NON-TAX REVENUES IN RAJASTHAN

A STUDY

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Preface

The National Institute of Public Finance and Policy is an autonomous non-profit organisation whose primary functions are to undertake research, consultancy and training in the field of public economics and related areas.

The present study was undertaken at the instance of the Government of Rajasthan. It seeks to examine the trends in the non-tax revenue of the State and identify the factors responsible for their slow growth. The motivation was to explore ways of aguementing the non-tax revenue of the State by identifying the main revenue yielding sources and examining the scope for rationalisation of the rates and charges for services provided by the government. The study was initiated in the month of January 1993.

The terms of reference required the study to concentrate on those non-tax revenues which originate from only the administrative departments and departmental undertakings. Interest, profits and dividends arising from the State's commercial undertakings thus fall outside the scope of this study. Further, in view of the Government's desire to have the study completed within a short time, it was not possible to go into each of the 230 odd items of non-tax revenue sources. Accordingly, it was decided to concentrate only on selected major non-tax sources for a close study. Thus while examining the overall trends in the aggregate non-tax revenue, the study has focussed on ten major heads of non-tax revenue for detailed analysis. These are: (1) public works, (2) education, sports, art & culture, (3) medical and health, (4) water supply and sanitation, (5) forestry and wild life (6) major and medium irrigation, (7) minor irrigation, (8) industries, (9) mines and minerals, and (10) roads and bridges.

The study was planned and conducted by J V M Sarma. The report was also drafted mainly by him. Parts of the report have been drafted by G Pradhan. Data collection and collation of information was done by O P Bohra, while K Obulesu rendered research assistance.

The Governing Body of the Institute does not bear any responsibility for the views expressed in this report, that responsibility belongs primarily to the authors.

October, 1993 **Director**

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Authors

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EXECUTIVE SUMMARY

The economy of Rajasthan is characterised by low-income-low-saving-low-growth features. There is very little improvement in the last several years in its developmental status in terms of industrialisation, urbanisation, education and health facilities. The plan expenditure of the State has grown sluggishly which can be attributed at least, partly, to the resource constraints caused by the negligible contributions from the public sector undertakings, and negative budgetary saving.

Trends in Non-tax Revenues in Rajasthan: About three-quarters of the State's own non-tax revenues come from the receipts of the administrative departments (*table 2.2*). There are over 100 departmental sources of non-tax revenues classified under 35 major heads each corresponding to one of the three functional expenditure heads: general, social and economic services.

From the late 80's the shares of both the economic and social services have been consistently going down and the share of the general services has been rising. The growth of revenue from other major individual sources has also remained slow (*table 2.5*).

Norms for Improvement of Non-tax Revenues

An important cause of the poor growth of non-tax revenues in Rajasthan seems to be the fact that most of the government services are provided free or remain undercharged. For the purpose of objectively assessing the existing user charges, it is necessary to measure the 'desired recovery rates' in each category of government service. Chapter 3 seeks to lay down some norms in this regard.

Three types of 'norms' for assessing the non-tax rates in Rajasthan are considered. The first indicates the extent of rate revision required for each source so that the State's own desired recovery rates are achieved. The second type proceeds on the basis of the extent to which the State's desired recoveries fall short of the all-State average preferences. The third set of norms are based on those of the 'best practice' States.

The derived norms indicate some scope for increasing the rates or charges in certain services of government departments in Rajasthan. However, in the social services such as water supply and sanitation, education, sports, art and culture, and medical service sources, the scope for increasing the recovery rates is limited and does not exceed 2 per cent. Economic services in particular, has greater scope for rate revision. For example, the scope for revision is 7 per cent in the case of major and medium irrigation sources, 9 per cent in the case of minor minerals, 6 per cent in the case of village and small industries, and 5 per cent in the case of housing.

While translating rate revisions from major to individual minor heads, it is kept in view that rate revisions and revenue contributions of certain sources are not always under the control of the State government. Also considerations such as equity, consumer acceptability, administrative feasibility, environmental needs, inflation as well as other governmental policies have been given due consideration before designing the new rates.

The most important individual sources of non-tax revenue in the State have been mines and minerals, water supply and sanitation, and major and medium irrigation which contribute about 40 per cent of the administrative non-tax revenues. In view of their revenue importance, these three sources are taken up first.

A. Mines and Minerals: A reliable and growing source of revenue under this major head is the receipts from lease and royalty rates, the share of which, at present, is about 80 per cent in the total mineral revenue. The significant differences in the growth rate of revenues from major and minor minerals and the fact that the recovery rate in the State is lower compared to that in other States suggest a need for a 20 per cent revision of the royalty rates of the 10 important minerals that contribute the most (*table 4.6*).

B. Major and Medium Irrigation: The need for the revision of rate in case of major and medium irrigation is emphasised, among other considerations, by the fact that Rajasthan is lagging way behind some of the best practice States like Maharashtra. To achieve their levels, the existing rates of water charges for major and medium irrigation projects in Rajasthan may be raised at least by 7 per cent.

C. Water supply, sanitation and sewerage charges: The present rate structure is a bizarre mixture of different schemes. Keeping in view the considerations of equity and administrative feasibility, we recommend a revamped rate-structure (*table 4.15*).

The preferred rate structure will eliminate the volumetric grading and adhere to the elements of the flat rate system. More specifically, the system of metered supply charged at different rate depending upon consumption slab, could be done away with. Finally, the new rate structure is designed in such a way that the differentiation between domestic, commercial and industrial user classes is automatically built-in.

Non-tax Revenues Rate Structures: Other Major Sources.

A. Machinery hire charges. : It is suggested that the additional hire charge of 25 per cent for private works should be done away with as there appears to be no good case for discrimination between governmental and other users of machinery.

B. Toll rates.: Considering the low recovery effort in this source, it was felt that the toll rates in all categories of users should be revised by atleast one rupee (*table 5.3*). Also it is recommended that the State should explore the possibility of extending the toll system to some of the main highways.

C. Housing.: It is recommended that efforts be made to raise the charges from this source by atleast 5 per cent so as to bring the recovery rate to the all-State average level.

D. Education, Sports, Art and Culture: It is suggested that there should a general increase in the tuition fees and other rates in respect of both general as well as technical education, such that the over all recovery rate of this major head is increased by 2 per cent. In addition, it is recommended that abolition of the existing fee differentiation for higher education between income tax payers and non-payers be abolished (*table 5.6*).

The recommended rate-structure relating to Museums and Archaeological monuments contains less number of rates (*table 5.7*).

E. Medical and Public Health: In order to achieve the required 2 per cent increase in the overall recovery rates of this major head, a 10 per cent enhancement of the hospital charges and other related rates is recommended.

Revenue implications of the recommendations: The approximate additional revenue due to our recommendations for the year 1992-93, worked out on the basis of the budget estimates is about Rs 68 lakh and the details are as shown in *table 5.8*.

Conclusion: While the recommended changes would not lead to significant gains in terms of revenues, at least they are aimed to bring about a measure of objectivity and rationality in the user rate structures. In the long-run, however, more objective norms need to be set up in order to maintain fiscal viability of government services.

I

INTRODUCTION

1. Motivation

1.1.1 Non-tax revenues form a sizeable portion of the States' revenues in India contributing, on an average, about 30 per cent of the total. They play an important role by mobilising about 6 per cent of the total domestic product. In recent years, attention is gradually turning to ways of improving the non-tax revenues to meet the widening revenue expenditure gaps in their budgeting, especially since attempts to raise more revenue through taxation are encountering increasing resistance from the people. Also, there is a trend now towards meeting the cost of public services through proper pricing wherever feasible. Provision of public services free of user charges, it is felt, leads to over-consumption of such services and wasteful use of scarce resources.

1.1.2 For all such reasons, efforts are on towards strengthening the non-tax revenues in many states. This study, undertaken at the instance of the Government of Rajasthan, seeks to appraise the performance of some of the non-tax sources of the State with a view to examining their trends, identifying the factors responsible for their growth or lack of growth, exploring the scope for rationalising their rate price structures and thereby improving the over all budgetary position of the State as well as efficiency in resource use.

2. Brief Outline of Rajasthan's Economy

1.2.1 Rajasthan is one of the low income States in India with a net state domestic product of Rs 9,000 crore and per capita income at Rs 1,666 lying well below the all-India level of Rs 2,125. Of greater concern, however, is the poor developmental status of the State for the last several years. If any thing, the position has deteriorated during the last two decades (1970-71 to 1990-91) and the gap in the per capita income between Rajasthan and all-India has widened from Rs 55 to Rs 680 (*table 1.1*).

1.2.2 A major factor contributing to, as also the result of, the persistent low growth in Rajasthan is the low level of plan expenditure in the State. The per capita plan outlay as well as actual expenditure have remained below the levels of many States in India, especially since the three-year Plan Holiday of 1966-69 (*table 1.2*).

1.2.3 The widening gap between Rajasthan and other States of India in per capita plan expenditure could be largely due to the greater constraints faced by the former in raising adequate budgetary surpluses. The balance from current revenue (BCR) in the total resources of the State was negative throughout the Sixth Plan and in the Seventh Plan (*table 1.3*).

1.2.4 A consequence of this increasing budgetary dissaving has been the growing reliance on borrowed funds for Plan finances (*table 1.3*). About 42 per cent of the Sixth Plan and 60 per cent of the Seventh Plan was financed by various loans. The dependence on borrowed funds is higher in Rajasthan compared to other States where the average shares of loan financing were of the order of 40 and 51 per cent during the two Plans. The increasing reliance on borrowed funds in financing Plan expenditure has been straining the government budgets by pre-empting an increasingly large proportion of revenue towards the repayment of loans resulting in the net capital receipts being negative. The loan repayment component of the Plan expenditure which was only 4.2 per cent during the Sixth Plan went up to 17.8 per cent in the Seventh Plan. Further, the rising revenue constraint is compelling the State to borrow from even some of the more expensive sources such as loans from small savings and provident fund. The share of these two sources has increased from 15 per cent in the Sixth Plan to 32.5 per cent in the succeeding Plan.

3. Role and Importance of Non-tax Revenues in the State

1.3.1 It is clear, therefore, that the root cause for the resource problem is the growing revenue deficits warranting a closer look at the trends in the budgetary revenues and expenditures. *Table 1.4* shows a persistent revenue deficit in the State since 1984-85. Although the phenomenon of growing deficits is not uncommon for the Indian States since the 80s, the deficit appears to be worse in the case of Rajasthan. While the average current revenue deficit of the major States has remained below Rs 30 crore (except in 1989-90), that of Rajasthan has been higher. The major source of the budgetary dissavings in the State, clearly, is the faster growth of per capita revenue non-Plan expenditure. The table shows that this part of the expenditure has grown at the rate of 12.2 per cent per annum during the period from 1974-75 to 1989-90 while per capita revenue receipts grew at the rate of 11.8 per cent.

1.3.2 About 42 per cent of the total revenue receipts comes from Central transfers and the remaining is raised from own sources (*table 1.5*). The share of Central transfers to total revenue is higher for the State at 47 per cent as compared to other States where it is about 35 per cent. Thus the contribution of own revenue in the total revenue receipts of

Rajasthan is relatively low. Within the own revenue receipts, State taxes contribute approximately 65 per cent which is lower compared to other States. However the growth rate of the own tax revenues at 16.4 per cent is higher than the 15.6 per cent rate in other States. Also the yield from the shared taxes has been growing slightly faster than in other States. Despite these improvements, Rajasthan is yet to catch up with other States in terms of the contribution of tax revenues. In the other major States, the contribution of the own tax in the total revenue receipts on an average is over 75 per cent.

1.3.3 The lower share of own tax revenue in the total revenue receipts of Rajasthan puts greater reliance on own non-tax revenue. The decomposition of the total own revenue receipts shows the contribution of own non-tax revenue to be in the range of 29 to 46 per cent in Rajasthan, while it is only 25 to 30 per cent in the other major States. However, in terms of growth of non-tax revenues, Rajasthan falls behind many States. The annual growth rate at 12 per cent is below the 13.4 per cent growth rate attained in other States. Thus the sluggish growth of own non-tax revenues has been an important cause for the State's resource problem. As the own tax revenue of the State is growing above the average rate observed in the fourteen major States, attempts to push it further may prove counter productive.

1.3.4 To that extent own non-tax revenue source remains a better alternative for Rajasthan and problems associated with its poor growth need to be probed into. This is attempted in the following chapter.

4. Scope of the Study

1.4.1 The terms of reference required the study to be confined to only those non-tax revenues which originate from the administrative departments and departmental undertakings of non-commercial nature. Therefore, sources such as interest, profits and dividends arising from the State's commercial undertakings are beyond its scope. Further, keeping in view the short time available, it was decided to focus on ten major non-tax sources: (1) public works, (2) education, sports, art & culture, (3) medical and health including family welfare programs, (4) water supply and sanitation, (5) forestry and wild life, (6) major and medium irrigation, (7) minor irrigation, (8) industries, (9) mines and minerals, and (10) roads and bridges.

5. Plan of the Report

1.5.1 The report is planned to contain six chapters including this one. Chapter 2 brings out the relatively greater reliance of the Rajasthan government on non-tax revenues as compared to most States. Chapter 3 examines in some detail the composition, growth trends and problems associated with the non-tax revenues. Norms for improvement of non-tax revenues in Rajasthan are discussed in Chapter 4. An analysis of rate structures of top three non-tax sources, viz., mines and minerals, irrigation, water supply and sanitation are attempted in Chapter 5 while the succeeding chapter analyses the rate structures of other major sources. Finally Chapter 6 gives the major conclusions of the study.

Table 1.1

Indicators of Development in Rajasthan and all-India.

	Rajasthan			All-India		
Year/Variables	1970-71	1980-81	1990-91	1970-71	1980-81	1990-91
Per Capita Income# (Rs)	1496.00	1239.00	1666.00	1551.00	1647.00	2125.00
Share of Rajasthan's SDP in total NDP@@ (%)	4.52	3.74	4.03			
Share of Secondary Sector in SDP** (%)	7.66	9.29	8.23	14.24	16.95	17.13
Urbanisation* (%)	17.63	21.05	22.88	19.91	23.31	25.72
Literacy rate* (%)	19.07	24.38	38.81	29.45	36.23	52.11
No. of Hospital Beds per lakh of population##	57.00	50.00	51.00	57.00	70.00	74.00
Infant Mortality Rate (%)	NA	108.00	96.00	129.00	110.00	91.00

Note:
a. # Rs.in 1980-81 prices. Income for the year 1990-91 refers to provisional estimates of 1988-89.
b. ## In respect of Years 1969-70, 1980-81 and 1989-90.
c. * Refers to Years 1971, 1981 and 1991.
d. ** Refers to year 1988-89.
e. @ Refers to Years 1969-70, 1980-81 and 1988-89.
f. @@ Refers to year 1988-89.

Sources:
a. Government of India, National Accounts Statistics, 1989, 1991 and 1992.
b. Government of India, Central Statistical Organisation, 'Estimate of SDP'.
c. Government of India, Census Reports, Registrar General.
d. Government of India, Ministry of Health, Health Information in India.
e. Sample Registration System, Registrar General of India.

Table 1.2

Per Capita Plan Outlay and Expenditure in Rajasthan and all-State Average

(Rs)

		Plan	Period	Rajasthan	All-State average #
		Plan outlay	expenditure	Plan outlay	expenditure
First Plan	1951-56	16	40	26	39
Second Plan	1956-61	56	53	54	52
Third Plan	1961-66	112	100	86	93
Annual Plans	1966-69	59	59	61	63
Fourth Plan	1969-74	117	120	125	142
Fifth Plan	1974-79	241	295	302	327
Sixth Plan	1980-85	559	589	670	688
Seventh Plan	1985-90	746	772	1022	1096

Note: # excluding Arunachal Pradesh, Goa and Mizoram.
Source: Government of India, Planning Commission.

Table 1.3

Pattern of Plan Financing in Rajasthan and other Major States of India

(per cent)

	Resources	Rajasthan 6th Plan (1980 to 84)#	Rajasthan 7th Plan (1985 to 89)@	14 Major States 6th Plan (1980 to 84)@	14 Major States 7th Plan (1985 to 90)@
1	Bal From Cur Rev	-2.70	-24.66	19.15	7.85
2	ARM	34.67	24.55	17.88	14.83
3	Upgradation	0.00	0.00	0.00	0.38
4	Others	0.00	0.00	-0.02	0.30
5	Seb Contributions	-9.99	1.21	-7.92	-7.08
6	Seb. ARM	0.00	0.00	5.27	4.13
7	RTC Contributions	-5.39	0.26	-3.53	-0.60
8	RTC.ARM	0.00	0.00	2.38	0.71
9	Small Savings	9.29	16.02	12.25	21.40
10	Provident Funds	5.80	16.50	4.63	7.66
11	Impounded DA in PF	0.00	0.00	0.82	0.90
12	Misc Cap Receipts	-4.22	-17.77	-1.28	-7.57
13	Reserves	-0.16	3.08	5.37	-0.89
14	Market Borrowing	14.65	16.76	9.61	13.69
15	Negotiated Loans	10.17	5.98	4.90	7.45
16	Central Assistance	45.71	57.19	29.52	35.52
17	Term Loans	2.16	0.87	0.97	1.29
		100.00	100.00	100.00	100.00
Total (Rs. Crore)		1841.05	3665.08	39564.14	69064.79

Note: a. #, @ Refer to total of five years' actual resources in 1980-81 and 1985-86 prices respectively.

Sources: NIPFP and RBI Bulletins.

Table 1.4

Trends in Per Capita Revenue Receipts, Expenditure and Surplus/Deficit in Revenue Budget of Rajasthan and 14 Major States

(Rs)

	Rajasthan					14 Major States				
YEAR\ ITEM	Plan Exp.	Non-Plan Exp.	Total Revenue Exp.	Total Revenue Receipts	Surplus/ Deficit	Plan Exp.	Non-Plan Exp.	Total Revenue Exp.	Total Revenue Receipts	Surplus/ Deficit
	1	2	3	4	5=4-3	6	7	8	9	10=9-8
1974-75	9.79	98.51	108.31	113.36	5.05	10.83	89.25	100.08	106.88	6.81
1975-76	12.42	107.14	119.56	135.78	16.21	14.13	99.91	114.05	130.54	16.49
1976-77	18.25	118.86	137.12	151.23	14.12	17.61	109.94	127.55	144.55	17.00
1977-78	21.67	127.93	149.60	158.01	8.41	21.81	118.20	140.01	154.93	14.92
1978-79	36.08	134.49	170.57	188.08	17.51	30.25	130.60	160.85	177.77	16.92
1979-80	38.81	156.10	194.91	200.44	5.53	30.31	152.11	182.42	206.11	23.68
1980-81	39.87	165.12	204.99	224.46	19.47	40.21	177.80	218.01	234.63	16.61
1981-82	39.04	199.62	238.66	248.60	9.94	44.56	202.59	247.14	267.35	20.21
1982-83	41.61	228.49	270.09	285.53	15.43	53.77	232.31	286.08	299.12	13.03
1983-84	52.51	250.72	303.23	315.56	12.33	69.23	259.06	328.28	331.22	2.94
1984-85	66.56	284.36	350.92	332.24	-18.68	83.30	303.69	387.00	368.36	-18.63
1985-86	71.97	324.17	396.14	395.57	-0.57	86.37	344.22	430.59	434.33	3.73
1986-87	123.99	354.45	478.43	388.99	-89.45	105.70	382.43	488.12	476.53	-11.59
1987-88	204.73	430.15	634.88	545.85	-89.04	128.98	434.44	563.42	544.92	-18.50
1988-89	161.97	465.09	627.06	573.75	-53.31	132.54	502.24	634.78	605.27	-29.51
1989-90	114.69	527.24	641.93	634.79	-7.15	130.36	584.31	714.67	667.52	-47.15
1990-91	137.04	591.41	728.14	709.50	-18.64	154.78	663.42	817.51	753.56	-63.95
1991-92	163.73	663.38	825.93	793.01	-32.92	183.77	753.25	935.15	850.70	-84.45
1992-93	195.62	744.11	936.86	886.35	-50.51	218.19	855.24	1069.71	960.35	-109.36
Growth Rate	19.48	12.17	13.43	11.77		18.73	13.54	14.39	12.89	

Source: Same as Table 1.1.

Table 1.5

Pattern of contributions of Own Revenue and Central Transfers in Total Revenue in Rajasthan as compared to 14 Major States

(per cent)

	RAJASTHAN			14 Major States		
	Total Rev. (Rs. crore)	Percentage Share of: Total own rev.	Percentage Share of: Total Centl transfer	Total Revenue (Rs. crore)	Percentage Share: Total own revenue	Percentage Share: Total current transfers
1974-75	320.44	55.18	44.82	5900.52	67.89	32.11
1975-76	394.92	57.87	42.13	7364.79	67.17	32.83
1976-77	452.59	58.66	41.34	8334.22	68.02	31.98
1977-78	486.54	57.39	42.61	9129.06	66.31	33.69
1978-79	595.88	54.06	45.94	10704.94	65.00	35.00
1979-80	653.37	55.56	44.44	12684.62	62.24	37.76
1980-81	752.85	56.93	43.07	14757.59	62.24	37.76
1981-82	857.07	56.93	43.07	17181.47	64.66	35.34
1982-83	1009.06	61.65	38.35	19626.21	64.75	35.25
1983-84	1143.12	61.99	38.01	22188.96	65.09	34.91
1984-85	1233.71	62.18	37.82	25195.05	64.59	35.41
1985-86	1505.69	57.51	42.49	30330.97	63.23	36.77
1986-87	1517.71	62.82	37.18	33977.90	64.25	35.75
1987-88	2183.08	52.31	47.69	39671.25	63.26	36.74
1988-89	2352.17	53.37	46.63	44992.06	64.25	35.75
1989-90	2667.60	57.83	42.17	50663.49	66.00	34.00
1990-91	3061.34	57.88	42.10	58420.07	65.82	34.18
1991-92	3513.19	57.93	42.03	67364.18	65.63	34.37
1992-93	4031.74	57.97	41.96	77677.63	65.44	34.57
Annual average Growth rates	14.76	14.85	14.57	15.31	14.98	15.95

Source: Same as Table 1.1.

Table 1.6

Share of Non-Tax Revenue in Total Revenue in Rajasthan and fourteen Major States

	Rajasthan		14 Major States	
	Total Non-tax Revenue (Rs crore)	Share in total Revenue (per cent)	Total Non-tax Revenue (Rs crore)	Share in total Revenue (per cent)
1980-81	348.10	46.24	4658.39	31.57
1981-82	348.744	0.69	5073.55	29.53
1982-83	405.984	0.23	5940.25	30.27
1983-84	459.934	0.23	6976.86	31.44
1984-85	479.363	8.85	7761.42	30.81
1985-86	614.454	0.81	9727.44	32.07
1986-87	493.973	2.55	10419.14	30.66
1987-88	1000.29	45.82	12378.39	31.20
1988-89	1004.08	42.69	14231.03	31.63
1989-90	952.11	35.69	14112.42	27.86
1990-91	1072.07	35.02	16141.79	25.63
1991-92	1207.15	34.36	18462.98	23.58
1992-93	1359.25	33.72	21117.96	21.69

Source: Same as in 1.3.

II

TRENDS IN NON-TAX REVENUES IN RAJASTHAN

1. Introduction

2.1.1 As noted in the previous chapter, the fiscal imbalance in the State has been due to the sluggish growth of non-tax revenues. This chapter is aimed at identifying the major items of non-tax revenue responsible for the slow growth.

2.1.2 About half of the non-tax revenues come from the Central Government by way of grants etc *(table 2.1)*. The share which briefly went down to 43 per cent during the early 80s, reverted to 51 per cent in 1985-86 and remained at that level thereafter. It implies that except for a brief increase between 1980-81 and 1984-85, own component of non-tax revenues has been growing more or less at the same rate as the Central transfers. Since the States have little control over the Central transfers, it is useful to confine to the State's own non-tax revenues.

2. Major Own Non-tax Revenue Sources

A. Interest Receipts

2.2.1 Within the State's own component of non-tax revenues, a large chunk shown under interest receipts is often fictitious in nature as it merely denotes book transfers and that too internal transfers from other State government departments. The receipts comprise (a) Proforma interest charges of the departmental commercial undertakings, (b) Interest realised on loans and advances made to public sector and other undertakings, (c) Interest realised on loans and advances to cultivators, cooperatives, local bodies and others.

2.2.2 About 80 per cent of the interest receipts are accounted under (a), namely, the proforma interest receipts from departmental commercial undertakings, commercial projects and schemes. However, these receipts do not constitute cash receipts and merely represent book adjustments carried out for the accounting purpose, with corresponding entries appearing on the expenditure side as well.

2.2.3 As per (b), that is interest receipts on loans and advances to public sector undertakings, they are computed for three categories, (i) Loans to Rajasthan State Electricity Board (RSEB), (ii) Loans to Rajasthan State Road Transport Corporation (RSRTC), (iii) Loans and advances to other undertakings. The question of recovering interest from the RSEB arises only when a net working surplus is available after meeting as many as nine obligations mentioned in section 67 of the Electricity (supply) Act, 1948. However, the RSEB's persistent deficits rule out the possibility of recovery of interest. As per RSRTC, the interest receipts (on account of the 6.25 per cent interest bearing loans) are hardly Rs 200 lakh. As per (iii) the interest recoveries are neither certain nor uniform. In any case, these receipts form less than 8 per cent of the total interest receipts.

2.2.4 Other interest receipts under (c) are also uneven and unreliable. More importantly, the State government's norm for maneuver in augmenting the interest receipts is limited.

2.2.5 Apart from being fictitious, interest receipts grew at only 10.3 per cent per annum and, therefore, create sluggishness in the non-tax revenue growth in the State. Their contribution to the State's own component went down steadily from about 35 per cent in 1974-75 to 25 per cent in 1989-90 and to 14 per cent in 1990-91 (*table 2.2* and *table 2.3*).

B. Dividends and Profits

2.2.6 These revenues arise from the State government's investments in the shares of co-operative institutions, statutory corporations, government companies and other joint stock companies. However, in majority of the cases no dividend is being received due to non-availability of surpluses or due to losses. Consequently, the share of these sources is quite negligible (*table 2.4*).

2.2.7 Thus, although non-tax revenues are supposed to include interest receipts, profits and dividends, they can be hardly relied as a source of revenue.

3. Trends in the administrative non-tax receipts

2.3.1 That leaves the administrative departments as the most productive and reliable sources of non-tax revenues in the State. About three-fourths of the State's own non-tax revenue comes from the administrative services. The share is showing a rising trend during the past few years, not so much due to the absolute rise in this source, but because of the decline in other sources.

2.3.2 There are over 100 departmental sources of non-tax revenues in the State classified under 35 major heads. Each of the three broad components of administrative receipts *viz.,* A. General services, B. Social services, and C. Economic services, contribute more or less equally *(table 2.5)*. However, the pattern of relative contributions over the years is marked by wide fluctuations. For example, during the 70s the economic services contributed about 60 per cent, while the shares of general services and the social services were 22 and 17 per cent respectively. During the early 80s the share of general services went up to 49 per cent while that of economic services came down. By the end of 80s the share of social services has gone up and the relative shares of the three components have become more or less equal. During 1990-91 the share of general services has gone up to cover as much as 72 per cent of the total revenue from the administrative services (again due to some fictitious additions described below), while that of social services has fallen drastically to less than 10 per cent.

2.3.3 In absolute terms, the average annual growth rate of the general service source is the highest among the three categories at 22 per cent per annum, while social services grew at 14 per cent and economic service source grew at 9 per cent.

A. Receipts from General Services

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

2.3.5 Revenue under (a) consists of fees charged from candidates appearing for various competitive examinations and interviews conducted by the Public Service Commission (PSC). The volume of the receipts under this head directly depends upon the nature and number of examinations held by the Commission during a year and the number of candidates appearing for the examination. Revenue under the head (b) Police, comprises reimbursement receipts from the Government of India and other states towards the cost of police supplied (forming the bulk of the revenue under the major head), cost of police supplied to autonomous bodies, private companies and persons, receipts under the Arms Act, as well as sale proceeds of unserviceable articles, collection of payments for services rendered, recovery of overpayments and miscellaneous receipts and so on. Receipts under the head (c) Jails, comprise receipts from sale of articles manufactured in jail factories and farm produce of the jails. Receipts of (e) Stationery and Printing department comprise sale proceeds of stationery supplied to government departments run on commercial lines, sale proceeds of State Gazette, printing charges for government departments and other miscellaneous receipts. Revenues of (f), the Public Works Department (PWD) consist of rental income from government buildings, hire charges of machinery supplied to the contractors as well as the percentage charges. Other revenues under (g) consist of receipts pertaining to administration of justice, elections, civil defence, fire protection and control, State lotteries, Central loans written off and so on. Pension contributions from other governments, autonomous bodies, local bodies etc in respect of Government servants placed on deputation are accounted for under (h). It also includes government share in Contributory Provident Fund (CPF) and interest thereon. The last major head under this category (i) includes numerous small receipts from sources such as State lotteries, unclaimed deposits, allotment and sale of land in Ganga, Bhakra, Chambal, Rajasthan canal areas, Mandi areas, evacuee land in Bharatpur and Alwar districts, receipts relating to guarantees given by Government, sale of old stores, shares and materials, urban assessments etc.

2.3.6 A substantial portion of the general services revenue comes from numerous other administrative services and other miscellaneous receipts including written off loans *(table 2.6)*. In fact, the sudden jump in 1990-91 in general services receipts was due to the writing-off of certain loans by the Ninth Finance Commission. Excluding these, the major receipts are under police, public works, and pension funds.

B. Receipts from Social Services

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

2.3.8 The main receipts under (a) are tuition and other fees realised from students in government educational institutions, public contributions to the educational institutions, receipts of museums and archaeological monuments. Receipts under (b) comprise receipts from Employees State Insurance Corporation (ESIC), medical receipts including contributions from patients, and tuition fees from the six medical colleges. Under the head 'Family welfare' the receipts are contribution recoveries, receipts on account of strengthening of family welfare. Under the head Water supply and sanitation, the receipts comprise service fees, percentage charges from other government departments, and receipts from water schemes. Rental receipts for the quarters constructed under the industrial housing scheme under the charge of PWD form the main source of revenue under the head 'Housing'. Other items under this class comprise receipts accruing from the sale of master plans, license fees from cinema halls, rental incomes of Devasthans as also various fees under the labour and trade laws.

2.3.9 A major portion of the receipts of social services are due to water supply and sanitation charges *(table 2.7)*. The share which was 59 per cent in 1974-75 has gone up to 78 per cent in 1985-86. Although it came down in 1989-90, in the following year it has gone up to 76 per cent. Out of the remaining, substantial part is derived from Education, sports, art and culture (ESAC) services whose share has fallen over time, and also from Medical and public health services. Receipts from Water supply and sanitation is a fast growing item in social service category with an annual growth of 16 per cent. Other fast growing items are medical and public health, urban development and family welfare services.

C. Receipts from Economic Services

2.3.10 Major items under this class are (a) Crop husbandry, (b) Animal husbandry, (c) Dairy development, (d) Fisheries, (e) Forestry and wild life, (f) Co-operation (g) Other agricultural and rural programmes, (h) Special area programmes,(i) Major and medium irrigation, (j) Minor irrigation, (k) Village and small scale industries, (l) Industries, (m) Non-ferrous mining and metallurgical industries, (n) Roads and bridges, (o) Tourism and (p) Others.

2.3.11 The largest contributor under the economic services class is receipts from mines and mineral department, which accounts for over a half of the receipts under the economic services category *(table 2.8)*. Other major contributors are irrigation receipts, industries, forestry and wild life, and agricultural services. However, the fast growing sources under this category are roads and bridges, area development service receipts, irrigation, cooperation and agriculture receipts in that order.

2.3.12 Excluding the other administrative and miscellaneous sources under the general services category, there appear to be in all about ten major individual contributors to the State's non-tax revenue. The shares and growth patterns of the top ten sources are shown separately in *table 2.9* and are taken up for an in-depth study.

4. Analysis of the Major Administrative Non-tax Receipts

2.4.1 The following are the major items taken up for an in-depth study.

(1) Public works,
(2) Education, sports, art & culture,
(3) Medical and health
(4) Water supply and sanitation,
(5) Forestry and wild life
(6) Major and medium irrigation,
(7) Minor irrigation,
(8) Industries,
(9) Mines and minerals, and
(10) Roads and bridges.

2.4.2 The ten sources accounted for about 70 per cent of the administrative component of the non-tax revenue, 45 per cent of own non-tax revenue and about 20 per cent of total non-tax revenues, in 1974-75. These proportions have declined over the years and in 1989-90, they were 50, 36 and 18 per cent respectively. These trends are brought out more clearly by the growth rates. The growth rate of the combined revenue of the ten sources is about 10 per cent, which is lower compared to the 12 per cent growth of the total, own and administrative source non-tax revenue.

A. Buoyancy Analysis

2.4.3 One way of judging the growth performance of non-tax revenues is in terms of relative growth to economic development. If the economic development is proxied by the State Domestic Product (SDP) then the growth of the non-tax revenues is compared with the growth of SDP. The relative growth is commonly known as the 'buoyancy' of the revenue with respect to SDP. A buoyancy value of unity indicates that the growth of the revenue is commensurate with that of the SDP, a value less than unity implies that the revenue growth is less than the desired growth.

2.4.4 A more refined version of the buoyancy rates can be obtained by measuring the relative growth of revenue to that of the SDP originating in the corresponding sector. Both types of buoyancy estimates are obtained by fitting a log-linear regression model and are shown in *table 2.10.*

2.4.5 For the total non-tax revenue of the State, the buoyancy estimate for the period from 1974-75 to 1989-90 is close to unity, implying that the growth of the revenue is commensurate with the State's economic growth. The buoyancy of the State's own non-tax revenue is slightly higher than unity.

2.4.6 At the disaggregated level, however, for the ten major components, the estimated buoyancy coefficients with respect to SDP are not always close to unity. In respect of revenues from roads and bridges, water supply and sanitation, minor irrigation, industries, the buoyancy rates are greater than unity, while in respect of revenues from education, forestry and wild life, major and medium irrigation, and mining and minerals, they are less than unity. The buoyancy rates are close to unity in the case of public works, and medical and health.

2.4.7 As regards the buoyancy estimates with respect to sectorial SDP, they are greater than unity only in the case of two sources - water supply and sanitation, minor irrigation, and roads and bridges. The remaining major sources show buoyancies lower than unity. Thus these buoyancy estimates appear to describe the growth trends of individual items more accurately.

5. Summary

2.5.1 To sum-up the growth trends and contribution patterns, about half of the total non-tax revenues of the State comes from the Central Government by way of grants. About 13 to 14 per cent of the total non-tax revenue or a quarter of the State's own non-tax revenues is fictitious. Of the remaining 35 to 37 per cent, 20 per cent is accounted for by the ten top sources: four social service sources and six economic service sources. Over the last 15 years this pattern of contributions has hardly changed.

2.5.2 The slow growth of the total non-tax revenues in the State is, therefore, due to the slow growth of the interest receipts, dividends and profits of commercial undertakings. The slow growth is also due to the stagnation in the revenue from the top administrative sources other than water supply and sanitation, irrigation and industry.

Table 2.1

Share of Own Non-tax Revenue in Total Non-tax Revenue in Rajasthan

(Rs. lakh)

	Annual Compound Growth Rate (%)	1974-75	1980-81	1985-86	1989-90	1990-91
Total non-tax rev	13.54	15718.34	34810.06	61444.62	95210.59	167251.08
Own non-tax rev	13.18	7067.41	19836.06	29999.80	47028.48	82004.61
Share of own non-tax(%)		45.0	57.0	48.8	49.4	49.0

Source: NIPFP Database on State Finances.

Table 2.2

Pattern of Own Non-tax revenue in Rajasthan

	Annual Compound Growth (%)	Per cent to total own non-tax revenue				
		1974-75	1980-81	1985-86	1989-90	1990-91
Interest receipts	10.25	35.17	22.59	25.92	25.89	14.23
Dividends and profits	11.19	0.41	0.18	0.07	0.10	0.18
Administrative services	14.27	64.41	77.24	74.02	74.29	85.77

Source: Same as Table 2.1.

Table 2.3

Pattern of Interest Receipts in Rajasthan

	Annual compound Growth (%)	Per cent to total				
		1974-75	1980-81	1985-86	1989-90	1990-91
Interest receipts	10.25	100.00	100.00	100.00	100.00	100.00
Deptl Comm Undertakings	10.84	78.70	83.03	86.12	72.39	85.53
Investments	14.41	1.35	0.00	0.44	0.44	3.89
Public Sec Undertakings	-0.78	6.26	4.02	4.78	5.06	3.27
Local bodies	4.68	5.19	5.62	0.39	11.44	1.11
Other interest receipts	14.33	8.50	7.32	8.27	10.66	6.21

Source: Same as Table 2.1.

Table 2.4

Pattern of Non-Tax Receipts from Profits & Dividends in Rajasthan

	Annual Compound Growth (%)	Per cent to total 1974-75	1980-81	1985-86	1989-90	1990-91
Dividends and profits	11.19	100.00	100.00	100.00	100.00	100.00
Public Sec Undertakings	16.65	11.58	30.01	54.34	50.02	86.07
Other Dividends & Profits	6.12	88.42	69.97	45.66	49.98	13.93

Source: Same as Table 2.1.

Table 2.5

Composition of Revenue from Administrative Services in Rajasthan

	Annual Compound Growth (%)	Per cent to total own non-tax revenue 1974-75	1980-81	1985-86	1989-90	1990-91
General services	21.63	22.03	48.91	38.75	33.98	71.77
Social Services	14.01	16.90	14.85	17.92	31.08	8.46
Economic services	8.97	61.07	36.23	43.33	34.94	19.76
Total Admn Services	14.27	100.00	100.00	100.00	100.00	100.00

Source: Same as Table 2.1

Table 2.6

Growth and Pattern of Revenue from Major Items of General Services in Rajasthan

	Annual Compound Growth (%)	Per cent to total own non-tax revenue 1974-75	1980-81	1985-86	1989-90	1990-91
Public service commission	10.07	0.62	0.35	0.33	0.23	0.07
Police	14.90	12.91	2.85	3.70	8.36	1.70
Jails	7.47	1.72	0.30	0.56	0.26	0.11
Supplies and disposal	NA	0.00	0.00	0.00	0.00	0.00
Stationery and printing	11.43	2.92	1.60	2.56	1.93	0.51
Public works	11.43	9.02	5.08	5.37	6.04	1.41
Other admn services	13.40	17.52	5.12	8.60	14.87	3.22
Pension funds	12.95	3.81	1.94	1.70	2.36	0.93
Misc. general service	27.44	51.48	82.77	77.18	65.96	92.04
Total General services	21.63	100.00	100.00	100.00	100.00	100.00

Source: Same as Table 2.1

Table 2.7

Growth and Pattern of Revenue from Major Items of Social Services in Rajasthan.

	Annual Compound Growth (%)	Per cent to total own non-tax revenue 1974-75	1980-81	1985-86	1989-90	1990-91
Edn. Sports, Art & cult.	1.94	18.28	9.30	6.45	2.68	5.81
Med and pub health	10.97	10.95	19.54	9.06	5.14	10.79
Family welfare	14.76	0.14	0.22	0.30	0.10	0.14
Water supply and sntn.	16.20	58.76	56.48	78.35	40.04	76.39
Housing	7.25	2.35	5.17	1.28	0.67	1.37
Urban development	14.74	0.03	0.06	0.06	0.03	0.38
Information and publicity	8.02	0.08	0.08	0.12	0.02	0.04
Labour and employment	4.60	2.97	1.26	1.22	0.58	0.97
Social security and welfa	5.09	3.84	1.71	1.87	0.47	0.95
Other social services	19.63	2.61	6.19	1.30	50.27	3.16
Social Services	14.01	100.00	100.00	100.00	100.00	100.00

Source: Same as Table 2.1

Table 2.8

Growth and Pattern of Revenue from Major Items of Economic Services in Rajasthan

	Annual Compound Growth (%)	Per cent to total own non-tax revenue				
		1974-75	1980-81	1985-86	1989-90	1990-91
Agriculture	12.02	1.48	1.08	1.35	1.17	1.03
Animal husbandry	-0.61	3.17	0.74	0.71	0.51	0.52
Fisheries	8.58	1.32	2.04	0.86	0.96	1.50
Forestry and wildlife	5.62	15.75	12.74	9.35	8.93	9.93
Cooperation	11.33	0.60	1.08	0.68	0.95	0.40
Other rural dev prg	-5.62	0.35	0.96	0.26	0.05	0.02
Backward area dev prg	21.87	0.13	0.14	0.25	0.25	0.13
Maj. and medium irrigation	3.69	16.80	17.46	12.54	13.10	11.73
Minor irrigation	12.53	3.73	5.10	6.15	6.34	5.05
Mines and minerals	11.39	44.72	49.75	59.56	58.18	56.54
Village and ssi	8.71	0.34	0.27	0.14	0.35	0.97
Industries	7.69	6.63	3.25	4.39	2.97	6.31
Roads and bridges	29.80	0.19	0.31	2.47	1.57	1.37
Tourism	6.39	0.20	0.16	0.07	0.32	0.18
Other general eco ser	16.25	0.65	0.71	1.20	2.86	2.90
Economic services	8.97	100.00	100.00	100.00	100.00	100.00

Source: Same as Table 2.1

Table 2.9

Growth Trends in the Selected Major sources of Non-tax revenue (1974-75 to 1990-91)

	Item	(Per cent) growth rate 1974-75 to 1990-91
	Total Non-tax Revenue	13.54
	Own Non-Tax Revenue	13.18
	Administrative services	14.27
1	Public works	11.43
2	Education, sports, art & culture	1.94
3	Medical and health	10.97
4	Water supply and sanitation	16.20
5	Forestry and wild life	5.62
6	Major and medium irrigation	3.69
7	Minor irrigation	12.53
8	Mines and minerals	11.39
9	Industries	7.69
10	Roads and bridges	29.80
	Total of Selected major Items.	10.23

Table 2.10

Buoyancy Estimates for the Top Ten Major Sources of Non-tax Revenues in Rajasthan.

Major head of Revenue	Growth rate sectoral NSDP	Buoyancy	
		w.r.t. Total	w.r.t. NSDP
Total Non-Tax Revenue	13.54	1.0637	1.0637
Own Non-Tax Revenue	13.18	1.1124	1.1124
Public Works	11.43	0.8643	1.0888
Education	1.94	0.2291	0.3062
Med and Public Health	10.97	0.8115	1.0905
Water Supply	16.20	1.1556	1.4742
Forestry and Wildlife	5.62	0.7602	0.5288
Maj and Med Irrigation	3.69	0.3726	0.3427
Minor Irrigation	12.53	1.2194	1.1409
Industries	7.69	0.7608	1.1146
Mines and Minerals	11.39	0.4136	0.5663
Roads and Bridges	29.80	1.5915	2.1269

Notes: i. Buoyancy is estimated from the equation log r = a + log NSDP + e where r= Revenue Item, NSDP = Net State domestic Product and e=error term.

ii. Growth rates given above are estimated from a semi-log trend equation.

Table 2.11

Contribution of Selected Non-Tax Sources (Per cent Shares in Total Non-tax Revenue)

		1974-75	1980-81	1985-86	1989-90	1990-91
	Total Non-tax Revenue (Rs. lakh)	15718.34	34810.06	61444.62	95210.59	167251.08
1	Public works	0.58	1.09	0.75	0.75	0.43
2	Education, sports, art & culture	0.89	0.61	0.42	0.31	0.21
3	Medical and health	0.54	1.28	0.59	0.59	0.38
4	Water supply and sanitation	2.88	3.69	5.07	4.57	2.72
5	Forestry and wild life	2.79	2.03	1.46	1.15	0.83
6	Major and medium irrigation	2.97	2.78	1.96	1.68	0.98
7	Minor irrigation	0.66	0.81	0.96	0.81	0.42
8	Mines and minerals	7.91	7.93	9.33	7.46	4.70
9	Industries	1.17	0.52	0.69	0.38	0.52
10	Roads and bridges	0.03	0.05	0.39	0.20	0.11
	Total of selected Items	20.41	20.80	21.62	17.89	11.29

Table 2.12

Trends in the Ten Selected Major Sources of Non-tax Revenue in Rajasthan (Percentage shares in Total Own Non-tax Revenue)

		1974-75	1980-81	1985-86	1989-90	1990-91
	Own Non-Tax Revenue (Rs. lakh)	7067.41	19836.06	29999.80	47028.48	82004.61
	Total of selected Items	45.40	36.51	44.29	36.22	23.03
1	Public works	1.28	1.92	1.54	1.52	0.87
2	Education, sports, art & culture	1.99	1.07	0.85	0.62	0.42
3	Medical and health	1.19	2.24	1.20	1.19	0.78
4	Water supply and sanitation	6.40	6.48	10.39	9.24	5.54
5	Forestry and wild life	6.19	3.57	3.00	2.32	1.68
6	Major and medium irrigation	6.61	4.88	4.02	3.40	1.99
7	Minor irrigation	1.47	1.43	1.97	1.64	0.86
8	Mines and minerals	17.59	13.92	19.10	15.10	9.58
9	Industries	2.61	0.91	1.41	0.77	1.07
10	Roads and bridges	0.08	0.09	0.79	0.41	0.23

Table 2.13

Trends in the Ten Selected Major Non-tax Revenue Sources in Rajasthan (Per cent Shares in Total Administrative Revenue)

		1974-75	1980-81	1985-86	1989-90	1990-91
	Administrative services	4552.43	15320.55	22204.92	34936.89	70332.44
	Total of selected Items	70.48	47.26	59.83	48.75	26.86
1	**Public works**	1.99	2.48	2.08	2.05	1.02
2	**Education, sports, art & culture**	3.09	1.38	1.15	0.83	0.49
3	**Medical and health**	1.85	2.90	1.62	1.60	0.91
4	**Water supply and sanitation**	9.93	8.39	14.04	12.44	6.46
5	**Forestry and wild life**	9.62	4.62	4.05	3.12	1.96
6	**Major and medium irrigation**	10.26	6.32	5.44	4.58	2.32
7	**Minor irrigation**	2.28	1.85	2.67	2.21	1.00
8	**Mines and minerals**	27.31	18.03	25.81	20.33	11.17
9	**Industries**	4.05	1.18	1.90	1.04	1.25
10	**Roads and bridges**	0.12	0.11	1.07	0.55	0.27

Figure 3.1

Pattern of Non-Tax Revenue in Rajasthan (1974-75 to 1990-91).

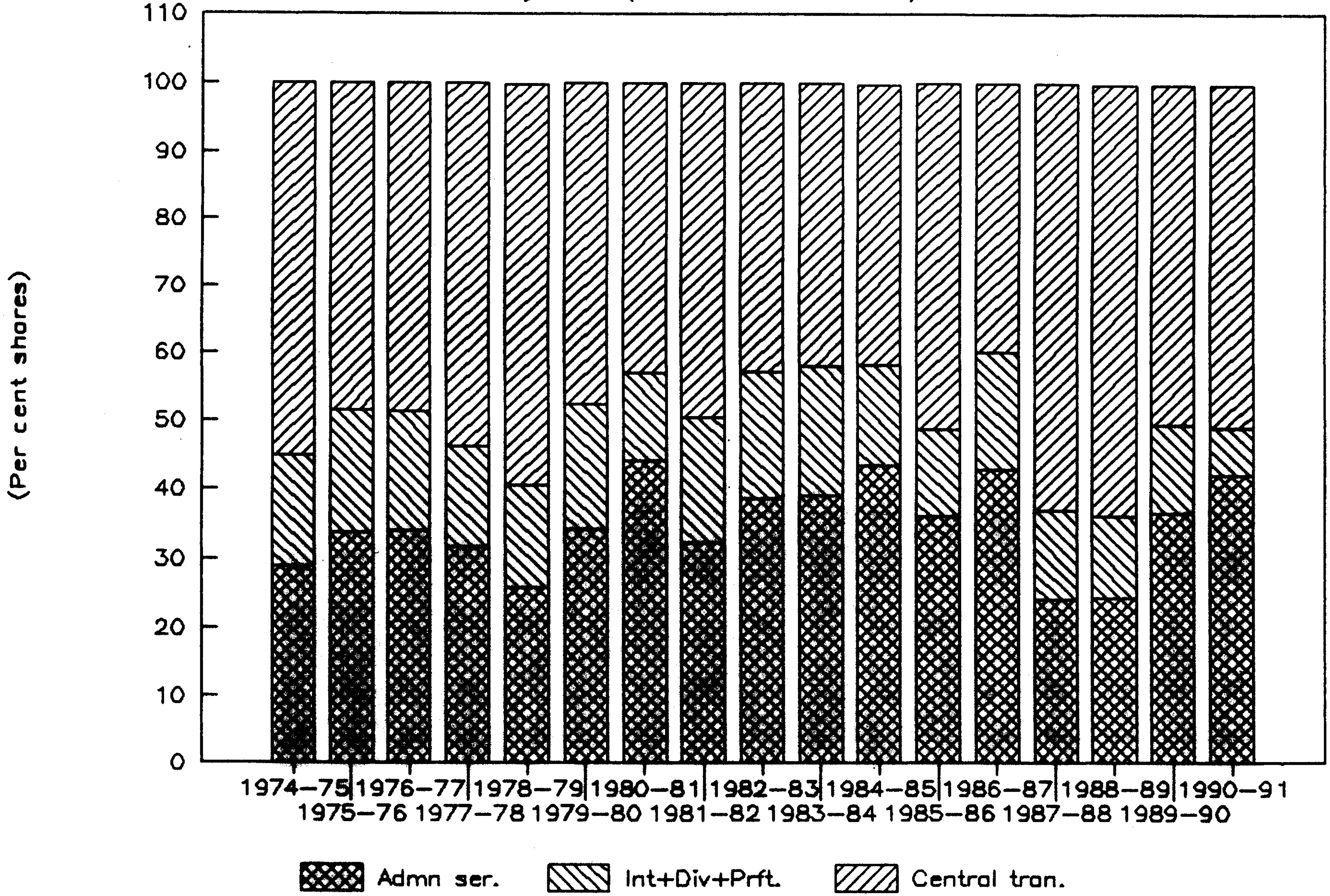


Figure 3.2

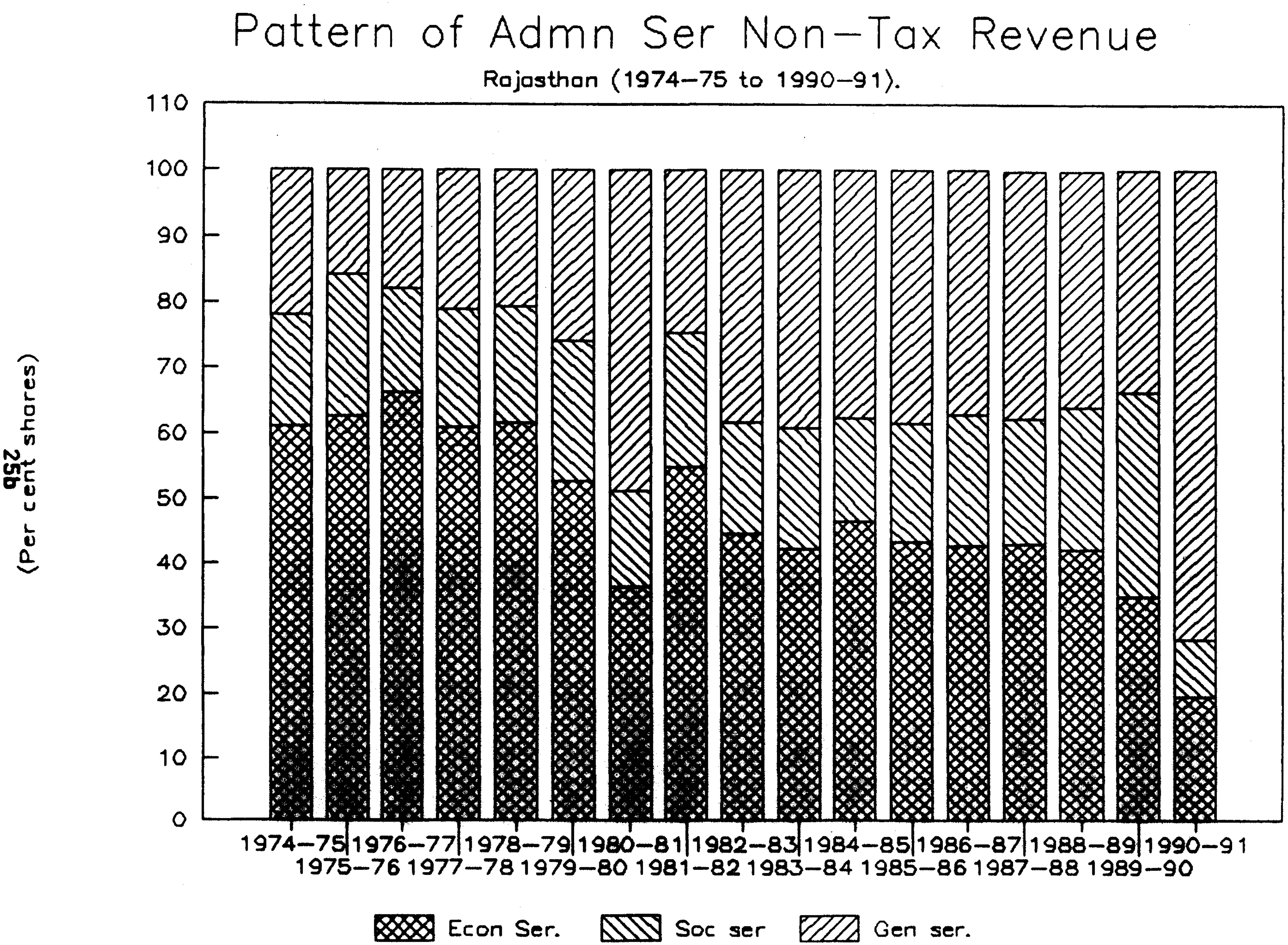
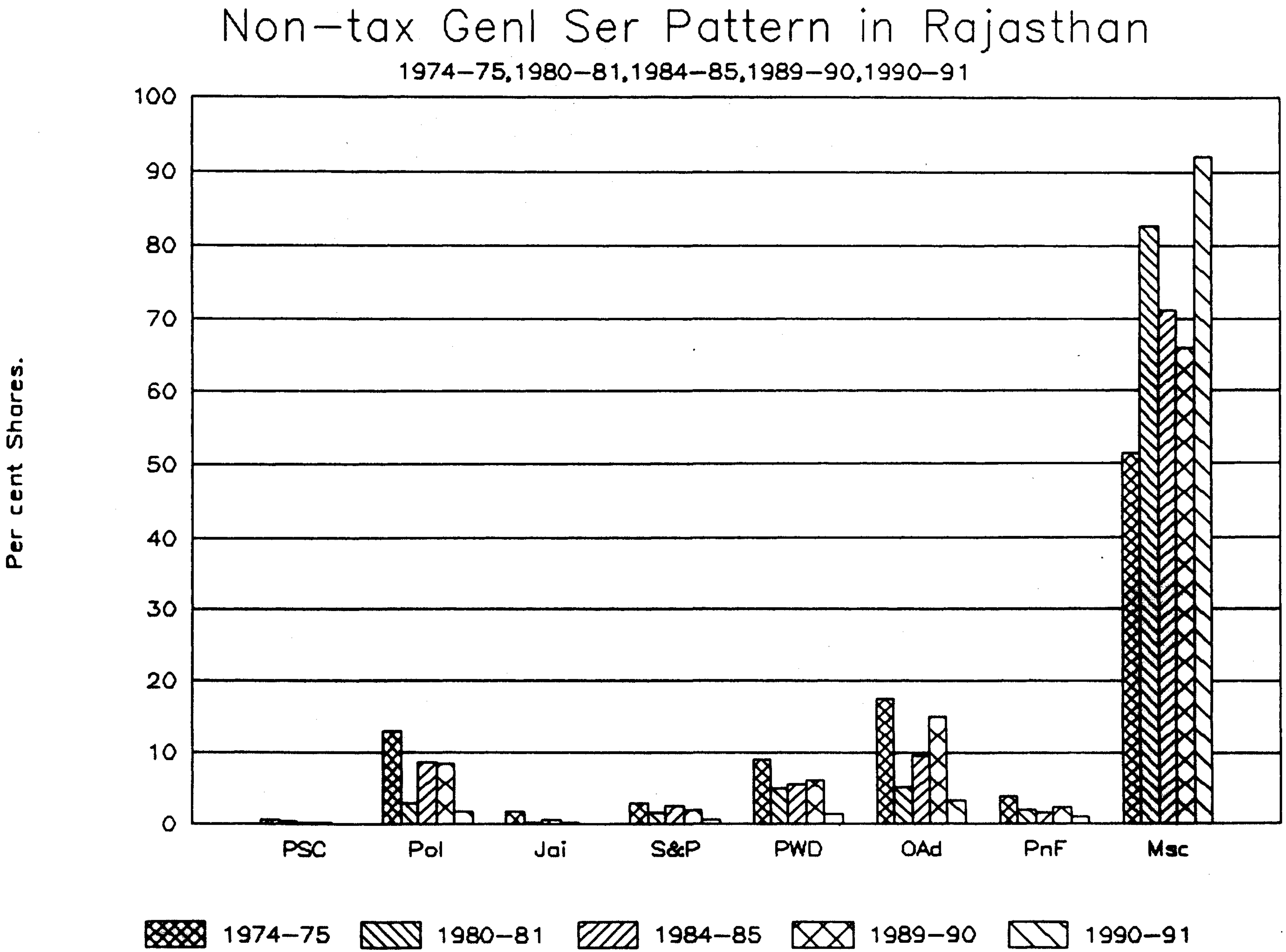
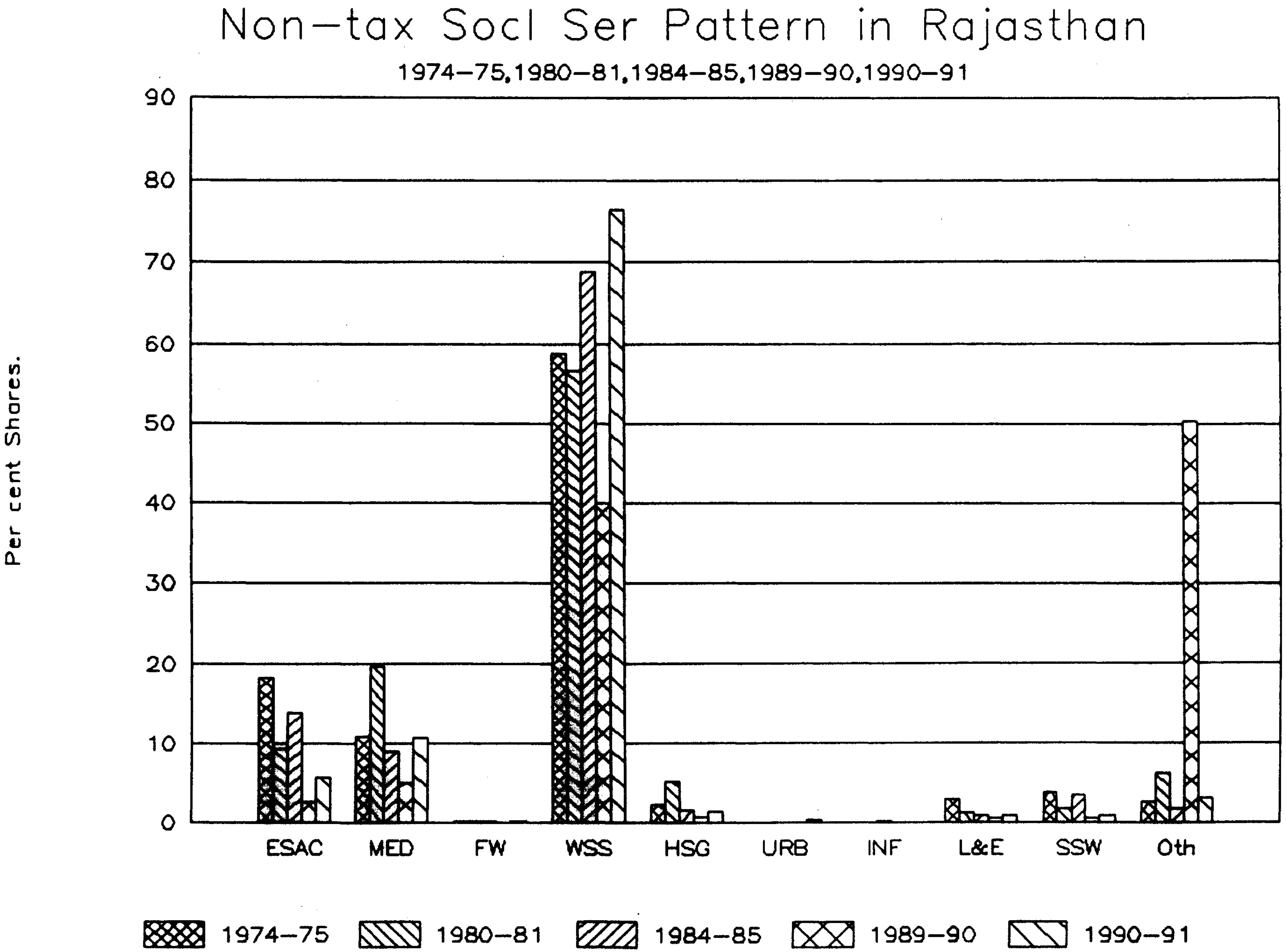

Pattern of Admn Ser Non-Tax Revenue
Rajasthan (1974-75 to 1990-91).
(Per cent shares)
110
100
90
80
70
60
50
40
30
20
10
0
1974-75
1975-76
1976-77
1977-78
1978-79
1979-80
1980-81
1981-82
1982-83
1983-84
1984-85
1985-86
1986-87
1987-88
1988-89
1989-90
1990-91
Econ Ser.
Soc ser
Gen ser.

Figure 3.3



Non-tax Genl Ser Pattern in Rajasthan
1974-75,1980-81,1984-85,1989-90,1990-91
Per cent Shares.
100
90
80
70
60
50
40
30
20
10
0
PSC
Pol
Jai
S&P
PWD
OAd
PnF
Msc
1974-75
1980-81
1984-85
1989-90
1990-91

Figure 3.4



Non-tax Socl Ser Pattern in Rajasthan
1974-75,1980-81,1984-85,1989-90,1990-91
Per cent Shares.
0
10
20
30
40
50
60
70
80
90
ESAC
MED
FW
WSS
HSG
URB
INF
L&E
SSW
Oth
1974-75
1980-81
1984-85
1989-90
1990-91

Figure 3.5

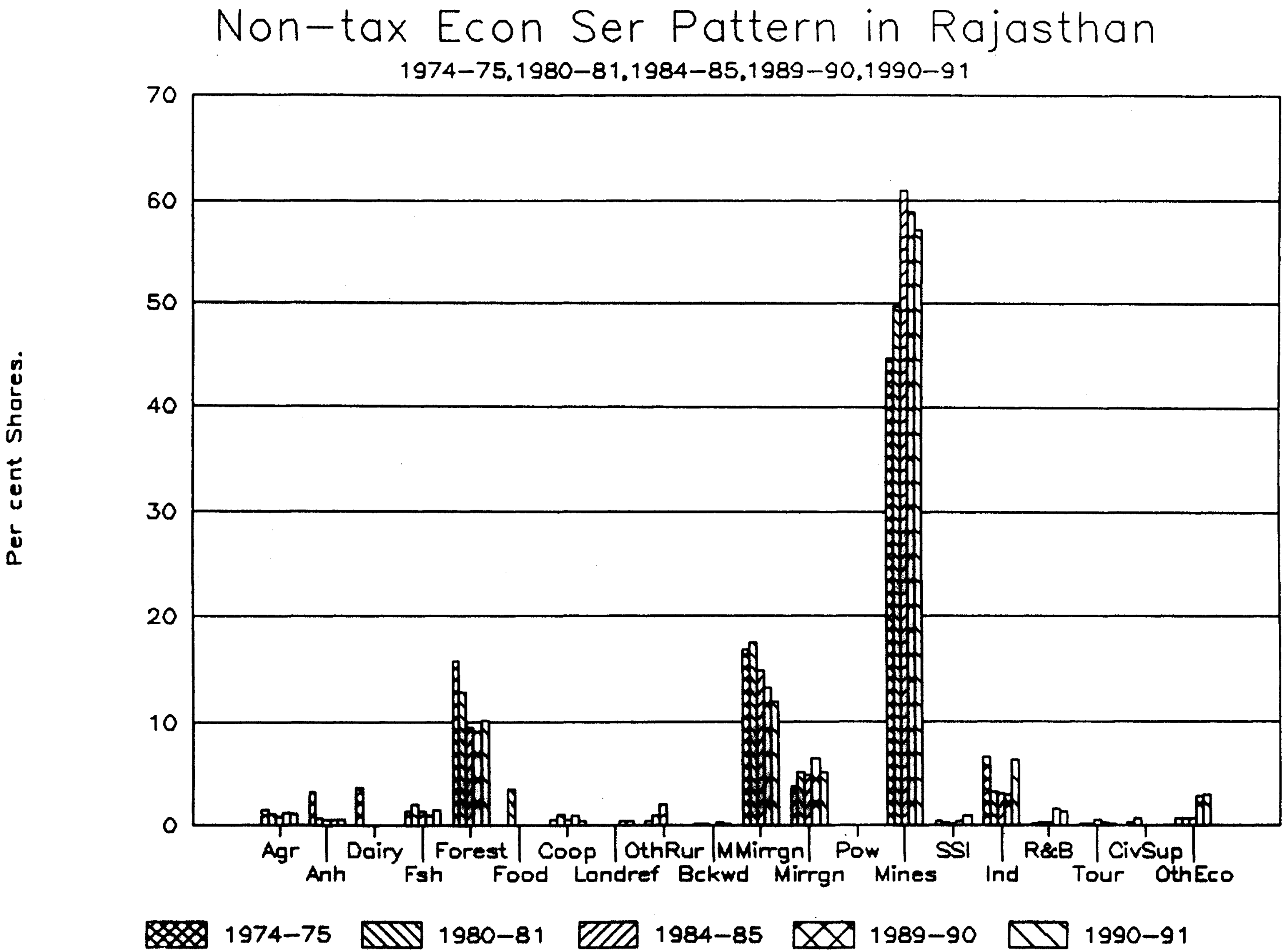
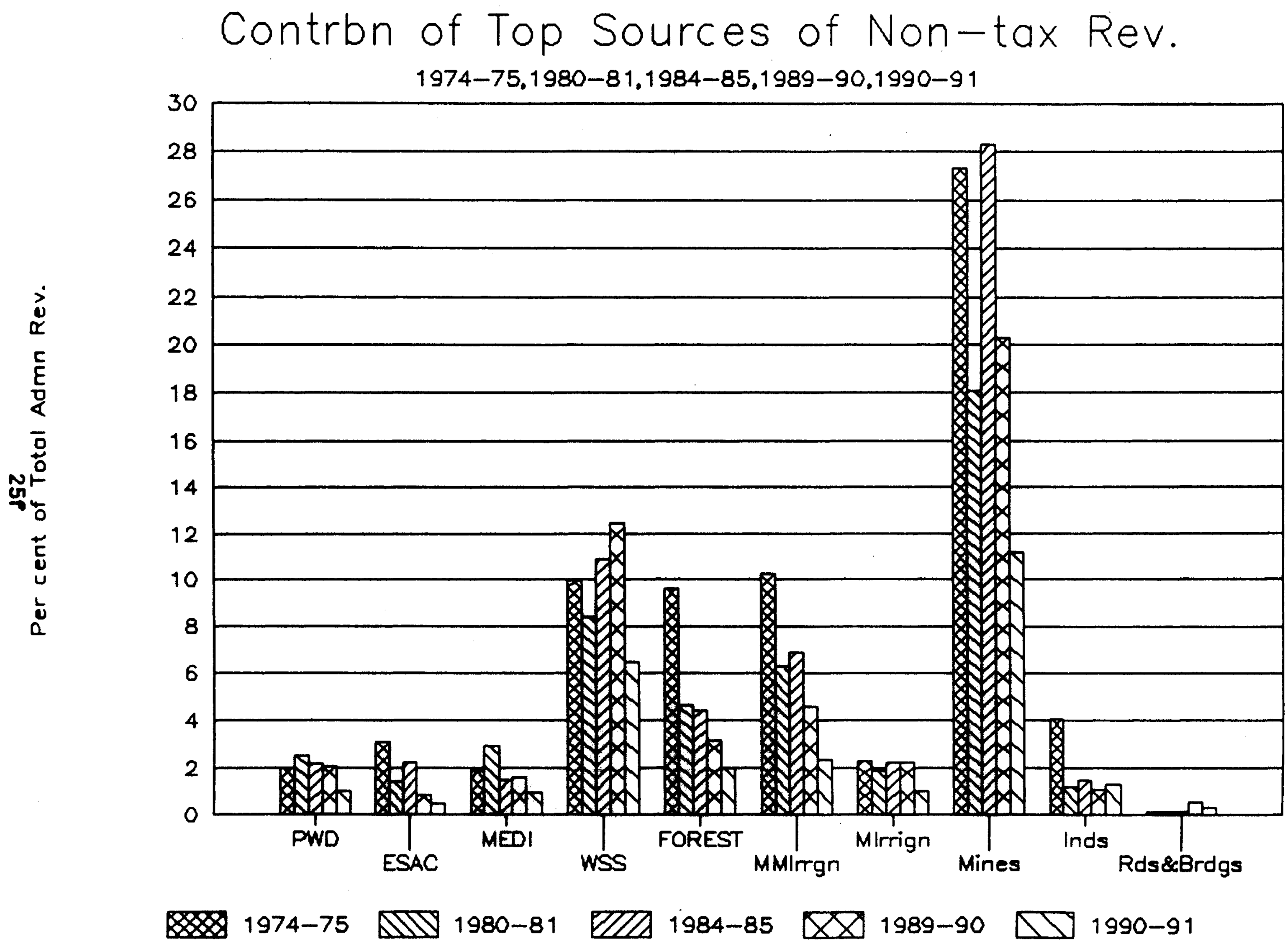

Non-tax Econ Ser Pattern in Rajasthan
1974-75,1980-81,1984-85,1989-90,1990-91
Per cent Shares.
70
60
50
40
30
20
10
0
Agr
Anh
Dairy
Fsh
Forest
Food
Coop
Landref
OthRur
Bckwd
MMirrgn
Mirrgn
Pow
Mines
SSI
Ind
R&B
Tour
CivSup
OthEco
1974-75
1980-81
1984-85
1989-90
1990-91

Figure 3.6


Contrbn of Top Sources of Non-tax Rev.
1974-75,1980-81,1984-85,1989-90,1990-91
Per cent of Total Admn Rev.
257
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
PWD
ESAC
MEDI
WSS
FOREST
MMIrrgn
MIrrign
Mines
Inds
Rds&Brdgs
1974-75
1980-81
1984-85
1989-90
1990-91

III

NORMS FOR NON-TAX REVENUES IN RAJASTHAN

1. Introduction

3.1.1 The analysis in the previous two chapters clearly brings out the need to improve the growth of non-tax revenues in Rajasthan. The fact is that as in the case of many States and countries in the world, most user charges for the government services remained low or non-existent in Rajasthan as they are assigned but a minor role in meeting the costs of providing government services. Instead, the resources for the purpose are sought to be mobilised through taxes, borrowings or deficit financing.

3.1.2 Traditionally, the dependence on sources other than user rates for meeting government expenditure is justified on the grounds that the goods and services provided by various governments are expected to be characterised by 'externalities' (benefits accruing to the society as a whole irrespective of being targetted at any individual or group), quality of being 'non-rival', (consumption or enjoyment of the services by one individual or one group not affecting the availability for the others), and 'scale economies' (production or supply of these goods not being viable for small private producers to operate efficiently). Since the benefits are expected to accrue to the society as a whole, the 'marginal cost pricing' principle that is generally applicable for pricing the goods and services of 'private' nature, would imply negligible or zero recoveries through user charges, and governments are expected to recover the costs either through taxes or public borrowing.

3.1.3 However, in actual practice, most goods and services provided by governments are not of 'pure public' nature. Even though a part of the benefits accrues to the non-targeted groups in the society, by and large, the targeted sections do enjoy better access to the benefits. Further, the "non-rival" condition is also not satisfied in many cases as the resources used for the generation of such goods and services are not everlasting. In the case of such 'quasi-public' or 'mixed' goods, the marginal cost pricing principle would justify the recovery of at least a part of the costs from the target groups through appropriate user charges, leaving the rest to be borne by the society through taxes and borrowing. As for the determination of the appropriate proportion of the cost recoveries through user charges, it can be intuitively related to the the degree of 'publicness' of such goods. Lower the publicness, higher should be the cost recovery through user charges.

3.1.4 These considerations yield a clue for the low revenue productivity of the non-tax sources in Rajasthan, namely, the possible under-pricing of government services over and above what is justified by the quasi-public nature of these goods and services. This chapter aims at measuring in general, the extent of such extra under-pricing if any, for different types of services provided by the Government of Rajasthan. In section 2, the basic assumptions made for measuring the public goods character of the government services are discussed. Section 3 is devoted to the empirical measurement of the degree of publicness, and in section 4 the scope for reviewing the existing user charges for the government services is examined in the light of the measured degree of publicness. Finally, in section 5 the other principles to be kept in mind while rationalising the rate-structures are discussed.

2. Optimal Recoveries on Quasi-Public Services

3.2.1 The model used here assumes that society and government are two separate entities with different objective functions although the latter can be regarded as merely an agent created to implement the programmes of the former. Let the society opt for public provision of a particular service because of its public good character. The marginal cost pricing approach implies that in general, collective spending of the society on provision of the service is viable as long as (a) the benefit to the society from the marginal expenditure exceeds the marginal cost, and (b) the marginal benefit of financing the service is atleast equal to the possible marginal benefit from other competing investments. The unit marginal cost to the society is the opportunity cost of allocating the resources for the provision of the service rather than for other investments. It can be proxied as the sum of market rate of interest and the expected operating and maintenance costs (including depreciation of the capital assets involved).

3.2.2 From the government's angle, however, the model assumes that the unit cost of providing the service depends on the amount of funds the society is willing to keep at the disposal of the government as well as its form of financing. Thus the unit cost is no longer an opportunity cost. For example, if the society is convinced of the usefulness of the service to it, it may be willing to be taxed more and thereby keep more funds at the disposal of the government. Similarly, the decision as to the pattern of financing, *viz.*, how much through taxation and how much through public borrowing, also rests with the society. Thus the unit cost of providing the service faced by the government could be different in nature from that of the society and in fact could be even lower than the costs faced by the entire society. In particular, government's cost is zero (or negligible) on that portion of expenditure which is financed through taxation. Similarly, on the debt-financed portion of expenditure, the unit cost is the interest rate on which government is allowed to borrow which may be lower than the market interest rate. However, the operating and maintenance costs remain the same. Thus a part of the total cost of providing the service is absorbed by the society in the form of taxation and subsidised lending to the government.

4.2.3 The extent of cost-absorption by the society, however, depends on the degree of publicness associated with the service. In the case of 'pure public' services, the society absorbs the full cost, while in the case of pure private services, the willingness to absorb the costs is, however, zero.

3.2.4 The extent of the public good character associated with a particular type of government service is not absolute and by and large, depends on society's collective preferences expressed through the voting mechanism and is reflected in the budgetary allocations. However, to the extent the voting mechanism is prone to lags and imperfections, actual allocations in the government budget may not always accurately reflect the society's preferences. Production inefficiencies may also creep in, pushing up the costs of providing the service. Thus, the actual cost to the government of providing a public service can be viewed as comprising three components: (i) a budgetary allocation from the general pool of government resources that reflects society's willingness to absorb the costs of providing the service, (ii) actual cost recoveries through user charges, and (iii) unrecovered costs due to various market inefficiencies as also due to imperfections in the voting mechanisms and the associated lags. The magnitudes of the first two components are complementary to each other and depend on the society's views regarding the publicness of the service. The costs due to the third component, clearly, need to be minimised by suitably adjusting the user charges.

3.2.5 An empirical exercise was conducted to segregate the different components in respect of each of the selected government services that are also the major non-tax revenue sources in the State. The aim was two-fold: (a) to measure for each service, the over all preferences of the society regarding the choice between financing the costs through budgetary allocations and through user charges, and (b) to compare the actual cost recoveries through user charges with the desired levels. The desired levels of cost recoveries through user charges in Rajasthan were also compared with those in the other States of the country.

3.2.6 An important assumption underlying the empirical exercise was that the degree of publicness is not absolute but depends on the preferences of the society. The recovery preferences were assumed to be conditioned by various socio-economic factors as well as other unidentifiable factors specific to each region (in this case the State). Given this assumption, the desired extent of cost recoveries in respect of the selected non-tax sources are derived empirically from the past behavioural trends for the fifteen major States in the country. The exercise assumes further that, firstly, the desired extent of cost recovery in respect of each service differs from State to State owing to differences in the population density, level of living, stage of development, as also due to various socio-cultural factors; secondly, the desired cost recovery, net of the effects of the State specific factors is either fixed for the last five years or has been changing in a fixed pattern;. and thirdly, the effects of production inefficiencies and voting imperfections do not have any fixed pattern and show up as random fluctuations. Using the appropriate econometric techniques, the random fluctuations were segregated and for each of the 15 major States including Rajasthan, the desired recoveries through non-tax rates in respect of the ten services were estimated (from a fixed effects type of regression equation fitted to the 5-year, 15-State panel observations). The dependent variable is the proportion of non-tax revenue in the total annualised expenditure (sum of interest and depreciation costs and revenue expenditure), and the independent variables are selected from population density, per capita income, proportion of relevant sectoral income in total State Domestic Product, urbanisation, literacy, availability of medical facilities, and so on. The details of the model are given in the Appendix to this chapter.

3. Desired and Actual Recoveries and Norms for Non-tax Rate Revision

A. Actual Recoveries

3.3.1 The recoveries through non-tax revenues as a ratio to corresponding expenditures (revenue expenditure + annualised capital expenditures) by each of the major sources are shown in *table 3.1* for the two years, 1985-86 and 1990-91. There is a wide variation in the recovery rates among different functional categories. The rate varies from as low as 0.42 per cent in the case of education, sports, arts and culture sources to as high as 183.2 per cent in the case of mines and minerals. In general, the ratios for social services are low and negligible compared to the economic and general categories. Even within each broad category of services, the recovery ratios show considerable variation. For example, the ratio for education, sports, art and culture is lower than that of medical health. Within the economic categories, non-tax recovery rates from irrigation services are the lowest, while the highest recovery is from mines and minerals and forestry categories. The wide variation among the ratios and the fact that the ratios are lower for social services as compared to other services reflect the society's perception regarding the degree of public good characteristic underlying the respective services.

3.3.2 Comparing column 1 and column 2 of the table shows a marked decline during the period from 1985-86 to 1990-91 in the recovery rates in respect of the selected categories. Major declines have occurred in respect of the services of public works department, mines and minerals, forestry, minor irrigation and industries, while the decline is not so glaring in respect of the social services, and major and medium irrigation services. The exceptions for the declining trend are water supply and sanitation services. But here too the improvement is only marginal.

B. Desired Recovery Rates

3.3.3 To what extent the actual recovery rates reflect the desired rates in Rajasthan? And to what extent the recovery preferences of Rajasthan differ from the rest of the country? To answer these questions without ambiguities, fluctuations in the actual recovery rates that might not reflect the preferences are separated out through econometric tools. The desired recovery rates thus estimated for the major administrative services in the State along with corresponding all-State average preference levels are shown in *table 3.2*. For comparison the actual ratios are also shown along.

3.3.4 The first two columns of the table bring out the scope for rationalisation of the non-tax rates or user charges in order to realise the State's own desired recovery rates. The fact that the desired recovery rates are higher than the actuals in many cases, indicates the existence of the scope for upward revision of the rates with a view to minimise certain kinds of inefficiencies mentioned earlier. The need for reviewing the rates is imminent in the case of mines and minerals head where the actual recovery rate falls short of the desired rate. In the case of public works also the gap is over 1 per cent. In other cases, the gap is either negligible or only slightly higher than the actual rates.

3.3.5 An important assumption made while deriving the desired rates of recovery is that differences exist between the States' perceptions regarding the degree of publicness associated with different services, and that these differences are conditioned by various socio-economic factors influencing the non-tax recoveries. Even after accounting for the variations in terms of differences within the identified socio-economic factors, the empirical exercise shows substantial variation in the desired recovery rates across the States that could not be accounted in terms of known socio-economic factors. Column 3 of the table shows the desired recovery rates of a representative State (derived as averages of the State-wise desired recovery rates) to enable a comparison. In a way the gap between Rajasthan's and that of the representative State if any, can be regarded as indicative of further scope for revising the rates.

3.3.6 Comparing columns 2 and 3, it can be noticed that the desired recovery rates in Rajasthan are generally higher than the representative State except in respect of public works, water supply and sanitation, and minor irrigation. In all other cases the State's recovery rate falls short of the all-India rate. The gap is more prominent in the case of mines and minerals and forestry.

3.3.7 A more stringent norm for evaluating the adequacy of the recovery rates of Rajasthan would be to compare with those of the 'best practising' State or top five best practising States. For this purpose, the highest (or top five higher) preference among the major States for each of the selected heads is taken as a norm. For example, for the major head education etc, Kerala's recovery rate (desired) happens to be the highest among the major States and therefore is taken as a norm. In some cases, Rajasthan's own rates turned out to be the highest among the States. Examples are public works, water supply and sanitation, and minor irrigation. Using this more stringent set of norms it can be noted that the recovery rates of Rajasthan in respect of many economic services, particularly, mines and minerals, leave much to be desired.

C. Setting of Norms for Non-tax Rates

3.3.8 The empirical exercise carried out facilitates formation of three types of 'norms' for reviewing the non-tax rates in Rajasthan. The first type indicates the extent of rate revision required for each source so that the State's own desired recovery rates are achieved. The second type indicates the extent of the State's desired recoveries falling short of the all-State average preferences. The first type can be regarded as short-term and the second type can be kept as long-term targets for rate revisions. The norms for rate revisions are as shown in column 6 of the *table 3.2*. Substantial rise in the non-tax rates is recommended for mines and minerals, housing, major and medium irrigation and small scale industries. For social services such as education, sports, art and culture the recommended rise is a nominal 1 to 2 per cent. For housing a 5 per cent rise is suggested. Among the economic services a 7 per cent rise in the major and medium irrigation and a 4 per cent rise in the mineral royalty rates can be envisaged.

4. Other Principles of Rate Fixation

3.4.1 In addition, the available literature on the subject shows that the rate fixation should also take into account the following principles:

3.4.2 **Equity:** The allocative efficiency objective also implies equalisation of the benefit from the incremental quantity (and quality) to each segment of the society. If the marginal benefits are not equal, then the society's total welfare can be increased by reassigning the service usage among different sections of the society. In practice this principle leads to differential charges. The differentiation could be on the basis of priority for use, or on the basis of the type of users (to lighten the burden of certain sections of the society). Any financial subsidies should be transparent and be justified by arguments for special treatment.

3.4.3 **Consumer Acceptability:** Any pricing system must be easily understood and acceptable to the consumers of the services. This naturally rules out complex pricing systems even though they satisfy the other principles.

3.4.4 **Administrative feasibility:** The rate-structure should not impose large administrative costs. This puts effective limits on the rate differentiation for achieving the equity and efficiency objective.

3.4.5 **Environmental considerations:** The rate-structures should wherever possible, reflect ecological, recreational and environmental uses of the services. A pricing system should promote the sensible use of environmental resources.

3.4.6 **Other Government policies:** It is well recognised that due regard has to be given to other government policies (general economic, agricultural, labour and employment or energy policies).

Table 3.1

Ratios of Non-tax Revenues to Government Expenditure by corresponding Major Functional Categories (1985-86 to 1990-91)

(per cent)

		1985-86	1990-91
1	Public Works Department	114.46	29.29
2	Housing	6.03	4.63
3	Education, Sports, Art&cult.	1.57	0.42
4	Medical and Public Health	3.34	3.08
5	Water Supply and Sanitation	16.01	17.52
6	Forestry	51.06	27.08
7	Major and Medium Irrigation	8.03	5.49
8	Minor Irrigation	34.51	11.08
9	Mines and Minerals	257.60	183.20
10	Industries	25.65	19.75

Table 3.2

Actual and Desired Cost Recovery of Different Services

	Source	Actual recov. ratio	State's estim. (regm) ratio norm1	All-State average estim. ratio norm2	Best-prac State's estim. ratio norm3	Recom-mended norm	Recom-mended rise in the present rate(%)
		1	2	3	4	5	6
1	Public works incl.roads & bridges	8.66	8.48	7.36	9.07	9.07	1
2	Housing	2.15	1.72	3.95	7.58	7.58	5
3	Education, sports, art and culture	0.42	0.40	1.97	7.07	1.97	2
4	Medical and public health	2.40	2.51	4.47	8.37	4.47	2
5	Water Supply and Sanitation	17.52	18.07	4.30	18.07	18.07	1
6	Forestry	27.08	22.82	74.96	197.88	27.08	0
7	Major and medium Irrigation	5.49	6.02	4.62	11.78	11.78	7
8	Minor irrigation	11.08	10.80	3.24	10.80	10.80	0
9	Industries	19.75	11.93	12.41	62.26	19.75	0
10	Mines and Minerals	173.20	188.27	2185.06	4305.59	188.27	4

Appendix to Chapter III

BASIC MODEL USED FOR DERIVING OVERALL NORMS OF NON-TAX REVENUES IN RAJASTHAN

3.A.1 The model developed here assumes that society and government are two separate entities with different objective functions although the latter is merely an agent created to implement the programs of the former. Let the society opt for government provision of a particular service because of its public good character and let the generating function for provision of a service be $Q_t = f(K_{t-1}, L_t, M_t)$ where Q denotes the output, L and M are labour and material inputs and K the capital. Also, let the cost equation be, $C_t = wL_t + mM_t + qI_t$ where w, m and q denote the respective prices of inputs, and the capital accumulation process be, $I_t = K_t - (1-\delta)K_t$, δ being the economic rate of depreciation of the capital stock.

3.A.2 The problem of the society is to maximise the service with minimum cost per unit. Since the generation of the service includes fixed capital costs, the maximisation is over the life time of K. Given the capital accumulation process, this would imply maximisation of

$$\phi = \sum_{t=0}^{\varphi} [pQ_t - wL_t - mM_t - qI_t].(1+r)^{-t} \qquad (1).$$

The provision of the service is maximum when the inputs are priced at their respective marginal products, in each period. The social marginal cost would be,

$$MC = (r+\delta)q.dK + w.dL + m.dM \qquad (2).$$

The unit marginal cost to the society can be proxied as the sum of market rate of interest and the expected operating and maintenance costs (including depreciation of the capital assets involved). At this point the difference between the total benefit and the total cost to the society resulting from a service is optimum.

3.A.3 Since the service is assumed to be quasi-public, society may be willing to finance only a part of the costs through taxation and public borrowing, leaving the rest to be financed through user charges levied and collected by the government. Let be the proportion of the cost society is willing to bear.

3.A.4 From the government's point of view, the unit cost of providing the service could be different. In particular, government's cost is zero (or negligible) on that portion of expenditure which is financed through taxation. Similarly, on the debt-financed portion of expenditure, the unit cost is the interest rate i at which government is allowed to borrow which may be lower than the market interest rate r. The cost of funds financed through the user charges is the market rate of interest. Let β_1, and β_2 be the proportions of expenditure financed through taxation and public borrowing, and the rest through user charges. The minimum return expected on the total funds at the margin would be the weighted sum of the respective returns and the corresponding shares of depreciation besides the working expenses. That is,

$$MC_g=[\beta_2 i(1+\delta i/r)+(1-\beta_1-\beta_2).(r+\delta)]q.dK+w.dL+m.dM \qquad (3).$$

Thus, only a part (1-α) of the MC, equaling the sum of the interest and depreciation cost and the recurring expenses is borne by the government. The remaining cost is absorbed by the society in view of the public good character of the service. The portion absorbed by the society can be derived as

$$MC_s = [\beta_1.r+\beta_2.(r-i)+\delta(\beta_1+\beta_2.(r-i)/r)]q.dK \qquad (4).$$

3.A.5 From equations (2) and (3) the degree of publicness of the service based on society's preferences can be measured as

$$\alpha = 1 - \frac{[\beta_2 i(1+\delta i/r)+(1-\beta_1-\beta_2).(r+\delta)]q.dK+w.dL+m.dM}{(r+\delta)q.dK+w.dL+m.dM} \qquad (5).$$

3.A.6 The extent of cost-absorption by the society, however, depends on the degree of publicness associated with the service. In the case of pure public services, society absorbs the full cost, while in the case of private services, the willingness to absorb the costs is zero. The extent of the pubiic good character associated with a particular type of government service by and large, depends on society's collective preferences expressed through the voting mechanism and is reflected in the budgetary allocations. However, to the extent the voting mechanism is prone to lags and imperfections, actual allocations in the budget may not always accurately reflect the preferences of the society. Besides, production inefficiencies may also creep in, pushing up the costs of providing the service. Thus, the actual cost of providing a public service can be viewed as composed of three components: (i) a budgetary allocation from the general pool of government resources that reflects the willingness to absorb the costs of providing the service, (ii) actual cost recoveries through user charges, and (iii) unrecovered costs due to various market inefficiencies as also due to imperfections in the voting mechanism and the associated lags. The magnitudes of the first two components are complementary to each other and depend on the society's view regarding the publicness of the service. The costs due to the third component, clearly, needs to be minimised by suitably adjusting the user charges.

3.A.7 The degree of publicness is taken to be reflected in the average 'desired' rate of recovery. The recovery preferences are assumed to be conditioned by various socio-economic factors as well as other unidentifiable factors specific to each State. The empirical exercise is aimed at deriving the desired extent of cost recoveries from the past behavioural trends in fifteen major States in the country, in respect of the ten selected non-tax sources. The exercise assumes that firstly, the desired extent of cost recovery in respect of each government service differs from State to State owing to differences in the population density, level of living, stage of development, as also due to various socio-cultural factors, secondly, the desired cost recovery, net of the effects of the State specific factors is either fixed for the last five years or has been changing in a fixed pattern, and thirdly, the effects of production inefficiencies and voting imperfections do not have any fixed pattern and show up as random fluctuations.

3.A.8 Using the appropriate econometric techniques, the random fluctuations are segregated and for each of the 15 major States including Rajasthan, the desired subsidy levels in respect of the ten services are estimated. Basically the desired recovery rates pertaining to a service in each of the 15 major States are estimated from a fixed effects type of regression equation fitted to the panel data spanning 17 years from 1974-75 to 1990-91. The dependent variable is the proportion of non-tax revenue in total expenditure, and the independent variables are selected from population density (PDEN), per capita income (PCSDP), proportion of relevant sectoral income in total State Domestic Product (SDPCON for construction, SDPAGR for agriculture, SDPMIN for minerals), urbanisation(URBN), literacy(LIT), availability of medical facilities(HBEDS), area under forests (FORAREA) etc. The best specifications of the equations apart from the trend and State-wise fixed dummy variables are as follows.

Public Works Department=f{PCSDP,SDPCONS}
Education, Sports, Art and Culture=f{PCSDP,URBN}
Medical and Public Health=f{PCSDP,HBEDS}
Water Supply and Sanitation=f{PCSDP,URBN}
Housing=f{PCSDP,URBN}
Forestry=f{PCSDP,FORAREA}
Major and Medium Irrigation=f{PCSDP,SDPAGR}

Minor Irrigation=f{PCSDP,SDPAGR}
Mines and Minerals=f{PCSDP,SDPMIN}
Industries=f{PCSDP,SDPAGR}

3.A.9 The estimated equations are as shown in *table A3.1*. The estimated values of the dependent variable is taken to be the desired recovery rate for the service provided. The average of the estimated values over the 15 States is taken as the all-India average desired recovery rate.

Table A3.1

Regression Results Used for Deriving Norms for Non-tax Recoveries

	Non-Tax Revenue Major Head	Explanatory variables												
		Constant	PCSDP	LIT	URBN	SDPCON	HBEDS	SDPAGR	POV	SDPMIN	TREND	R^2	SEE	DW-Statistical
1	Public Works Department	-0.0408				0.0183					-0.0033	0.8669	0.0212	2.2653
2	Education, Sports,Art & Culture	0.5650			-0.0180						0.0019	0.8110	0.0091	1.6075
3	Medical & Public Health	0.1112					-0.0000				-0.0024	0.6936	0.0130	2.3960
4	Family Welfare	-0.0060		0.0014							-0.0057	0.7604	0.0057	2.1548
5	Water Supply & Sanitation	1.1140			-0.0426						0.0103	0.9270	0.0147	1.8978
6	Housing	1.1826			-0.0368						0.0065	0.6093	0.2710	2.0583
7	Agriculture	0.7168	-0.0029					-0.0029	-0.0047		-0.0164	0.9549	0.0803	2.0904
8	Forestry	1.0166	-0.0004								0.0745	0.8881	0.2251	1.8142
9	Major and Medium Irrigation	-0.0120						0.0003			0.0014	0.7514	0.0185	2.5985
10	Minor Irrigation	0.7717						0.0022			-0.0073	0.7531	0.2302	2.2474
11	Mines & Minerals	113.5505	-0.0026							21.5832	4.7915	0.7515	35.7921	2.0357
12	Small Scale Industries	-0.0125	0.0001								-0.0036	0.7192	0.5401	2.0561
13	Industries	0.0204						-0.0125			0.0698	0.3644	0.2496	2.5607

Table A3.2

Regression Results used for Deriving Norms for Non-tax Recoveries

Non-Tax Revenue Major Head	State - wise Dummy Variables						
	APR	ASM	BIH	GUJ	HAR	KAR	KER
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Public Works Department	0.0352	0.1217	-0.0382	0.0472	0.0026	0.0237	-0.0605
2 Education,Sports,Art & Cult.	-0.1558	-0.4040	-0.3692	0.0130	-0.1962	-0.0568	-0.2126
3 Medical and Public Health	-0.0259	-0.0478	-0.0412	0.0232	0.0146	-0.0155	-0.0231
4 Family Welfare	0.0120	-0.0022	0.0401	-0.0100	-0.0081	0.0133	-0.0521
5 Water Supply and Sanitation	-0.2400	-0.8027	-0.7161	0.1463	-0.3412	-0.0117	-0.4236
6 Housing	-0.3010	-0.7315	-0.7630	0.0868	-0.3659	-0.0455	-0.4295
7 Agriculture	-0.1359	-0.2222	-0.1133	-0.2667	-0.1929	-0.1706	-0.2026
8 Forestry	0.1583	-0.6247	0.4988	-0.1140	0.3097	-0.0154	0.4218
9 Major and Medium Irrigation	0.0165	-0.0055	0.0009	0.0212	0.0695	0.0323	0.0066
10 Minor Irrigation	-0.0325	-0.0762	-0.0640	-0.0356	-0.0984	-0.0622	-0.0195
11 Mines and Minerals	-208.5405	-223.7936	-201.1470	-196.4918	-162.5034	-184.3823	-179.6780
12 Small Scale Industries	0.0201	0.0073	0.0228	-0.0469	0.0176	0.2939	0.0073
13 Industries	-0.1138	0.7887	-0.0817	0.0158	0.2750	-0.0558	-0.1529

Table A3.2(Contd')

Regression Results Used for Deriving Norms for Non-tax Recoveries

	Non-Tax Revenue Major Head	State - wise Dummy Variables						
		MPR	MAH	ORI	PUN	RAJ	TND	UPR
		(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Public Works Department	0.1375	-0.0076	-0.0118	0.0387	0.0621	-0.0053	0.0646
2	Education,Sports,Art & Cult.	-0.2446	0.0732	-0.3931	-0.0980	-0.2042	0.5871	-0.2692
3	Medical and Public Health	0.0126	-0.0378	-0.0359	-0.0060	-0.0403	-0.0099	-0.0376
4	Family Welfare	0.0187	0.0155	0.0127	-0.0045	0.0217	-0.0078	0.0283
5	Water Supply and Sanitation	-0.4279	0.3595	-0.7481	-0.0030	-0.1712	0.2649	-0.5265
6	Housing	-0.3836	0.2078	-0.8143	-0.0856	-0.4008	0.1570	-0.5368
7	Agriculture	1.1765	-0.1839	-0.0976	-0.1816	-0.1824	-0.0403	-0.1147
8	Forestry	1.2608	0.4905	0.8196	0.6944	-0.7864	0.2508	0.1777
9	Major and Medium Irrigation	0.0077	0.0357	0.0121	0.0956	0.0372	-0.0011	0.4050
10	Minor Irrigation	-0.0625	-0.0110	-0.0612	-0.1197	0.0209	0.0663	-0.4508
11	Mines and Minerals	-247.7761	-184.9461	-236.6562	-169.0656	-211.0090	-172.6975	-187.4102
12	Small Scale Industries	-0.0657	0.0330	0.0040	-0.0353	0.0144	0.0471	0.0068
13	Industries	0.3240	-0.1893	-0.0375	0.5362	0.0040	-0.2077	-0.0163

IV

ANALYSIS OF NON-TAX RATE STRUCTURES: MINES AND MINERALS, IRRIGATION, WATER SUPPLY AND SANITATION

1. Introduction

4.1.1 The previous chapter reflected on the scope for reviewing the non-tax rate structures. In this and the next chapters, an attempt is made to review the user-charge rates in Rajasthan keeping in mind the overall scope indicated by the results of the empirical exercise, as also the other aspects such as equity and administrative feasibility.

4.1.2 By far, the most important individual sources of non-tax revenues in the State have been mines and minerals, water supply and sanitation, and major and medium irrigation. In 1989-90, these three have accounted for about 37.35 per cent of the administrative non-tax revenues. In view of their revenue importance, they deserve a more detailed analysis of the base and the rate-structure. Accordingly, these three sources are taken up first, leaving the remaining sources to be covered in the subsequent chapters.

2. Mines and Minerals

4.2.1 Rajasthan is one of the mineral rich States in the country and derives substantial non-tax revenue from the mineral sources. However, the growth of the revenue from this source has not been commensurate with the growth of the income originating from the mineral sector in the State. The recovery rate also, as noted in the previous chapter, is lower as compared to the other mineral rich States such as Assam, Maharashtra, Madhya Pradesh, and West Bengal.

4.2.2 The revenue under this major head comprises receipts on account of lease/royalty in respect of major and minor minerals, and sale proceeds of certain minerals whose mining operations are conducted by the Government itself, in particular, the rock phosphate mined at Jhamarkotra and limestone at Sanu (*table 4.1*). Till 1979-80, the revenue also included the sale proceeds of coal mined at Palana mines.

4.2.3 Of the two components, the most reliable and growing source has been the revenue from lease and royalty rates. The share of this component which was roughly 43 per cent of the revenue from the major head in 1985-86, has gradually risen to 79 per cent by 1990-91. The annual growth of this component has been over 22 per cent per annum during the period.

4.2.4 As against this, the growth of the sale proceeds from the mining operations by the State government has been going down over the years, apparently due to their diminishing prospects. The sale proceeds have declined from Rs 25 crore in 1986 to about Rs 7 crore by 1990, that is, an average fall of 20 per cent per annum. Consequently, the overall growth in the total revenue from the head has remained low at around 13 per cent per annum.

A. Revenue from the Sale Proceeds

4.2.5 Most of the revenue from the sales component comes from mining of the rock-phosphate deposits located at Jhamarkotra in Udaipur district. The mining operations had started in 1969-70 in collaboration with the Rajasthan State Mines & Minerals Limited (RSMML), and the sale proceeds from this source dominated the mineral revenue until as late as 1986. However, over the years, the high grade component of the ore had been gradually exhausted. Besides, apparently there were certain difficulties in marketing and the State government was often forced to lower the selling price. The sale proceeds of this mineral has fallen from around 5.17 lakh tonnes in 1983-84 to 2.5 lakh tonnes by 1987-88. But for the purchasing obligation of the RSMML to the tune of 1 lakh tonnes per year, the fall in the sale proceeds would have been worse. From 1988 onwards, the entire mining operation in respect of this mineral has been handed over to the RSMML, which further reduced the revenue yield. Thus the low recovery rate of the major head appears to be mainly due to the dwindling sale proceeds from the mining operations of rock phosphate etc undertaken by the State Government.

B. Analysis of Growth in Royalty Revenue

4.2.6 The low and falling overall recovery rate can only be reversed through efforts to compensate the fall in the sale proceeds component by enhancing the other component, namely, the royalty revenue. This requires modifications in the existing lease/ royalty rates, or drastic reductions in the corresponding expenditure under this major head. In order to assess the scope for such efforts, it is necessary to have a closer look at the revenue growth of the different components of the royalty revenue. We begin by decomposing the growth into base growth and that due to changes in the royalty rate structure, and decompose the base growth in turn, into real base growth and that due to price changes. We also conduct a further disaggregated analysis to identify individual items in respect of which concrete recommendations can be given.

The Base-Price Decomposition

4.2.7 The production base, namely, the value of mineral produce in the State has gone up from Rs 281.22 cr. in 1986 to Rs 497.51 cr. in 1990, the growth rate averaging at about 15 per cent per annum (*table 4.2*). As against this, the growth of lease/ royalties component during the same period at 22 per cent per annum appears to be impressive.

4.2.8 Much of the growth, however, is due to the price rise. By splitting the base (value of production at current prices) into real base (quantity) and the price components, it can be seen that roughly 10 per cent of the growth in the value of production is accounted for by the price changes while the real base grew only at 5 per cent per annum. Thus the 22 per cent growth in the royalty revenue adequately covers the rise in the mineral prices. However, there are notable differences between the growth of revenues from major and minor minerals which provide some clues for rate revision.

4.2.9 Roughly two-thirds of the revenue from royalties comes from the minor minerals and the rest from the major minerals (*table 4.3*). As compared to the 15 per cent growth in the total mineral production, that of major minerals has been only 10 per cent per annum resulting in an increase from Rs 143.9 cr. in 1986 to Rs 247.8 cr. in 1990. In contrast, the production of the minor minerals has been growing at a faster rate of 20 per cent resulting in an increase from Rs 137.3 cr. in 1986 to Rs 325.8 cr. in 1991. However, the growth difference in real terms has been marginal. Thus it is the price factor that explains the wide nominal growth difference between the major and minor minerals. As can be seen from *table 4.2*, the prices of minor minerals in the State have almost doubled between 1986 and 1990, while the prices of major minerals (relevant for the State) have increased only by 1.5 times.

C. Royalty and Lease Rate-Structure - An Evaluation

4.2.10 A comparison of the royalty rate-structures and the changes therein, however, tells a slightly different story. For this purpose, royalty rates of only important items of major and minor minerals are considered. Although the State produces as many as 50 types of major minerals, about 90 per cent of the production (sale value) of the major minerals is accounted for by 6 items: copper-ore, gypsum, zinc ore, limestone, rock-phosphate and soapstone. Similarly, although the State produces about 23 types of minor minerals, about 95 per cent of the production is accounted for by 6 items: brick earth, kankar bajri, limestone (of burning type), limestone (of building type), marble, masonry stone and sandstone. In fact, the State produces roughly 50 per cent of the minor minerals in the country.

4.2.11 The minor minerals are classified into 18 groups for the purpose of fixation of royalty rates (*table 4.4*). In all, there are about 25 rates of royalty the fixation of which takes into account the type, quality, size as well as the use of the mineral product. Rates differ for products such as sand stone, lime stone, marble and granite. For example, the rate for the sand stone obtained from Bharatpur, Dhaulpur, Sawaimadhopur and Kota is higher than for sandstone obtained from other places. Similarly, the royalty rates differ among marble slabs, blocks, irregular blocks of specified dimension and kandas having dimension of not more than 35 cm. The royalty rates for the most revenue-yielding items are separately shown in *table 4.4*.

4.2.12 The rates of royalty in respect of major minerals, fixed by the Central government, are revised roughly once in five years, while the rates for the minor minerals fixed by the State government are revised almost every year. However, what is important is the magnitude of the rate revision. Most prescribed royalty rates being 'specific' in nature,the revenue growth does not automatically grow with the rise in the mineral prices. Therefore, it is useful to see to what extent the revenue growth resulting from the rate-structure revisions covers the mineral price-rise.

4.2.13 The average royalty rates for the major and minor minerals, and the implied indices of change between 1986 to 1991 are shown in *table 4.5*. The indices show that on average, royalty rates have increased approximately by 2.5 times during the period and the change has been the same both for the major and the minor minerals. However, as seen from *table 4.1* the prices of minor minerals in the State have almost doubled between 1986 and 1990, while prices of major minerals (relevant for the State) have increased only by 1.5 times. These trends suggest that the revision in the royalty rates in respect of the minor minerals should have been higher by 50 per cent with the higher rise in their average price. This would result in an additional revenue of atleast 17 per cent for the entire major head.

4.2.14 Also, the analysis of the previous chapter indicates that substantial scope exists for augmenting the revenue receipts from minor minerals. The rate of recovery in the State lags behind the all-India average in this respect.

D. **Recommended Rate Revision**

4.2.15 The different types of norms so derived seem to suggest a revision of all the royalty and lease rates of the minor minerals by at least 10 to 15 per cent. The recommended royalty rates for the top 7 important minor mineral items, are shown in *table 4.6*. With such a revision, the additional revenue of this head is likely to be over 17 per cent higher than the budgeted revenue in 1991-92 (*table 4.7*).

3. Major and Medium Irrigation.

4.3.1 As noted in the preceding chapters, irrigation contributes roughly Rs 13.5 crore of the non-tax revenue in Rajasthan, which forms about 5 per cent of the total own non-tax revenue in 1989-90, and 16 per cent (1989-90) of the own non-tax revenue from the economic sources of the State. The growth of revenue from this source has been 3.5 per cent (1974-75 to 1989-90) in the case of major and medium irrigation and 13 per cent in the case of minor irrigation. The buoyancy coefficient has been 0.37 for major and medium irrigation and 1.21 in the case of minor irrigation.

A. Revenue Composition

4.3.2 Most of the revenue yield is from water charges for irrigation, domestic and other purposes (*table 4.8 and 4.9*). Other revenue components such as the sale proceeds from canal plantations, betterment levy in respect of major irrigation works, and other miscellaneous receipts constitute less than 10 per cent of the revenue. Further, over 78 per cent of the revenue comes from the five major irrigation projects namely, the Bhakra-Nangal project, the Chambal project, the Indira Gandhi canal, the Gurgaon canal, and the Mahi project. The rest comes from the nine medium irrigation projects: the Ganga canal, the Jawai canal, Meja project, Parbati project, Gudha project, Moral project, Alnia project, West Banas project, and Vallabh Nagar project.

B. Existing Rate Structure

Water Charges

4.3.3 The water rates (*table 4.10*) differ according to (i) the source of irrigation, and (ii) type of crop receiving the water. At present there are 3 groups of irrigation sources and 25 groups of crops. The source-wise differentiation of the water rates is based on the considerations of quality of irrigation as reflected in the quantum, duration and assurance of water supplies. Among the three categories of irrigation sources the first category consists of perennial channels of Ganga, Bhakra, Ghaggar, Indira Gandhi Nahar and Chambal canals, irrigation works constructed or improved after 1st January, 1952 as also the works in the area of former States of Banswara, Dungerpur and Pratapgarh. The second category comprises the pre-1952 irrigation works other than the inundation works. The third category consists of the post-1952 inundation works.

4.3.4 Given the source of irrigation, rates differ according to the usage of water. Crop wise, the rates are generally higher for perennial cash crops like sugarcane and paddy. Unlike many other States, rates do not vary according the season; Kharif or Rabi. The crops are classified into 25 groups according to the water usage and then are determined by cost-benefit analysis undertaken for each of the 25 groups of crops.

4.3.5 Separate rates are charged for non-irrigation uses. In this category, there are 11 types of non-irrigation water uses with 13 rates (*table 4.11*). For lift or seepage irrigation, the rates applied are 50 per cent less. In all, there are about 88 irrigation water rates, 75 of which are for irrigation of crops and the remaining 13 for non-irrigation uses (*table 4.10 & 4.11*).

Betterment Levy

4.3.6 The betterment levy is charged as a result of the increase in land value after the supply of irrigation water. At present, the tenant beneficiaries of the command areas of major projects such as Bhakra, Chambal and Indira Gandhi Nahar are required to pay this levy.

4.3.7 The schedule of betterment levy contains nine rates (*table 4.12*). As the basis of rate fixation differs from project to project, the administration of the levy necessitates separate record keeping. There are three rates in the Bhakra project. The crop intensity is the basis of fixing up a progressive rate structure. The Chambal project has two rates. Here the rate of betterment levy is worked out on the basis of difference of wet and dry rent rates of post- and pre-project position up to a limit of 15 times and sanctioned by the Governmental Rs 75 per acre on lump-sum and Rs 90 per acre on instalment basis. Lastly, the betterment levy in the Indira Gandhi Nahar distinguishes between payment on lump-sum and payment in instalments. Under both these options there are two categories of rates depending upon the class of soil being either 'nali' or 'light loom'.

C. An Evaluation of the Irrigation Rates

4.3.8 Our discussions with the concerned officials in the State government reveal the following considerations that are supposed to have gone into the determination of the water rates: (i) volume of water consumed, (ii) the paying capacity of irrigators, and (iii) the need to cover the organisation and maintenance costs incurred in providing irrigation. These considerations are in line with the guidelines suggested by the Second Irrigation Commission (1972). However, it is not known what weightage was given to each of these criteria while arriving at the rates.

4.3.9 As for the paying capacity considerations, the Irrigation Commission (1972) has suggested that the water rates should be fixed such that the revenue should be at least 5 per cent of gross income for food crops and 12 per cent for cash crops. However, the existing gross revenue as per cent of the estimated gross output per hectare is barely 2 per cent in Rajasthan.

4.3.10 The necessity to ensure that irrigation charges paid by farmers are adequate at least to cover the operational expenses and also meet a part of the interest charges has been emphasised by several studies.

4.3.11 Further, The Irrigation Commission (1972) on the basis of their study of price rise and increase in the irrigation costs, suggested revising of water rates at five-year intervals. However, in Rajasthan the last revision took place in 1982, a decade ago. The rate increases were modest. As a result, gross receipts from the three major irrigation projects per acrè of gross irrigated area declined from Rs 46.87 in 1984-85 to Rs 33.77 by 1991-92 (*table 4.13*).

D. Recommended Revision of Rates

4.3.12 The need for the revision of rate in the case of major and medium irrigation emanates from the fact that Rajasthan is lagging far behind some of the best practising States in India. At present the cost recovery is approximately 5 per cent which is much below the 12 per cent recoveries in some of the best practising States such as Maharashtra.

4.3.13 In order to achieve the levels of the best practising State, the existing rates in respect of water charges for major and medium irrigation projects in Rajasthan may have to be raised by at least 7 per cent. There could be an across-the-board increase of the present rate of water charges by this amount without altering the present structure as the

State seems to have designed its rate on the basis of cost-benefit analysis of water supply from the major irrigation projects. With the application of the revised rates, an incremental revenue to the tune of Rs 172.27 lakh is expected to be raised during the year 1992-93.

4. Water Supply and Sanitation

4.4.1 The main sources of revenue under this major head are receipts from urban and rural water supply schemes. Other sources such as service fees, per cent charges recovered from municipalities on account of execution/reorganization of water supply schemes against LIC loans, and other miscellaneous receipts form a negligible portion of the receipts.

4.4.2 As regards water, a natural resource apart from being a semi-public good, it is not enough to determine its charges on the basis of financial viability alone. Various other considerations need also be taken into account while assessing the rate structure. The pricing systems adopted in the world for this service can be classified as (a) flat tariff system, (b) average cost pricing system, (c) increasing block tariff system, and (d) two-part tariff system.

4.4.3 Under the flat tariff system, the water charges are not directly related to the consumption levels. Instead, the rates are prescribed in terms of the number of family members, number of taps, size of inflow pipe, ground area and the property value. The charge collected from a consumption unit (household) is the weighted sum of the rates weighted by the size of the bases. The system avoids metering the water consumption. Under the average cost pricing system, the total cost other than access costs are distributed according to the consumption level. Under the increasing block tariff systems, the rate structure is progressive. The two-part system consists of a fixed charge (access cost) and the varying charge related to the consumption level.

A. Present Rate Structure

4.4.4 The existing water pricing system in Rajasthan that has been in operation since 1987, is a bizarre mixture of several pricing systems as mentioned above (*table 4.14*). It follows the two-part system, the connection charge and a flat meter rental comprising the fixed part and a rate representing the varying part. It follows the flat-rate system in the sense, the rate differs according to (a) the size of the pipe connected to the main line of water supply, (b) the type of consumer, and (c) the water consumption size class. There are 8 rates applicable depending on the size of the pipe connected to the main line of water supply, the rate increasing progressively with the change of service mains. Consumers are divided into three groups: domestic, commercial and industrial. Within each group again, the rate differs according to the volume of water consumption.

4.4.5 Domestic consumers have the option of availing either metered or un-metered rate systems. The metered supply is charged at different rates depending upon the consumption slab, (i) upto 15000 litres (ii) 15000 litres to 100000 litres and (iii) over 100000 litres. The un-metered domestic supply has two slabs based on the size of the main service pipe. The supply through 15mm pipe upto two taps has one rate of Rs 19.25. An additional payment of Rs 5.50 for each additional tap is necessary thereafter. In addition there is a provision of minimum payment irrespective of consumption.

4.4.6 The commercial rate of water consumption falls into four groups. The consumption slabs are the same as those of domestic supply (metered) except that the commercial rates have an extra requirement. Under this category, consumption between 15000 litres to 50000 litres and 50000 litres to one lakh litres have two rates. The industrial rates of water supply has similar types of consumption classification. But the charges are higher compared to the commercial ones. In all the cases, a 20 per cent discount is allowed on prompt payment.

4.4.7 The sewerage charges also follow the general world wide practice of hinging the rate to the water supply charges. It is equivalent to 20 per cent of the water charge. An additional 13 per cent of the water charges is collected towards the cost of sewerage treatment plants.

4.4.8 From 1987, a distinction is made between the urban and rural areas and the water rates prescribed for rural areas are lower.

B. Recommended Revisions in the Rates

4.4.9 An evaluation of the cost recoveries in respect of water supply and sanitation services indicates scope for an overall rise in the present recovery rate of 17.5 per cent by at least one per cent. This would imply a little more than one per cent rise in the water supply and sewerage component of the source.

4.4.10 Further, the existing rate-structure presents a bizarre mixture of all possible pricing schemes. The advantages of following one scheme is nullified by partial adoption of another scheme. Consequently, the rate structure ends up imbibing the disadvantages of partial adaptation of different lines. Thus there is a need for simplification. The flat rate systems are said to be simpler to administer, easily understood by the consumers, have certainty of revenue and require little monitoring. In contrast, the volumetric pricing has the advantage of being more equitable. Nevertheless, studies show that a properly designed flat rate system can also achieve the equity objective.

4.4.11 Thus as a first step of rationalisation of the rate structure, we recommend that the graded rate-structures can be done away with, while keeping the elements of the flat rate system intact. More specifically, the metered supply charged at different rates depending upon the consumption slab, can be abolished. The existing elements of rate differentiation on the basis of size of the inflow pipe, number of taps, type of consumer, and rural/urban distinction can be retained. The rate categories however should be fewer. The new rate structure recommended is shown in *table 4.15*.

C. Revenue Implication of the New Rates

4.4.12 An increase of one per cent revenue receipt under the major head of Water supply and sanitation would yield an additional sum Rs 54.08 lakh during the year 1992-93.

Table 4.1

Mineral Revenue by Major components

(Rs lakh)

	Lease Royalty etc	Sale proceeds: Rock-phos-phate	Palana coal	Sanu Limestone	Refunds	Total
1977	633.56	651.40	0.23	0.00	-0.83	3302.20
1978	773.03	1517.65	0.10	0.00	-0.84	2289.94
1979	898.76	1610.06	0.00	0.00	-0.40	2508.42
1980	1025.08	1737.98	0.00	0.00	-2.37	2760.69
1981	1233.54	2137.29	0.00	0.00	-0.21	3370.62
1982	1454.66	2300.00	0.00	0.00	-0.50	3754.16
1983	1859.18	2730.25	0.00	0.00	0.00	4589.43
1984	2211.70	3700.51	0.00	0.00	0.00	5912.21
1985	2481.24	3249.38	0.00	0.00	0.00	5730.62
1986	2625.23	2500.02	0.00	0.00	0.00	5125.25
1987	3801.68	2200.04	0.00	0.00	0.00	6001.72
1988	4728.68	1468.56	0.00	183.38	0.00	6380.62
1989	5480.30	1204.49	0.00	417.70	0.00	7102.49
1990	6126.00	716.00	0.00	870.00	0.00	7712.00
1991	7900.67	681.38	0.00	1463.57	0.00	10045.62
Average Growth 1986-91	22.4	-20.4				12.8

Source: Government of **Rajasthan, Mineral Statistics**

Table 4.2

Recent Trends in Mineral Production (Value) in Rajasthan

	Value (Rs Crore)			Quantity (Lakh tonnes)			The implied price index		
	Major minerals	Minor minerals	Total	Major minerals	Minor minerals	Total	Major minerals	Minor minerals	Total
1986	143.9	137.3	281.2	109.0	228.3	337.3	100	100	100
1987	188.7	158.6	347.4	115.7	226.0	341.7	123	117	122
1988	202.8	208.3	411.1	118.3	222.4	340.7	130	156	145
1989	201.8	241.4	443.2	127.7	251.2	378.9	120	160	140
1990	225.1	272.4	497.5	128.5	263.8	392.3	133	172	152
1991	247.8	325.8	571.4	134.1	274.4	408.6	140	197	168
Annual growth	10.1	19.6	14.9	4.4	4.0	4.1			

Source: Same as Table 4.1

Table 4.3

Revenue Composition from Major and Minor Minerals in Rajasthan

	Major minerals	Minor minerals	Share in total (%)	
			Major	Minor
1986	907.25	1717.98	34.56	65.44
1987	1660.38	2141.30	43.67	56.33
1988	2088.01	2640.67	44.16	55.84
1989	2124.57	3355.73	38.77	61.23
1990	2222.18	3903.82	36.27	63.73
1991	2834.76	5065.91	35.88	64.12
Average Growth	20.7	23.7		

Source: Same as Table 4.1

Table 4.4

Royalty Rate-Structure of Important Minerals

(Rs per tonne)

	1981	1987	1992
Major minerals:			
Copper-ore (per unit pe	4	5	17
Gypsum	4	8	20
Zinc ore	4	6	16
Limestone			
Low silica content	5	10	50
Other	5	10	25
Rock-phosphate			
Ore with 27%P2O2	15	45	70
Ore with 20 to 27%P2O2			40
Ore with 20% P2O2	10	25	17
Soapstone			
Insecticide grade	3	10	23
Other grade	3	30	56

	1975	1977	1983	1985	1986	1987	1991	1992
Minor minerals:								
Brick Earth	0.5		1	1.5	2.5	1.5	4	4
Kankar Bajri	0.5	0.75	0.75	1.5	2.5	1.5	4	4
Limestone (of burning type)	3	4.5	4.5	4.5		12.5	15	15
Limestone (of building type)	6.5	7.5	8	8	12.5	12.5	25	25
Limestone (masonry)	0.5	1	8	8				
Marble								
Regular blocks	20	27.5	85	85	90	90	120	120
Small (<35*<60)	10				40	40	60	60
Other	3.75				12.5	12.5	18	18
Sandstone (max)	6.5	7	10	10	15	15	20	20
Masonry stone	0.5	1	2	2	2.5	3	3	3

Table 4.5

Implied Average Royalty Rates and their Indices of Change

	Av Royalty (Rs per tonne)			Av Royalty (index)		
	Major minerals	Minor minerals	Total	Major minerals	Minor minerals	Total
1986	8.33	7.52	7.78	100	100	100
1987	14.35	9.47	11.12	172	126	143
1988	17.65	11.87	13.88	212	158	178
1989	16.64	13.36	14.46	200	178	186
1990	17.29	14.80	15.61	208	197	201
1991	21.13	18.46	19.34	254	245	248

Source: Same as Table 4.1

Table 4.6

Recommended Rate Structure - An illustration

(Rs)

Minor minerals:	Existing rate (1991)	Recommended rate
Brick Earth	4	4.75
Kankar Bajri	4	4.75
Limestone (of burning type)	15	17.50
Limestone (of building type)	25	30.00
Limestone (masonry)		
Marble		
Regular blocks	120	140.00
Small (<35*<60)	60	70.00
Other	18	21.00
Sandstone (max)	20	23.50
Masonry stone	3	3.50

Source: Same as Table 4.1

Table 4.7

Estimated Revenue for 1991-92 with 50 per cent Rise in the Royalty Rates for Minor Minerals

(Rs lakh)

Estd major min revenue	3421.9
Estd minor min rev	6267.3
Add 50%	3133.65
Sale proc	511.08

Total exp rev	13333.93
Budgeted rev	11334.22
% increase	17.64

Source: Same as Table 4.1

Table 4.8

Componentwise Non-tax Revenue from the Major and Medium Irrigation Sources

(Rs lakh)

	1985-86	1986-87	1987-88	1988-8	1989-90	1990-91
Sale of Water for	834	1073	1016	1048	1170	1253
a) irrigation purposes	799	1016	972	1013	1120	1170
b) domestic purposes	32	34	24	17	30	50
c) for other purposes	3	23	19	18	21	33
Sale proceeds from canal	2	14	3	7	7	7
Betterment levy	35	34	35	31	32	41
Other receipts	35	62	62	84	55	58
Total	905	1182	1116	1171	1265	1359

Source: Government of Rajasthan, Forecast of Resources, (Submitted to Ninth Finance Commission)

Table 4.9

Structure of Non-tax Revenue from the Major and Medium Irrigation sources

(Rs lakh)

	1985-86	1986-87	1987-88	1988-8	1989-90	1990-91
Sale of Water for	92	91	91	90	93	92
a) Irrigation purposes	88	86	87	87	89	86
b) domestic purposes	4	3	2	1	2	4
c) for other purposes	0	2	2	2	2	2
Sale proceeds from canal	0	1	0	1	1	0
Betterment levy	4	3	3	3	3	3
Other receipts	4	5	6	7	4	4
Total	100	100	100	100	100	100

Source: Same as Table 4.8

Table 4.10

Irrigation Water Rates in Rajasthan

Sl.	Name of Crop	a) Ganga Canal Bhakra Ghaggar, Rajasthan & Chambal Canal (Irrigation under perennial channels) (per acre) b) Irrigation works constructed/improved after Ist 1st January, 1952 & all works in the areas of former States of Banswara, Dungerpur & Pratapgarh (per acre)	Pre-1952 Irrigation works except inundation irrigation works (per acre)	Inundation Irrigation works (per acre) (per acre)
1.	(2)	(3)	(4)	(5)
1.	Sugar cane	58.00	50.00	21.00
2.	Rice	40.00	23.00	10.00
3.	Cotton	36.00	29.00	18.00
4.	(Maize	18.00	10.00	8.00
5.	Bajra	18.00	10.00	8.00
6.	Jawar	18.00	10.00	8.00
7.	Pulses	21.00	18.00	13.00
8.	Garden (per year)	73.00	49.00	23.00
9.	Guwar	21.00	18.00	10.00
10.	Simmhemp &/Grass)	18.00	18.00	13.00
11.	Vegetables	29.00	20.00	11.00
12.	Other Kharif Crops	23.00	18.00	13.00
13.	Wheat	30.00	21.00	13.00
14.	Barley	21.00	15.00	10.00
15.	Gochani & Bajra Gram Ist	29.00	21.00	15.00
16.	Watering (2 or more watering	20.00	18.00	18.00
17.	Palewa	9.00	6.00	-
18.	Fodder	18.00	18.00	10.00
19.	Oil Seeds	23.00	18.00	13.00
20.	Water Nuts	36.00	25.00	13.00
21.	Indigo & other dyes	36.00	18.00	13.00
22.	Tobacco	36.00	21.00	13.00
23.	Lucerne & poppy	36.00	21.00	11.00
24.	Zeera	36.00	19.00	11.00
25.	Other crops of Rabi	26.00	18.00	13.00

Note: Perennial channels Ganga, Bhakra & Ghaggar & Rajasthan Canal areas.

All Kharif Crops: Same Rates as perennial Channels in Column 3 above.

All Rabi Crops

(a) For First watering — Palewa rates as per colum 3 above would be charged.

(b) For second and subsequent watering — Full rates as applicable to perennial channels as per column 3 above would charged.

Source: Government of Rajasthan, Dept. of Irrigation.

Table 4.11

Water Rates (Other than Irrigation) in Rajasthan

Sl. No.	Purpose of Water Use	Rate
1	2	3
1.	Brick making and paise wall building	
2.	Laying/concrete/and brick or stone masonry stone masonry	00.19 np. % cft.
3.	Metalling Roads.	Rs 15.00 per mile
4.	Consolidation of Kutcha Service Road.	Rs 45.00 per mile
5*.	a. Water supplies in bulk for industrial purpose	Rs 20.00 per 1000 cft.
	b. Water supplies in bulk for drinking purpose	Rs 00.80 per 1000 cft.
	c. Water supplies in bulk for other purpose	Rs 1.00 per 1000 cft.
6.	Watering Road side or Avenue trees	Rs 3.75 per canal mile of 5000 ft. for Kharif crop.
7.	Watering Road side or Avenue trees	Rs 7.50 per canal mile of 5000 ft. for Rabi crop.
8.	Sprinkling water on roads in the Khariff season	Rs 7.50 per mile.
9.	Sprinkling water on roads in the Rabi season	Rs 15.00 per mile
10.	Watering parks in Kharif season	Rs 3.50 per Bigha
11.	Watering parks in Rabi season	Rs 7.00 per Bigha

Note: * Item No. 5 amended vide Government Order No. F.13(4)irg/74 Item No. 5a amended vide Government Order No. F.22(7)irg/90 dated 28.11.1991 and published in gazette on 2.1.1992.

Table A 4.12

Betterment Levy on Irrigated land in Rajasthan

	Irrigation Project	Rate per acre (Rs)
I. Bhakra Project*		
i.	Upto 30 % intensity & 45 acres irrigation holdings.	Exempted
ii.	31 % to 40 % intensity	3.00
ii.	41 % to 50 % intensity	6.00
iii.	51 % and above	11.00

II. Chambal Project

The rate of betterment levy of chambal project was worked out on the basis of difference of wet and dry rent rates of past of pre project position up to a limit of 15 times and sanctioned by Governments at Rs 75 per acre on lump-sum and Rs 90 per acre on instalment basis.

III. Indira Gandhi Nahar Project@**

	Class of Soil	Rate per acre in lump-sum (Rs)	Rate per acre in installment (Rs)
i.	Nali	335.00	420.00
ii.	Light Loom	450.00	312.00

Notes: * Rates are fixed to be charged on the basis of intensity of water use.

** The betterment levy rate was fixed by the Government in the year 1970 for the stage I of Indira Gandhi Nahar upto 13.8 mile of main canal as under:

@ Due to not sanctioning the betterment levy rate in the command of other areas of this project a flat rate of Rs 300 per bigha is being realised whoever takes Khatedari rights.

Source: Same as Table 4.8

Table 4.13

Per Acre Receipts from Water Charges from the Area Irrigated for Major three Projects (Bhakra Nangal Project, Chambal Project and Indira Gandhi Nahar Pariyojana) in Rajasthan

Year	Total area Irrigated (in lakh acre)	Receipts from water charges for irrigation purposes (Rs lakh)	Water charges per acre of area irrigated (Rs)
1981-82	13.83	377.54	27.29
1982-83	14.61	669.05	45.79
1983-84	15.21	641.02	42.16
1984-85	14.34	672.06	46.87
1985-86	14.67	629.50	42.92
1986-87	18.51	694.23	37.50
1987-88	19.78	726.43	36.72
1988-89	21.14	760.12	35.96
1989-90	22.58	795.38	35.22
1990-91	24.13	832.27	34.49
1991-92	25.79	870.87	33.77

Source: Same as Table 4.8

Table 4.14

Existing Rates of Water Supply and Sanitation

(Rs)

Sl.		Category of Consumers	Urban	Rural
1.		**Domestic Rate:**		
		(Metered supply - rate per 1000 ltrs)		
	a.	upto first 15,000 ltrs.	1.25	1.25
	b.	next upto 1,00,000 ltrs.	1.50	1.50
	c.	next above 1,00,000 ltrs.	2.00	2.00
2.		**Flat Rate:**		
		(Un-metered supply)		
	a.	For 15mm per family upto two taps.	19.25	17.50
	b.	For each additional tap	5.50	5.00
3.		**Commercial Rate:**		
	a.	upto first 15,000 ltrs.	2.50	1.85
	b.	next upto 50,000 ltrs.	3.00	2.25
	c.	next upto to 1,00,000 ltrs.	3.375	2.25
	d.	next above 1,00,000 ltrs	4.50	3.00
4.		**Industrial Rate:**		
	a.	upto first 15,000 ltrs.	5.00	2.50
	b.	next upto 50,000 ltrs.	6.00	3.00
	c.	next upto to 1,00,000 ltrs.	6.75	3.00
	d.	next above 1,00,000 ltrs	9.00	4.00
5.		**Minimum Rate:**		
		Applicable to all categories, domestic, commercial & industrial:		
	a.	15mm or less	19.25	17.50
	b.	20-25mm	55.00	50.00
	c.	25-30mm	165.00	150.00
	d.	25-40mm	440.00	400.00
	e.	40-50mm	550.00	500.00
	f.	50-80mm	1,100.00	1,000.00
	g.	80-100mm	2,200.00	2,000.00
	h.	100-150mm	5,500.00	5,000.00

Notes:
a. A rebate of 20 per cent is allowed for prompt payments.
b. Flat rate connections are given for domestic consumers with 15mm service mains.
c. Connection Fee: Equivalent to one month's net minimum charges for service mains of relevant size.
d. Security Deposit: Equivalent to one month's net minimum charges for service mains of relevant size.
e. Public Stand Post Charges: Same gross rate as applicable for domestic connections.
f. Subsequent mater testing fee on request from the consumer:
i. Upto 25mm connection — Rs 10.00
ii. Above 25 mm connection — Rs 50.00
g. Re-connection fee after disconnection:

Table 4.14 (Contd')

i.	Upto 25mm connection	Rs 10.00
ii.	Above 25mm connection	Rs 50.00
h.	Fee for issue of license to Plumber:	
i.	First licence (Only Rs 100 if applicant is ITI trained in any trade).	Rs 200.00
ii.	Renewal in subsequent years	Rs 20.00
i.	Meter Rent: Rs 2 per month for all categories.	
j.	**Sewerage charges**: 20 per cent of the water rates mentioned above wherever sewer connections exist or are taken hereafter subject to the usual rebate applicable for timely payment.	
k.	**Sewerage Treatment Plant Charges**: 13 per cent of the water rates are taken hereafter subject to usual rebate applicable for timely payment.	

Source: Government of Rajasthan, Dept. Water Supply, Sanitation and Public Health.

Table 4.15

Recommended Water Supply Rates in Rajasthan Applicable to all Domestic, Commercial and Industrial Categories

(Rs)

Sl. No.	Width of the service mains	Urban areas	Rural areas
	a. 15mm or less	20.00	18.25
	b. 20 - 25mm	60.00	55.00
	c. 25 - 30mm	170.00	155.00
	d. 25 - 40mm	450.00	410.00
	e. 40 - 50mm	560.00	510.00
	f. 50 - 80mm	1125.00	1025.00
	g. 80 - 100mm	2250.00	2050.00
	h. 100- 150mm	5600.00	5100.00

Notes: All other charges will remain the same.

V

ANALYSIS OF NON-TAX RATE STRUCTURES IN RAJASTHAN OTHER MAJOR SOURCES

1. Introduction

5.1.1 This chapter attempts to review the user-charge rates in respect of the other seven major sources. It should be noted that the freedom to alter the rate-structures of the administrative services does not always rest with the State government. In cases of major minerals the rates are fixed by the Central government. Further, in some cases the rates are determined by the market forces. For example, the revenue of the forest department is raised through public auctions of the forest produce. While examining the scope for rate-structure revision in respect of the ten selected non-tax sources, the discussion is limited to only those subheads in respect of which the State government has some flexibility.

5.1.2 In section 2, rate-structures of the general and social services are examined, and in section 3, rate-structures of the economic services are discussed, and section 4 sums up the recommended rate revisions along with the revenue implications.

2. General and Social Services

A. Public Works Department (PWD)

5.2.1 The PWD of Rajasthan has four minor heads of revenue generation: (a) rental income from functional and other buildings occupied for purposes other than residential, (b) hire charges of machinery and equipment supplied to contractors etc., (c) recovery of percentage charges, (d) other miscellaneous receipts. In addition, the department is also responsible for revenue collections from roads and bridges and housing. Of the four minor heads, some flexibility for rate revision exists in respect of machinery hiring charges.

Machinery Hire Charges

5.2.2 The department looks upon the source as largely incidental in the sense that machine hiring is done mostly with a view to minimise idling. The existing hire charges differ according to (a) the type of machine, (b) the type of the user, (c) whether the work for which the machine was used is for government departments or outside the government (*table 5.1*).

5.2.3 There are about 50 types of machines enlisted for hiring, each with a different rate. Earth-moving machines are charged on hourly basis. Two types of charges are levied depending on whether the machine is used for government works or for non-government works. An additional charge of 25 per cent is levied for machines used for non-government works. Also, hire charges may or may not include the petrol, oil and lubrication (POL) costs. In all, there are as many as 196 rates in operation.

5.2.4 Presumably, the machine-wise hiring rates are worked out on the basis of the cost and productive age of the equipment. However, there seems to be no rationale for giving a discount of 25 per cent for use of machinery for government purpose. Although the charges are mere book transfers and do not add to the total Government revenue, the opportunity cost of the machine is lower for government department as compared to a private work, leading to wasteful usage of the equipment.

5.2.5 Other than this minor change, there appears to be no strong case for further rate revisions, especially considering that the present rates were fixed only in April 1992. The cost recovery from this source is comparable to other States. As regards the question of reducing the rate categories, considering the small number of the users, we feel that switching to a simpler structure with fewer rate categories may not be necessary at this stage.

B. Roads and Bridges (Toll Tax)

5.2.6 As mentioned above, the revenue is credited to the State's PWD. The major revenue earning source under this head is the toll tax. The toll is collected from parties using the permanent bridges which are under the control of the State Public Works Department. The toll rates reflect the cost over the life period of the bridge distributed according to the use and type of the vehicle.

5.2.7 The present structure of toll consists of three categories of rates - Rs. 2, Rs. 5 and Rs. 7 (*table 5.2*). In cases of the same vehicle crossing the bridge more than once a day, the user has the option of paying the toll only once but the charge is one-and-half times the applicable rate. Vehicles belonging to the defence, police, fire fighting, ambulance and funeral services are exempt. Option of a monthly pass is also available.

5.2.8 Although the average cost recovery rate is comparable with those in other States, the rate of toll tax has not been revised for a long time. The last revision was done in 1978. The rise in the prices and the replacement value would have gone up since. In view of the price rise, revision in the toll rates is called for. Based on the price rise, we recommend that the rates in all the three categories should be revised by Re 1 for all categories. The recommended rates are given in *table 5.3*. It may be seen that the new schedule retains all the characteristics of the present structure except for rate revision.

C. Housing

5.2.9 Rental receipts for the quarters constructed under the Industrial housing scheme, Government quarters and other residential buildings under the charge of Public Works Department and some minor miscellaneous receipts are credited to this head of account.

5.2.10 On the basis of our findings regarding the desired cost recovery norm for the housing service, there is scope for increasing the rates by 5 per cent. The present recovery of 2 per cent of the cost incurred in supplying the housing service is much below that of the third best practising State. Therefore, we recommend the revision of the present rate by at least another 5 per cent. The revised rate will yield an additional revenue of Rs 4.20 lakh during the year 1992-93 over and above the budget estimate.

D. Education, Sports, Arts and Culture

5.2.11 The most important source of revenue under this head is the tuition and other fees realised from the students studying in Government schools and colleges. Other sources under education comprise public contributions, and miscellaneous receipts such as sale proceeds of unserviceable stores, recoveries of over-payment and so on. Notable sources of revenue under art and culture are entry fees to the museums and other places of importance, sale proceeds of publications and photographs by Archives department, fees charged for visiting museums and archaeological monuments, receipts from libraries, and sale proceeds of publications by the Oriental Research Institute.

Education Fees

5.2.12 The rates of fee charged differ according to firstly, the type of education - general and technical education; and secondly, in the case of general education, according to the size of income. For example, a distinction is made between wards of income tax payers and others, and within the latter, wards of income tax payers upto an income of Rs 30,000 pay less than those whose parents' income is above that level. And thirdly, fee rates depend on the class. Free education is given to students upto class VIII irrespective of the income. Thereafter fees are charged at different rates for students of (i) IXth and Xth class, (ii) XIth and XIIth classes (iii) 1st Year TDC college (iv) 2nd and 3rd Year TDC college, and (v) Post graduate (vi) LLB (*table 5.4*). In the technical education area, the tuition fees charged is Rs 120 per term.

5.2.13 Besides these prescribed rates, there exist several types of exemptions. No tuition fee is charged from girl students, and students belonging to scheduled castes and scheduled tribes. Further, a number of concessions in the form of freeships and half-freeships are available to all students subject to fulfilment of certain other conditions. The fee-structure was last revised in 1982.

Arts and Culture Fees

5.2.14 The entry fee of the places of historical importance and museums differs mainly according to the types of users, namely, normal visitors, film and TV shooting companies. Each of these broad groups of users is further sub-divided according to other specified criteria. The gate fees also differs from monument to monument.

5.2.15 Among the visitors fee rates differ between students and non-students. It can be seen from *table 5.5* that Amer Mahal, Amer and Jantar Mantar in Jaipur charge Re 1 from students and Rs 2 from non-student visitors per visit. On the other hand Nahargarh Quilla and Hawa Mahal, Jaipur, collect Re 0.5 and Re 1 from student and non-student visitors respectively. Film related visits have a set of rates that distinguish between film shooting by foreigners, non-Rajasthani Indians and Rajasthanis. The rate imposed per day on foreigners is higher than those from locals. Among the monuments mentioned Amer Mahal attracts slightly higher charges than others. Fee rates also differ between Amer Mahal and other monuments for TV film purposes. Again, two rates are imposed depending on whether the film is taken by foreigners or Indians. Another item in this group is with respect to stationery photo taken of the monuments. Two rates are imposed that differentiate between foreign and Indian nationals.

5.2.16 Considerations to individual monuments for charging different fees have produced a greater number of rates. The recent rate revision of 1989 does not seem to have taken into account this feature of simplifying the rates structure.

Recommended Changes in the Rates of Education Fees

5.2.17 Taking into account the publicness of education, art and culture, the present study would suggest a 2 per cent increase over the present rates. Though the present cost recovery rate in the State is not different from its own desired rate, there are many other States in India which have a higher desired norm. Thus the State can do better and catch up with the other States in a basic input supply like education by revising the relevant rates.

5.2.18 In addition, some minor changes can be introduced in the tuition fee structure without significantly altering its progressivity nature. Perhaps, the fee differentiation for higher education between income tax payers with income upto Rs 30,000 and those with income above that, could be done away with.

5.2.19 The recommended structure is presented in *table 5.6*. It can be seen from the table that the progressive rate structure designed for general education in Rajasthan has not been altered. The new rates are rounded up to the next higher digit after the old rates are revised upwards by 2 per cent. The new structure shows two rates after class XII due to consideration of the distinction between income tax payee parents above and below Rs 30,000.

5.2.20 In the case of technical education the present rate of fees may be increased by 2 per cent following the general pattern in the field of education.

Recommended Change in Fees Related to Arts and Culture

5.2.21 Following the general pattern of upward revision in education, the fee rates in respect of art and culture can also be raised by 2 per cent across the board. *Table 5.7* gives the recommended rates relating to museums and archaeological monuments in the State. The new rate schedule contains less number of rates, and does away with rate differentiation between different categories of Indian visitors and users.

Revenue Implication of Revised Rates

5.2.22 With the two per cent increase, the revenue receipts of the major head under education, sports, arts and culture is expected to yield an additional revenue of Rs 7.73 lakh during the year 1992-93. This amount reflects the increase that will be effected due to application of new rates on the revenue yield estimated for the year 1992-93.

5.2.23 The increase in tuition fees is expected to contribute Rs 5.67 lakh while visitors' fees on museums etc. can yield Rs 0.97 lakh. A sum of Rs 1.08 lakh will be left to be recovered from the remaining sub-head, i.e., other receipts. But this source of revenue is fluctuating in nature and there could be doubts about relying on it for raising the expected amount of additional receipts. The role of the adjustment made in the rate structure with the aim of reducing the number of rates is crucial to bridge up the revenue gap.

5.2.24 It may be useful to point out that the new schedule not only reduces the number of rates but also clubs some of the old rates with that of their next higher slabs. So the revenue receipts from the new rates will be more than Rs 5.67 lakh given above. Similarly, the new rate schedule in respect of fees on art and culture is expected to contribute more than Rs 0.97 lakh. Despite the presence of these possibilities there is likely to be some gap in the above mentioned additional revenue yield. However, the amount of shortfall may not be much to reconsider the above suggestion of 2 per cent increase in educational fees.

E. Medical and Public Health

5.2.25 The revenue receipts on account of medical and public health is composed of three minor sub-heads: (i) contribution of Employees State Insurance Corporation towards reimbursement of the share of expenditure on ESI scheme, (ii) fees/ charges received from patients for hospital facilities and (iii) other miscellaneous receipts of the health department including tuition and other fees for medical education.

5.2.26 Out of the three sources, the bulk of the receipts, (nearly three-fourths), comes from the ESI Scheme over which the Government has only limited control. The scope for rate revisions is limited mostly to the subheads (ii) and (iii).

Recommended Rate Revision

5.2.27 The recovery norms indicate that the current receipts could be increased by two per cent. Since the envisaged rise in the revenue can come only from the sources other than the ESI contributions, the rate revisions in respect of these sources should be such that the additional rise will be much larger than the 2 per cent. The need to raise the receipts of medical and public health at least by two per cent, therefore, is difficult to ensure without passing on the extra burden of additional revenue to subheads (ii) and (iii). The two per cent revenue increase in medical and public health will result in an additional revenue of Rs 20.88 lakh. Since the additional revenue would have to be raised through subheads (ii) and (iii), the required additional revenue contribution by them would have to be 10 per cent.

3. Rate-Structures of Economic Services

A. Forestry and Wild Life

5.3.1 Most receipts under this head are sale proceeds of various forest produce and, therefore, the scope of maneuvering the revenue receipts by the Government is limited. Further, the policy of forest conservation and environmental protection prevents more exploitation of the forest resources.

B. Village and Small Industries

5.3.2 The receipts under this head come from (i) developmental charges levied and recovered for land converted for industrial purposes and salt production, (ii) contract money of 'Sajji' and 'Papar-khar' areas, and (iii) registration fee of powerlooms. There exists some scope for raising additional revenue from the items of this major head and attempts should be made to estimate the receipts that could be expected.

5.3.3 The State should try to reach the cost recovery levels exhibited by some of the best performance States. The desired norm in case of sources under the major head of village and small industries in Rajasthan is 2 per cent which is less than the all-India average. In contrast, some of the States such as Punjab and Tamil Nadu have desired to recover more than 8 per cent of the cost of providing this service. The present level of actual cost recovery in Rajasthan is 1.72 per cent only and the need for improving its performance significantly cannot be overlooked. With a view to minimising the chances of administrative difficulties of a very high rate of revision, it is suggested that the State should revise the rates in respect of the Major head of village and small scale industries to reach the level of the 3rd best performing State. This suggestlon requires an increase in the present rates by 6 per cent.

Revised Rates and Additional Revenue

5.3.4 Keeping in view the small number of rateable items in each sub-head, the present study suggests that there could be a uniform increase in their rates by 6 per cent. The application of the revised rates to the concerned tax base of 1992-93 will raise an additional revenue of Rs 4.53. Considering the steady rise in the revenue receipts under the major head of village and small industries since the second half of the 1980s when the revenue yield has gone up by three times from Rs 13.20 lakh in 1985-86, and assuming that the base of revenue of this major head will not change significantly from the present level after the rate revision, the additional revenue is not difficult to raise.

C. Industries

5.3.5 The receipts comprise sale proceeds of (i) Salt trading scheme, (ii) Sodium sulphate industries, (iii) State woollen mills, Bikaner, and (iv) other miscellaneous receipts. The revenue raising potential of the industries should be assessed in the light of their profitability trends. However, there are certain problems that hamper their growth. For instance, the leasing arrangement in respect of the sodium sulphate industries and the woollen mills industries has run into trouble due to non-payment of lease money. The lease agreement in the case of the sodium sulphate plant was terminated in January, 1987 and the plant has been closed down. The matter is presently sub-judice. Therefore, no receipts on account of lease money would be expected immediately. Similarly the woollen mills of the State in Bikaner are not expected to contribute any revenue due to problems related with payment of lease money and the case has been placed under arbitration. The receipt from production and sale of crude sodium sulphate is expected to be Rs 40 lakh and can be reckoned on to some extent for higher revenue. The subhead comprising other miscellaneous receipts has limited revenue contributing potential as the bulk of the receipts under this head come from the Government of India by way of Central subsidy for industrial development in backward areas. The receipts do not add to the revenue of the State government as the subsidy has to be passed on to the entrepreneurs. Other receipts under this subhead are due to fees and receipts from the Petroleum Act, Services and Service fees, and receipts of the Excise department - contributing less than one lakh. Thus the revenue potential of this head is weak and uncertain.

4. Summary of the Revenue Implications

5.4.1 The detailed analysis of the non-tax revenue in the previous and this chapters shows that the scope for augmenting the yield in this respect is confined to only a few sources. Accordingly upward rate revisions are recommended for machinery hire charges, toll rates, housing charges, urban and rural water supply rates, tuition fees pertaining to higher education, fees collected for medical facilities, irrigation rates, and royalty rates in respect of the minor minerals. The additional revenue that can be raised by the rate revision is as shown in *table 5.8*. It may be seen from the table that the expected revenue is approximately Rs 7 crore.

Table 5.1

Machinery Hire Charges of the Public Works Department in Rajasthan

(Rs)

Sl. No.	Name of Machine	For Departmental Work		For Contractor	
		Without POL	Idle	Without POL	Idle
	Rollers				
1.	Diesel Road roller (8-10 tons)	240	120	265	140
2.	Tractor mount/vibratory (6-8 tons)	180	90	205	100
3.	Vibratory Compactor (10 tons)	865	175	1020	210
4.	Steam Road roller	170	110	185	125
5.	Sheep foot rollers	12	1.50	13	3
6.	Smooth hand roller (1/2 ton)	9.50	1.50	10	1.50
7.	Smooth hand roller (1 ton)	11	1.50	12	3
8.	Compactor rollers (5 tons)	24	3	28	9
	Truck and Trailor (which ever is higher)				
9.	Tractor Trailer (20 tons)	1040	260	1210	455
		9.50p.km.	11p.km.	1km.	
10.	Truck (3-5 tons)	300	105	360	125
		3p.km.		3.60p.km.	
11.	Tipper trucks 3-5 tons	360	125	400	180
		3.60p.m.	4p.m.		
12.	Trucks (7-10 tons)	420	170	480	210
		4.20 p.km.	4.80 p.km.		
13.	Tipper truck (7-10) tons	450	180	510	210
		4.50 p.km.	5.10 p.km.		
14.	Trucks mounted water tank/Bitumen Tank.	480	180	540	210
		4.80 p.km.	5.40 p.km.		
	Tractors and Trolley				
15.	Tractors 25 HP	170	75	190	100
16.	Tractor 26-40 HP	185	75	205	100
17.	Tractor 41-50 HP	235	85	250	110
18.	Tractor Trolley 4 wheel	20	3	25	7
19.	Tractor Trolley 2 wheel	15	3	18	5
20.	Water tanker trailor	25	5	30	10
	Trees and Plants				
21.	Hot mix plant 6-10 tons p.h.	305	135	340	170
22.	Bitumen mixer 10-14 cft.	165	70	180	90
23.	Bitumen mixer 5-7 cft.	120	60	125	70
24.	C.C. mixer 10-14 cft.	105	60	115	65
25.	C.C. mixers 7-10 cft.	95	60	100	65
26.	C.C. mixers 5-7 cft.	85	60	90	65
27.	Mortar mixers	90	60	95	65

Table 5.1(Contd')

Sl. No.	Name of Machine	For Departmental Work		For Contractor	
		Without POL	Idle	Without POL	Idle
Tar Boiler and Storage					
28.	Bitumen storage tanks 3 ton	40	-	60	-
29.	Tar boiler 1.5 tons	40	15	40	20
Stone Crushers and Granulators					
30.	Stone Crusher 30" x 16"	490	165	580	265
31.	Stone Crusher 16" x 9".	305	135	340	170
32.	Granulator 16" x 5".	295	130	325	180
Water Pumps					
33.	Pumping set 5-9 HP	70	55	75	60
34.	Pumping set 10-19 HP	80	60	85	60
35.	Pumping set 20-30 HP	85	60	90	65
36.	Pumping set above 30 HP	200	75	225	110
Generators					
37.	Generating set upto 5 kva.	90	60	95	65
38.	Generating set 5-15 kva.	115	65	130	80
39.	Generating set above 115 kva.	185	75	210	105
Aircompressors					
40.	Aircompressor upto 115 cfm.	220	85	240	110
41.	Aircompressor above 115 cfm.	245	85	270	115
Boring Machine					
42.	Other than diamond core	170	110	185	125
43.	Diamond core drilling m.c.	540	350	600	475
Other Machines					
44.	Mobile Crane 3 Ton.	465	160	530	155
45.	Power winch.	155	70	180	90
46.	Frontend loader.	335	135	380	190
47.	Hydraulic scraper.	155	110	170	130
48.	Chainpulley lock.	8.50	1.50	10	3
49.	Vibrators.	60	55	60	55
50.	Grouting machine.	30	-	35	-
Hire Charges of Earth Moving Machinery Hourly Basis					
51.	Bull Dozer 180/200 HP	270	120	360	140
52.	Bull Dozer 100/110 HP	170	70	210	85
53.	Motor Graders	60	20	70	45

Notes:
1. The rates are with effect from 9.4.1992 per day for 8 Hrs.
2. POL - petrol, oil and lubrication costs.

Source: Government of Rajasthan, Dept. of Public Works.

Table 5.2

Existing Toll Tax Rates in Rajasthan

(Rs)

Sl.No.	Categories of Vehicles	Rate per Vehicle
1.	Tempos, cars, taxis, private cars, tractors with trollies carrying non-agricultural produce.	2.00
2.	Motor Lorries, buses and other heavy machinery such as earthmoving machinery and mini-bus.	5.00
3.(a)	Trucks with registered laden weight less than 5 tons.	5.00
(b)	Trucks with registered laden weight more than 5 tons.	7.00

Notes:

1. When the same vehicle has to cross the bridge more than once in a day, the user shall have the option to pay one and half times the above rate while crossing the bridge more than once.

2. Vehicles exempted from paying Toll Tax: Vehicles of Defence Department, Police Vehicles, Fire fighting vehicle, Ambulances, Funeral Vans, Posts and Telegraph Deptt. Vehicles and Central, State Government Panchayat Samities and Local Bodies Vehicles on duty, and tractor trolleys carrying agricultural produce and registered for such purpose..

3. Any owner of private vehicles can obtain monthly pass by paying 30 times of the one time rate mentioned above in the schedule.

4. On the bridges lying within the Municipal Limits of a City, Toll Tax shall be charged only on heavy vehicles mentioned at Sr. No. 3. No Toll Tax shall be charged on other vehicles.

Source: Same as Table 5.1

Table 5.3

Recommended Toll Rates in Rajasthan

(Rs)

Sl.No.	Categories of Vehicles	Rate per Vehicle
1.	Tempos, cars, taxis, private cars, tractors with trollies carrying non-agricultural produce.	3.00
2.	Motor Lorries, buses and other heavy machinery such as earthmoving machinery and mini-bus.	6.00
3.	(a) Trucks with registered laden weight less than 5 tons.	6.00
	(b) Trucks with registered laden weight more than 5 tons.	8.00

Notes: Other provisions and exemptions to remain same as earlier (see table 5.2).

Table 5.4

Existing Fee Rate Structure of Education

(Rs)

Education level	Non-Income Tax Payers	Income Tax Payers: Income upto Rs 30000	Income Tax Payers: Income above Rs 30000
I to VIII Class	Nil	Nil	Nil
IX Class	1.50	7.00	10.00
X Class	1.50	7.00	10.00
XI Class	4.00	10.00	12.00
XII Class	4.00	10.00	12.00
1st Years TDC	3.50	10.00	12.00
2nd Year TDC	4.50	12.00	15.00
3rd Year TDC	4.50	12.00	15.00
Post Graduate	8.00	18.00	20.00
LL.B.	10.00	18.00	20.00

Source: Government of Rajasthan, Dept, of Education.

Table 5.5

Existing Visiting Fees to Museums and Archaeological Monuments in Rajasthan

(Rs)

A. rates for ordinary tourist visits:

	Non-Student	Student
1. Amer Mahal, Ajmer	2.00	1.00
2. Nahargarh Quilla, Jaipur	1.00	0.50
3. Jantar Mantar, Jaipur	2.00	1.00
4. Hawa Mahal, Jaipur	1.00	0.50

B. Visit for other purposes:

		Filming purposes			Other cultural purposes
		Foreign	Indian	Rajasthan	
1.	Amer Mahal, Ajmer	20,000	15,000	7,000	5,000
2.	Jantar Mantar, Jaipur	15,000	12,000	7,000	3,000
3.	Nahargarh Quilla, Jaipur	15,000	12,000	7,000	3.000
4.	Hawa Mahal, Jaipur	15,000	12,000	7,000	3,000
5.	Other Monuments	15,000	12,000	7,000	2,000

C. TV Film Shooting:

		Foreign	Indian
1.	Amer Mahal, Ajmer	1,500	1,000
2.	Rajasthan's all Protected Monuments	1,000	500
4.	Static Photography	1,000	500

Source: Government of Rajasthan, Cultural Affairs

Table 5.6

Recommended Tuition Fee Structure of General Education

(Rs)

Education level		Non-Income Tax Payers	Income Tax Payers
1.	I to VIII Class	Nil	Nil
2.	IX Class	2.00	12.00
3.	X Class	2.00	12.00
4.	XI Class	5.00	14.00
5.	XII Class	5.00	14.00
6.	1st Years TDC	4.00	14.00
7.	2nd Year TDC	5.00	18.00
8.	3rd Year TDC	5.00	18.00
9.	Post Graduate	10.00	24.00
10.	LL.B.	12.00	24.00

Table 5.7

Recommended Visiting Fees to Museums and Archaeological Monuments in Rajasthan

(Rs)

A. Rates for ordinary tourist visits:

		Non-Student	Student
1.	Amer Mahal, Ajmer	3.00	1.00
2.	Nahargarh Quilla, Jaipur	1.00	1.00
3.	Jantar Mantar, Jaipur	3.00	1.00
4.	Hawa Mahal, Jaipur	1.00	1.00

B. Visit for other purposes:

		Filming purposes		Cultural
		Foreign	Indian	
1.	Amer Mahal, Ajmer	20,400	15,300	5,100
2.	Jantar Mantar, Jaipur	15,300	12,240	3,060
3.	Nahargarh Qüilla, Jaipur	15,300	12,240	3.060
4.	Hawa Mahal, Jaipur	15,300	12,240	3,060
5.	Other Monuments	15,300	12,240	2,040

C. TV Film Shooting:

		Foreign	Indian
1.	Amer Mahal, Ajmer	1,530	1,000
2.	Rajasthan's all Protected Monuments	1,200	510
4.	Static Photography	1,020	510

Table 5.8

Expected Additional Revenue Receipt in Selected Major Heads of Rajasthan Due to the Recommended Changes

(Rs Lakh)

	Revenue Heads	1992-93 (BE)	Recommeded rate revision (per cent)	Additional revenue
1.	Public works including tolls.	1023.25		
	Tolls.	173.25	1.00	1.73
2.	Education etc.	386.28	2.00	7.73
	a. fees	283.43	2.00	5.67
	b. Other receipts	54.16	2.00	1.08
	c. Art and culture	48.69	2.00	0.97
3.	Medical etc.	1044.16	2.00	20.88
	a. Medical Receipts	135.46	10.00	13.55
	b. Others	66.54	10.00	6.65
4.	Water Supply & Sanitation	5408.00	1.00	54.08
5.	Housing	84.00	5.00	4.20
6.	Major & Medium Irrign.	2461.00	7.00	172.27
7.	Mines and Minerals	10564.00	4.00	422.56
	a. Minor minerals	4633.75	9.00	417.04
	Total	20970.69		683.45

VI

SUMMARY AND RECOMMENDATIONS

1. Introduction

6.1.1 Non-tax revenues form a sizeable portion of the States' revenues in India contributing, on an average, about 30 per cent of the total. They mobilise about 6 per cent of the total domestic product. Ways of improving the non-tax revenues to meet the widening revenue expenditure gaps in their budgeting is needed especially since attempts to raise more revenue through taxation are encountering increasing resistance from the people. The cost of public services through proper pricing should be met to avoid over-consumption and wasteful use of scarce resources.

6.1.2 This study seeks to appraise the performance of some of the non-tax sources of the State, identify the factors responsible for their growth or stagnation, explore the scope for rationalising their rate price structures and thereby improve the over all budgetary position of the State.

6.1.3 Chapter 1 brings out the greater reliance of the Rajasthan government on non-tax revenues as compared to most States, reflecting the lower share of tax revenue in total own revenue. The sluggish growth of non-tax sources in the State's total revenues, has been identified as a major factor underlying its resource problem.

2. Trends in Non-tax Revenues in Rajasthan

6.2.1 Chapter 2 examines in some detail the composition, growth trends and problems associated with the non-tax revenues. About a quarter of the State's own non-tax revenues comprises interest receipts. However, over 80 percent of the interest receipts is from departmental commercial undertakings which are often fictitious in nature as corresponding entries appear on the expenditure side as well. The "other" interest receipts realised on loans and advances made to the public sector undertakings, cultivators, cooperatives, local bodies and so on, form only a small portion.

6.2.2 Profits and dividends from the public undertakings form a negligible portion of the non-tax receipts.

6.2.3 About three-quarters of the State's own non-tax revenues comes from the receipts of the administrative departments (*table 2.2*) classified under 35 major heads each corresponding to one of the three functional expenditure heads: general, social and economic services.

6.2.4 Recoveries from the economic and social services have been consistently going down during the last two decades and the share of the general services has been rising. The growth of revenue from other major individual sources has also remained slow (*table 2.5*).

6.2.5 The dwindling contribution of the recoveries from social and economic expenditures over the years and the fictitious nature of those of the general service expenditures appear to be the major factors underlying the tardy growth of non-tax revenues in the State.

3. Norms for Improvement of Non-tax Revenues

6.3.1 As in the case of many States and many countries in the world, most of the government services are provided free or remain undercharged. As these services are looked upon as 'pure public' good in character, these are expected to be financed through taxation or borrowings. However, in practice, not all services provided by governments are of a 'pure public' in nature and therefore, financing of the 'private-good' portion of these services through taxation (or public borrowing at low interest) is not fair. Partial recovery of the costs through appropriate user charges should be called for.

6.3.2 In order to objectively assess the existing user charges, it is necessary to measure the 'desired recovery rates' in respect of each category of government service. Chapter 3 seeks to lay down some norms in this regard. Assuming that the recovery preferences are conditioned by various socio-economic factors as well as other unidentifiable elements specific to each region (in this case the State), and using econometric tools such as panel data determinant models, the 'desired' extent of cost recovery in respect of the ten selected non-tax sources are derived empirically from the past behavioural trends of the major States in the country.

6.3.3 Three types of 'norms' for assessing the non-tax rates in Rajasthan have been recommended. The first indicates the extent of rate revision required for each source so that the State's own desired recovery rates are achieved. The second type proceeds on the basis of the extent to which the State's desired recoveries fall short of the all-State average preferences. The third set of norms are based on those of the 'best practice' States.

6.3.4 These norms indicate scope for increasing the rates or charges in respect of certain major services of government departments in Rajasthan, although in the case of the social services such as water supply and sanitation, education, sports, art and culture, and medical service sources, the scope for increasing the recovery rates is limited and does not exceed 2 per cent. Economic services, such as, major and medium irrigation sources, minor minerals, village and small industries, and housing in particular, offer greater scope for rate revision.

6.3.5 While translating the scope for enhancing the recoveries into plausible rate structure revisions, sufficient note was taken of the fact that rate revisions and revenue contributions of certain sources is not always under the control of the State government. Also considerations such as equity, consumer acceptability, administrative feasibility, environmental needs, inflation as well as other governmental policies were kept in mind.

6.3.6 By far, the most important individual sources of non-tax revenue in the State have been mines and minerals, water supply and sanitation, and major and medium irrigation which account for about 40 per cent of the administrative non-tax revenues. These three sources are, therefore, taken up first.

4. Analysis of Rate Structures of Top three Non-Tax Sources: Mines and Minerals, Irrigation, Water Supply and Sanitation

A. Mines and Minerals

6.4.1 The growth of revenue from this source has not been commensurate with the growth of income originating from the mineral sector. Revenue under this major head comprises, receipts on account of lease/royalty in respect of major and minor minerals, and sale proceeds of certain minerals such as rock-phosphate. Of the two components, the most reliable and growing source has been the revenue from lease and royalty rates, the share of which, at present, is about 80 per cent in the total mineral revenue. As against this, the growth of the sale proceeds, particularly of rock-phosphate mining has been going down over the years, apparently due to changes in the mining prospects.

6.4.2 The low and falling recovery rate (ratio of non-tax revenue to corresponding revenue expenditure + annualised capital expenditure) can only be reversed through modifications in the existing lease/royalty rates, or drastic reductions in the corresponding expenditure under this major head.

6.4.3 The value of mineral produce in the State has been growing at about 15 per cent per annum, of which about 10 per cent of the growth is due to price rise.

6.4.4 Although the growth of the base in real terms has been the same, the price rise has been higher in the case of minor minerals than major minerals. Yet the revenue growth of minor minerals has not been higher than that of the major minerals, partly due to the 'specific' nature of the royalty rates. This and the fact that the recovery rate in the State is lower compared to that in other States suggests a need for a 20 per cent revision of the royalty rates of the 10 important minerals. With such a revision, the revenue of this head could be 17 per cent over the budgeted revenue.

B. Major and Medium Irrigation

6.4.5 At present irrigation contributes roughly 8 per cent of the own non-tax revenues of the State. The growth of revenue from this source has been just about 3.5 per cent per annum and the buoyancy coefficient has been much below unity for major and medium irrigation.

6.4.6 As in many States most of the revenue is from water charges. Over 78 per cent of the revenue comes from the five major irrigation projects namely, the Bhakra-Nangal project, the Chambal project, the Indira Gandhi canal, the Gurgaon canal, and the Mahi project.

6.4.7 The water rates differ according to (i) the source of irrigation, and (ii) the type of crop receiving the water. At present there are 3 groups of irrigation sources and 25 groups of crops. The source-wise differentiation of the water rates is based on the considerations of quality of irrigation as reflected in the quantum, duration and assurance of water supplies. The first category consists of perennial channels, irrigation works constructed or improved after 1st January, 1952 as also the works in the area of former States of Banswara, Dungerpur and Pratapgarh. The second category comprises the pre-1952 irrigation works other than the inundation works. The third category consists of the post-1952 inundation works. Rates also differ according to the usage of water. Unlike many other States, rates here do not vary according to the season; Kharif or Rabi. The crops are classified into 25 groups according to water usage for the purpose. Separate rates are charged for non-irrigation uses. For lift or seepage irrigation the rates applied are 50 per cent less than the normal water rates.

6.4.8 Betterment levy is charged as a result of the increase in land value after the supply of irrigation water. At present, the beneficiaries of the command areas of major projects such as Bhakra, Chambal and Indira Gandhi Nahar are required to pay this levy.

6.4.9 Water rate fixation is based on considerations such as water consumption, paying capacity of irrigators, and the need to cover the organisation and maintenance costs incurred in providing irrigation. However, it is not known what weightage is given to each of these criteria while arriving at the rates. The effective water charge computed as gross revenue as a ratio of the estimated gross output per hectare has been low and declining. As for the paying capacity considerations, while the norm set by the Second Irrigation Commission (1972) is 5 per cent of gross income, the existing gross revenue as per cent of the estimated gross output per hectare is barely 2 per cent in Rajasthan.

6.4.10 Despite the recommendations of various study groups for revising the water rates periodically, in Rajasthan the last revision took place in 1982, a decade ago, and that too with a modest increase. As a result, gross receipts from the three major irrigation projects per acre of gross irrigated area declined from Rs 47 in 1984-85 to Rs 34 by 1991-92.

6.4.11 The need for the revision of rate in case of major and medium irrigation is underlined because the average cost recovery of Rajasthan is approximately 5 per cent which is much below the 12 per cent recovery in States like Maharashtra.

6.4.12 In order to achieve the levels of the best practice States, the existing rates in respect of water charges for major and medium irrigation projects in Rajasthan may be raised at least by 7 per cent. With this revision the additional revenue of about Rs 172 lakh can be raised.

C. Water Supply, Sanitation and Sewerage Charges

6.4.13 The present rate structure of this source is bizarre mixture of different schemes. Keeping in view the considerations of equity and administrative feasibility, we recommend a revamped rate-structure (*table 4.15*).

6.4.14 While redesigning, we have eliminated the volumetric grading and adhered to the elements of the flat rate system. More specifically, the system of metered supply charged at different rates depending upon the consumption slab, is done away with. The existing elements of rate differentiation on the basis of size of the inflow pipe, number of taps, type of consumer, and rural/urban distinction, however, are retained.

6.4.15 The new rate structure is designed in such a way that the differentiation between domestic, commercial and industrial user classes is automatically built-in.

5. Analysis of Non-tax Rate Structures: Other Major Sources

A. Machinery Hire Charges

6.5.1 The public works department looks upon the machinery hire charges as largely incidental. Even so, the existing rate structure is not simple. While there may be some justification for the machine-specific hire charges rather than uniform rates, there appears to be no good case for discrimination for governmental and other users of the machinery. We, therefore, suggest that the additional hire charge of 25 per cent for private works can be done away with. Enhancement of the present hire charges is not recommended as the State discourages the practice of giving the machineries of the public works department for private works.

B. Toll Rates

6.5.2 Considering the low recovery effort in this respect, the toll rates in all the three categories should be revised by atleast one rupee (*table 5.3*). The possibility of extending the toll system to some of the main highways in the States should be explored.

C. Housing

6.5.3 The charges from this source should be raised by atleast 5 per cent so as to bring the recovery rate to the all-State average level.

D. Education, Sports, Art and Culture

6.5.4 We recommend a general increase in the tuition fees and other rates in respect of both general as well as technical education because as such the over all recovery rate of this major head is increasing by 2 per cent. In addition, we recommend the abolition of the existing fee differentiation for higher education between income tax payers and non-payers with a view to keep the rate structure simple (*table 5.6*).

6.5.5 The recommended rate-structure relating to Museums and Archaeological monuments contains fewer rates, and does away with rate differentiation between different categories of visitors and users (*table 5.7*).

E. Medical and Public Health

6.5.6 In order to achieve the required 2 per cent increase in the overall recovery rates of this major head, a 10 per cent enhancement of the hospital charges and other related rates is recommended.

Revenue Implications of the Recommendations

6.5.7 The approximate additional revenue due to our recommendations for the year 1992-93, worked out on the basis of the budget estimates is about Rs 68 lakh and the details are as shown in *table 5.8*.

6. Conclusion

6.6.1 Although the recommended changes may not lead to significant gains in terms of revenues, at least they are aimed to bring about a measure of objectivity and rationality in the user rate structures. The derivation and setting up of the norms in relative terms rather than in absolute terms, is done deliberately with a view to keeping the rate revisions in conformity with the public preferences. In the long-run, however, more objective norms need to be set up in order to maintain fiscal viability of government services.

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