction cost and staggered tolling in order to allow traffic ramp up on the roads,
- IL&FS participation in the partnership, which has enabled the mobilization of Rs.910 crore of external debt without the provision of explicit guarantees for the full amount.

RIDCOR is an ingenious financial construct for financing an inherently risky project. Using toll rates which are governed by the provisions of the Rajasthan Road Development Act, 2002, the required number of trips per hour per highway in order to finance Rs.910 crore of external debt (over the next ten years) have been worked out in chapter 7 to lie in the range 15 to 21. The tolls payable are not trivial. For a single car or taxi or tempo or jeep, which will have to pay a flat Rs.14.00 for the first 20 km. and a rate of Rs.0.35 per km. for a single trip, the cost of travelling the entire 407 km. stretch from Hanumangarh to Kishangarh, assuming a single flat stretch, will amount to Rs.149.45. For a multi-axle truck, the entire stretch will cost Rs.1260.80 paise. These payments go up by 10 percent every two years. At these rates of levy, the ability of these roads to divert and capture the desired volume of traffic is subject to the relative advantage the improved highways will offer, especially when the fact that these highways will be competing with non-tolled stretches of National Highways is factored in.

8.39 Alternative Configuration for RIDCOR: Some measures that might be contemplated by the state government for improving the financial viability and the transparency of the project are:

- Financial Viability: Exclusive dependence on toll revenues to service the debt on the project appears a bit risky, considering the arithmetic of the required density of traffic, and the likelihood of this density being realized at the tolls levied. Therefore, the project must actively look for supplementary revenues from services provided along the highways to secure the financial viability of the project.

- Improving Transparency: An institution similar to the Public Sector Comparator should be established in order demonstrate the value-for-money from such PPP engagements. At present, it is very difficult to assess the advantage that the government has from this particular format of PPP.

8.40 Financing the Road Fund: The Rajasthan Road Fund, enacted and notified in September 2004, is funded from a 50 paise cess on petrol and diesel. This non-lapsable fund is expected to accumulate Rs. 200 crore in 2005-06. Additional inflows into the Road Fund can be secured by capturing the addition to land values that occur as a result of public investments particularly in road infrastructure. There are three possible such instruments:

(i) **Development Impact Fee.** This imposes the burden of new infrastructure on residents and businesses of new developments, without affecting the existing population. For a state which is experiencing considerable development around its cities, levy of an impact fee should be able to meet a substantial portion of the cost of public facilities.

(ii) **Betterment Levy.** A betterment levy is defined as the capitilised value of urban externalities (facilities and services) and un-priced social infrastructure. The rationale for betterment levies springs from the fact that major public infrastructure development, including road development, in and around cities, produce large windfall surpluses to owners of lands close to such investments.

(iii) **Securitisation of Receipts of the Road Fund:** A more central role can be given to the road fund by securitizing receipts from the fund directly in order to raise further resources for road development. Securitisation of predictable receipts from the cess flowing into the road fund should be possible on better terms, than securitization of uncertain toll receipts.