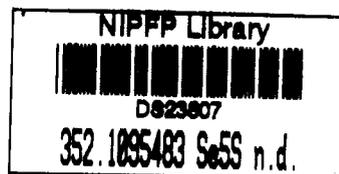




STATE FINANCES IN KERALA: SELECTED ISSUES

TAPAS K. SEN
M. GOVINDA RAO

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NATIONAL INSTITUTE OF PUBLIC FINANCE AND POLICY
18/2, SPECIAL INSTITUTIONAL AREA
NEW DELHI 110 067.

PREFACE

The National Institute of Public Finance and Policy is an autonomous, non-profit organisation, whose major functions are to carry out research, undertake consultancy work and impart training in the area of public finance and policy.

The study on *State Finances in Kerala: Selected Issues* was entrusted to the State Finances Unit of the Institute by the Government of Kerala at the instance of the Resources Commission. The study was carried out by Dr. M. Govinda Rao and Dr. Tapas Sen with the assistance of Shri Dipchand Maity.

The Governing Body of the Institute does not take the responsibility for any of the views expressed in this Report. This responsibility belongs to the staff of the Institute and more particularly to the authors of the Report.

Raja J. Chelliah
Chairman

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The present study was undertaken by the State Finances Unit of the National Institute of Public Finance and Policy at the request of Shri V. Ramachandran, Vice-Chairman, State Planning Board and Chairman of the Resources Commission set up by the Government of Kerala, to enlist the Institute's help in restoring order to the sagging government finances in the State of Kerala. He was not only the motive force behind this study, but has taken active interest in it throughout. His contribution to the study is not apparent, but his tips and suggestions were extremely useful for us in focussing on specific issues.

We have had the benefit of prolonged discussions and exhaustive comments from Shri K.V. Nambiar, Member, Resources Commission, who went through an earlier draft meticulously and suggested several improvements. He also supplied us with some useful material on subsidies which helped us considerably.

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We have had the benefit of discussions with Shri R.P. Singh, Member, Board of Revenue on the issues relating to excise duty. Shri K.N. Kurup, Chief, Economic Division, State Planning Board, has made our task considerably lighter by organising discussions with various persons, maintaining the flow of needed information and, of course, providing us with his insights into Kerala Finances.

Dr. Raja J. Chelliah, Chairman of the Institute, went through the draft report despite his busy schedule and gave suggestions for improvements.

To all of the above, our sincere thanks. Any remaining error, needless to say, is our responsibility.

New Delhi

Tapas Sen
M. Govinda Rao

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Chapter I

AN OVERVIEW OF STATE FINANCES IN KERALA

a. Objective and Scope of the Study: The severity of fiscal imbalance and its adverse effects on macroeconomic and balance of payment situation in the country have recently received a good deal of attention by researchers as well as policy makers. However, growing volume of public dissaving at the State level and the consequent constraint on financing satisfactory levels of social and economic infrastructure by them has not so far been adequately addressed.

In some respects, the fiscal situation in the States is more critical than that at the Centre. The States have the primary Constitutional responsibility for providing basic social and economic services. At the same time, while the elasticity of own revenues of the Centre and the States are broadly the same, the States' expenditures have been growing at rates faster than that of the Centre particularly in recent years. Further, the States do not have the same ability to finance their growing fiscal imbalance; unlike the Centre, the States do not have independent power to borrow from the market, nor can they take recourse to borrowing from the central bank because of the overdraft regulation scheme.¹ In the event, given the primacy of salary bill, interest payments, subsidies and transfers of various kinds, the burden of adjusting to the imbalance has tended to fall mainly on capital and maintenance expenditures with adverse implications in terms of infrastructural constraints, declining productivity of public sector investment and deceleration in long-term growth of the economy.

Briefly, the effect of a difficult fiscal position at the State level has been to (i) alter the pattern of financing of plans resulting in greater dependence on borrowed funds; (ii) make it difficult to achieve the targetted plan outlay in real terms (at constant prices); and (iii) decelerate outlay on developmental sectors in general, and capital and maintenance expenditure in particular.

While these issues are common to all the States, the fiscal problem in Kerala has been aggravated by certain additional factors. Given the very high density of population in the State, the emphasis historically has been to make large investments in

1. According to the scheme in force since 1985, the Reserve Bank of India would not be obliged to honour the cheques of the States having overdrafts beyond seven continuous working days.

The authors thankfully acknowledge the excellent research assistance rendered by Dipchand Maity and the efficient secretarial assistance by R. Periannan.

human capital rather than in physical capital formation. Consequently, while in terms of social indicators of development, the State's performance remains very impressive, the per capita income in Kerala has continued to be below the national average. The inability to contain revenue expenditures has curtailed the State's capacity to generate resources for investment. At the same time, emphasis on social services has resulted in a high revenue component in plan expenditures and consequently, a large proportion of borrowed funds is used up in financing current expenditures leaving little for physical capital formation. The increasing interest burden and successively larger outlay on social services have resulted in a significant acceleration in current expenditure. At the same time, revenue recoveries from the provision of public services have continued to be negligible. The social services which account for a predominant proportion of expenditure are provided virtually free, and the investments in economic services too have not yielded significant returns. Due to these reasons, increasingly larger proportions of current expenditure have had to be financed from borrowed funds over the years.

The analysis of fiscal problems and the examination of the potential to generate additional revenues in Kerala, therefore, is extremely important. Considering this, the Resources Commission appointed by the Government of Kerala requested the National Institute of Public Finance and Policy to study certain aspects of the fiscal condition prevailing in the State. Specifically, the Institute was asked to (i) estimate the State's tax revenue potential, (ii) analyse the structure and operation of sales tax and State excise duties - the two most important sources of tax revenue, with a view to rationalise these taxes and examine the scope for improving their revenue productivity; and (iii) examine the possibility of raising recovery rates in specific areas through more rational pricing of public services. The present chapter broadly reviews the nature and magnitude of fiscal problems in Kerala particularly from the viewpoint of financing the developmental plans.

b. Trends in Plan Outlay and Pattern of Financing: In both economic analysis and policy making, it has always been assumed that public sector plan expenditure is an important determinant of economic growth. From this perspective, the trends indicate that Kerala's performance, relative to the country as a whole, has not been upto the mark (Table 1.1). The index of per capita plan expenditure in Kerala relative to the average for all the States did show improvement in the initial stages, i.e., upto the Third Plan when per capita plan expenditure in the State was higher than the all-State average by over nine per cent. Even in the Fourth Plan period the State's per capita plan expenditure was higher than the all-State average by about five per cent. However, since then, per capita outlay in the State has been lower than all-State average and the difference has shown a continuous increase so that during the Seventh Plan period, the per capita plan expenditure in the State was just about 70 per cent of all-State average. Of greater concern is the fact that Kerala's per capita income in 1988-89 was lower than

the average for the country by almost 20 per cent and the lower per capita plan expenditure would, *ceteris paribus*, further distance the State from the level of average income prevailing in the country.

The per capita plan expenditure in Kerala, in real terms, is not only low in relation to the all-State average, but also has been showing a declining trend since the Fifth Plan. In constant (1980-81) prices, the per capita annual expenditure declined from Rs 187 in the Fifth Plan to Rs 138 in the Sixth and further to Rs 124 in the Seventh Plan. The declining real per capita expenditure clearly indicates the resource constraint faced by the State.

Table 1.1
Per Capita Annual Plan Outlay in Kerala and
All States in Different Plans

(Rs. per year)

Plans	Kerala	All States	Index of Plan Outlay
(1)	(2)	(3)	(4)
I Plan 1951-56	4.5	5.2	84.6
II Plan 1956-61	9.0	10.8	83.3
III Plan 1961-66	19.2	17.6	109.1
Annual Plans 1966-69	22.0	21.0	104.8
IV Plan 1969-74	24.2	25.5	94.5
V Plan 1974-79	98.0	136.5	86.1
VI Plan 1980-85	117.6	136.5	86.1
VII Plan 1985-90	148.2	210.9	70.3

Source: *Statistics for Planning*, Department of Economics and Statistics, Government of Kerala.

The resource constraint has not only limited the level of spending on social and economic infrastructure in Kerala, but also has altered the pattern of financing the plan. The pattern of plan financing in Kerala over the Sixth and Seventh Plan periods presented in Table 1.2 brings out clearly the deteriorating fiscal condition in the State. During the Sixth Plan period, budgetary savings contributed almost a third of the plan resources. In contrast, during the Seventh Plan, the balance from current revenue was -10.3 per cent of total plan resources. While the reliance on borrowed funds

including the loan portion of Central assistance was only about 63 per cent of the plan outlay during the Sixth Plan, it was much larger, almost equal to the total plan outlay during the Seventh Plan. The plan funds diverted to repay the loans as seen in the negative values of miscellaneous capital receipts was about 6 per cent in the Sixth Plan period whereas, in the Seventh Plan period, it was 18 per cent. Thus, the budgetary sources, after adjusting for repayment of loan, contributed about a quarter of the plan resources for the Sixth Plan; for the Seventh, they drained the resources by as much as 28 per cent. In other words, the diversion of plan funds to fill non-plan revenue gap and non-plan capital gap in the State was almost equivalent to the grant portion of Central assistance and almost the entire resources for plan had to be raised through borrowing. As the revenue component of plan in the State constituted almost 48 per cent of the total plan outlay, this financing pattern implies a diversion of almost one-half of borrowed funds for meeting revenue expenditure.

Table 1.2
Plan Financing in Kerala - Sixth and Seventh Plans

(Rs. Crore)

Particulars	Sixth Plan (1979-80 Prices)		Seventh Plan (1984-85 Prices)	
	Amount	Per cent	Amount	Per cent
(1)	(2)	(3)	(4)	(5)
Balance from current revenue*	395.0	31.5	-214.0	-10.3
Contribution of enterprises				
State Electricity Board*	3.6	0.3	-61.7	3.0
State Road Transport* Corporations	-78.4	-6.3	-61.0	-3.0
Market borrowing and negotiated loan	208.3	16.6	744.1	36.0
Small saving loans	54.0	4.2	356.5	17.2
Provident Fund	183.5	14.6	480.7	23.2
Misc. capital receipts	-73.4	-5.9	-371.2	-18.0
Adj. of Overdrafts	201.8	16.1	54.7	2.6
State's Total Resources	893.4	71.3	1051.4	50.8
Central Assistance	359.5	28.7	1019.5	49.2
Total Plan Resources	1253.0	100.0	2070.9	100.0

* Includes Additional Resource Mobilisation under respective heads.

Source: State Planning Board, Government of Kerala.

Alongside increased reliance on borrowing, it is seen that the recourse to more expensive sources of borrowing too has shown a significant increase. During the Sixth Plan period, for example, the two relatively more expensive sources of borrowing, i.e., small saving loans and provident fund, constituted only about 19 per cent of the total plan resources. However, during the Seventh Plan period, reliance on these two sources more than doubled to form about 40 per cent. Apart from the higher cost of borrowing, the rationalisation of the saving incentives in the personal income tax system at the Central level has led to a decline in the small saving collections. This is likely to further strain plan financing in the future.

The difficult fiscal situation in the State is clearly brought out when the financing pattern of the Seventh Plan in the State is compared with the all-State average pattern (Table 1. 3). Whereas in the States in aggregate the budgetary contribution to the plan after adjusting for repayment of loan to the Centre (balance from current revenue and miscellaneous capital receipts) amounted to 10 per cent, in Kerala over 10 per cent of plan resources had to be diverted to finance non-plan revenue deficit and repayment of Central loans claimed another 18 per cent. With practically no contribution from public enterprises, the dependence on borrowed sources of finance was much higher in Kerala than in the States taken together. While in Kerala borrowed resources were almost equivalent to the plan outlay, in the States taken together they formed just about two-thirds of total plan expenditure. In other words, in the States taken together, borrowed funds financed the entire plan capital expenditure and the current component of plan expenditure was financed entirely by budgetary savings and the grant portion of Central plan assistance. In contrast, in Kerala, only about one-half of the borrowed funds was actually utilised for capital spending.

From the above analysis, it is clearly seen that:

- (i) the basic problem in Kerala is that the revenue expenditure in the State has been rising faster than its revenue receipts. The principal reason for this has to be seen in very high growth of expenditures, although the stagnancy in non-tax revenues too contributed to the relatively slow growth of the State's own revenues. As a consequence of this, the budgetary contribution to the plan in Kerala has shown substantial deterioration over time. Also while in the State as a whole, the budgetary savings contributed a small proportion of the resources for the plan, in Kerala, the dissavings and loan repayment obligations caused a major drain on resources of the State.
- (ii) the severe resource constraint created on account of the declining budgetary contribution has caused a decline in per capita plan expenditure in the State. Also, the plan expenditure in the State is much lower than the States taken together and this difference has shown an increase over time.

Table 1.3
Plan Financing Pattern in Kerala and All States - Seventh Plan

(Rs Crore)

Particulars	Kerala		All States	
	Amount	Per cent	Amount	Per cent
(1)	(2)	(3)	(4)	(5)
Balance from Current Revenue	-214	-10.3	12944	17.8
Contribution of Enterprises	1	0.0	-2146	-2.9
Market Borrowing	744	35.9	13855	16.0
Small Saving Loans	356	17.2	15166	20.8
Provident Fund	481	23.2	5497	7.6
Misc. Capital Receipts	-371	-17.9	-5670	-7.8
Adj. of Overdrafts	55	2.6	-	-
State's Total Resources	1051	50.8	39646	54.5
Central Assistance	1019	49.2	72796	45.5
Total Plan Resources	2071	100.0	72796	100.0

Source: 1. State Planning Board, Government of Kerala.
2. *Indian Economic Statistics (Public Finance)*, Government of India.

Table 1.4
Growth of States' Revenues and Expenditure
(1980-81 to 1988-89)

(per cent per annum)

Particulars	Revenue Receipts	Non-Plan Revenue Expenditure	Total Revenue Expenditure
(1)	(2)	(3)	(4)
Andhra Pradesh	16.3	16.7	17.6
Karnataka	14.9	16.4	17.2
Kerala	13.9	16.7	16.1
Tamil Nadu	13.7	15.4	16.1
High Income States	15.0	16.6	17.2
Middle Income States	15.0	16.0	16.4
Low Income States	15.0	13.2	14.3
All Major States	15.0	15.2	15.9

Source: NIPFP Database on State Finances.

- (iii) the significant decline in the budgetary contribution has enhanced the dependence on borrowed funds in the State. Even among the various sources of borrowing, the reliance on more expensive sources has shown an increasing trend.

The deterioration in budgetary savings in Kerala noted above has been due to the non-plan revenue expenditure increasing at a rate much faster than the State's revenue receipts, as can be seen from Table 1.4. During the 1980s, while the non-plan revenue expenditure increased at an average annual rate of 16.7 per cent, the growth of revenue receipts was much lower at 13.9 per cent. In fact, the growth of non-plan expenditure in Kerala was the highest among the neighbouring States; it was also higher than the average growth rates in high income, middle income and low income States. At the same time, the growth of revenue receipts in the State was lower than all the neighbouring States except Tamil Nadu; it was also lower than the average rates in high income, middle income and low income States.

A disaggregated analysis of the growth of non-plan revenue expenditure is helpful to identify the items that have shown very high growth rates in recent years. It is seen in Table 1.5 that the growth of interest payments and spending on general administrative services in Kerala was not only the highest among the neighbouring States but also was higher than the averages for the groups of high income, middle income as well as low income States. The very high growth rate observed in the case of general administrative services is particularly disturbing as the per capita expenditure on this item in 1980-81 in Kerala was already the highest among the neighbouring States (Table 1.6). Equally disturbing is the fact that even when per capita expenditure on economic services in Kerala in 1980-81 was the lowest among the neighbouring States, it recorded an annual average increase at the rate of only 13 per cent in contrast to the growth rate of almost 18 per cent in Andhra Pradesh and 14 per cent in Tamil Nadu. In the case of social services, the growth rate in Kerala was the lowest and this may perhaps be due to the fact that per capita expenditure on social services in Kerala was higher than all the neighbouring States in 1980-81 (Table 1.6).

The serious concern arising from the high growth of non-plan revenue expenditures noted above has been emphasised even by earlier official and non-official studies. The study by Bagchi and Rao (1987) analysed the reasons for the growth of non-plan expenditures in terms of, *inter alia*, increase in employment, inflation, emphasis on various social security schemes, taking up of various developmental projects on the non-plan side, various types of wastage and inefficient use of funds. The Expenditure Commission appointed by the Government of Kerala too has recommended specific measures needed to ensure cost-efficient spending. As the issues on the expenditure side have already been analysed in reasonable detail, we have not gone into them in this study.

Table 1.5

**Growth of Revenue Expenditure in the States
(1980-81 to 1988-89)**

(per cent per annum)

Particulars	Growth in Non-Plan Revenue Expenditure in the States								Growth in Total Revenue Expenditure in the States							
	Andhra Pradesh	Karnataka	Kerala	Tamil Nadu	High Income States	Middle Income States	Low Income States	All Major States	Andhra Pradesh	Karnataka	Kerala	Tamil Nadu	High Income States	Middle Income States	Low Income States	All Major States
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. Interest Payment	22.1	22.8	24.4	16.7	22.8	20.9	19.5	20.0	22.1	22.8	24.4	16.7	22.8	20.9	19.5	20.8
2. General Service	16.2	16.6	20.5	16.8	16.4	16.9	14.2	15.9	16.2	16.7	19.9	17.0	16.3	16.9	14.2	15.0
3. Social Service	14.8	17.5	14.5	15.7	16.9	15.2	11.8	14.6	16.4	18.1	14.4	16.9	17.6	15.8	12.8	15.3
of which																
a. Education, Art and Culture	15.5	18.4	13.9	16.3	16.4	15.9	12.4	14.9	15.9	18.3	13.7	16.1	16.7	15.9	13.1	15.2
b. Medical and Public Health	12.6	14.4	12.1	13.1	14.2	12.9	11.9	13.0	15.1	16.4	12.9	14.6	14.7	14.1	14.1	14.3
4. Economic Services	17.6	12.4	13.0	13.8	14.0	14.4	10.7	13.2	18.7	14.9	13.0	14.7	15.7	15.8	14.4	15.3
of which																
a. Agriculture	16.8	15.8	13.0	9.1	13.8	13.4	10.2	12.5	19.7	19.1	13.1	12.5	15.1	16.6	16.3	16.1
b. Power, Irrigation and Flood Control	14.3	12.2	12.5	17.6	15.1	14.6	13.3	14.4	15.7	13.2	15.2	29.2	18.9	17.9	12.8	16.7
c. Mining and Industry	16.2	7.5	30.2	9.1	10.1	10.8	12.1	11.3	19.2	10.8	14.7	16.7	14.5	14.2	12.9	13.9
d. Transport	5.9	10.5	11.5	5.1	11.5	8.7	7.0	9.0	5.6	10.5	10.9	4.5	11.1	8.2	11.1	10.1
5. Total Non-Plan Expenditure	16.7	16.4	16.7	15.4	16.5	16.0	13.2	15.2	17.6	17.2	16.1	16.1	17.2	16.4	14.3	15.9

Source: NIPFP Data Base on State Finances.

Table 1.6

Per Capita Revenue Expenditure in Kerala and Other Selected States

(Rs per capita)

	Andhra Pradesh		Karnataka		Kerala		Tamil Nadu		All Major States	
	80-81	88-89	80-81	88-89	80-81	88-89	80-81	88-89	80-81	88-89
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Interest payment	15	60	17	68	18	87	19	57	21	67
2. General services	37	110	38	125	43	150	37	115	45	100
3. Social services	96	259	93	289	141	344	90	292	101	231
of which										
a. Education	44	125	46	140	85	207	49	140	53	121
b. Medical and public health	14	36	14	40	20	45	17	41	19	40
4. Economic services	74	256	83	215	64	143	93	242	82	180
of which										
a. Agriculture	11	30	18	48	19	37	14	39	40	90
b. Power, irrign. and flood control	25	92	21	48	6	18	31	73	17	41
c. Mining and industry	3	12	11	19	4	11	5	15	8	17
d. Transport	8	12	9	18	0	24	14	17	11	17
Total Expenditure	222	685	232	697	266	725	239	707	249	586

c. **Growth and Composition of State Revenues:** While the non-plan expenditure in Kerala grew at 16.7 per cent per year during the period 1980-81 to 1988-89, the growth in revenue receipt was much lower at 13.9 per cent. In fact, among the neighbouring States only Tamil Nadu had lower growth rate of revenue (13.7 per cent). A more disaggregated analysis of the growth of revenues in Kerala reveals that while the State's own revenues grew at only 13.2 per cent per year, the growth of Central transfers was higher by 2 points, at 15.2 per cent (Table 1.7). In fact, the growth of own revenues in the State was the lowest among the neighbouring States; it was also lower than the average growth even in high, middle and low income States. It is further seen that the low growth in own revenue was mainly due to the virtual stagnancy in non-tax revenues. The non-tax revenues grew at only 4.5 per cent per year as compared to the all-major State average of 13.3 per cent. Also, growth of non-tax revenue in Kerala was lower than in all the States compared.

The consequence of the slower growth of own revenues in Kerala has been to reduce its share in total revenues. The share of the State's own revenues declined from 68.5 per cent in 1980-81 to 65.7 per cent in 1988-89 (Table 1.8). In all other neighbouring States except Tamil Nadu, the shares of own revenue in total revenues showed increases. The decline in the share in Kerala is mainly attributable to the fall in the share of non-tax revenues from 15.4 per cent in 1980-81, to less than 10 per cent in 1988-89. Thus, even the increase in the share of own tax revenues by 3 percentage points from 53 per cent to 56 per cent could not prevent the declining share of own revenues of the State in total revenue. The stagnation in non-tax revenues in the State clearly represents the inability of the State to mobilise resources by levying user charges at economic rates and efficiently manage the public enterprises to yield reasonable returns on their investments.

The State's own tax revenue, however, has increased at almost 16 per cent per year, which is equivalent to the average growth rate registered in the middle income States, though it is lower than in Andhra Pradesh (17.5 per cent) and Karnataka (16.3 per cent). Consequently, the share of the State's own tax revenue in total revenue increased from 53.1 per cent in 1980-81 to 56.2 per cent in 1988-89. This, however, has come about entirely due to the very high growth of sales tax (16.6 per cent). Consequently, the share of sales tax in total revenues increased from 31.5 per cent in 1980-81 to 36.4 per cent in 1988-89. While the stamp duty and registration fees and the taxes on transport broadly maintained their shares, the share of State excise duty declined from 10.1 per cent to 8.9 per cent during this period.

It is important to analyse the reasons for the slow growth of State excise duties. In the case of sales tax, which contributes over 36 per cent of total revenue of the State, the growth performance in Kerala is comparable to the performance in the middle

Table 1.7
Growth of States' Revenues
(1980-81 to 1988-89)

(per cent per annum)

Particulars	Andhra Pradesh	Karna- taka	Kerala	Tamil Nadu	High Income States	Middle Income States	Low Income States	All Major States
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Stamps and Registration	14.3	17.5	13.9	17.5	15.2	15.0	16.8	16.0
2. State Excise	17.6	12.2	14.2	21.1	18.2	14.7	20.1	17.1
3. Sales Tax	19.0	18.2	16.6	15.0	15.2	16.6	14.7	15.6
4. Motor Vehicle Tax and Taxes on Goods and Passengers	16.6	20.8	16.6	11.3	15.9	14.8	14.3	15.0
5. Other Taxes	12.1	9.2	15.3	11.4	13.9	15.2	15.7	14.8
6. Own Tax Revenue	17.5	16.3	15.9	14.6	15.4	15.9	15.7	15.7
7. Own Non-Tax Revenue	14.9	10.8	4.5	8.1	14.7	10.2	14.4	13.3
8. Own Total Revenue	16.9	14.9	13.2	13.4	15.2	14.7	15.2	15.0
9. Shared Taxes	14.2	12.6	12.4	12.2	9.0	13.0	14.7	13.2
10. Grants from Centre	16.5	20.0	20.6	18.9	21.8	20.5	15.6	18.2
11. Total Central Transfers	15.0	15.1	15.2	14.4	14.0	15.5	15.1	15.0
12. Total Revenue	16.3	14.9	13.9	13.7	15.0	15.0	15.1	15.0

Source: NIPFP Data Base on State Finances.

Table 1.8
Composition of State's Revenue

(per cent)

Particulars	Andhra Pradesh		Karnataka		Kerala		Tamil Nadu		All Middle* Income States		All Major States	
	1980-	1988-	1980-	1988-	1980-	1988-	1980-	1988-	1980-	1988-	1980-	1988-
	81	89	81	89	81	89	81	89	81	89	81	89
1. Stamp Duty and Registration Fees	3.7	3.3	3.4	3.9	5.1	5.0	4.6	6.2	3.8	4.2	3.1	3.5
2. State Excise	12.0	13.1	9.8	8.6	10.1	8.9	1.0	4.2	7.1	7.8	5.4	6.6
3. Sales tax	21.8	25.6	24.8	33.2	31.5	36.4	35.3	39.9	28.0	32.1	25.7	28.2
4. Motor Vehicle Tax and Taxes on Goods and Passengers	4.1	4.0	5.0	6.9	3.1	3.3	6.3	4.6	5.2	4.7	4.5	4.6
5. Other Taxes	4.9	3.9	7.0	4.8	3.3	2.6	3.4	3.0	7.4	4.6	5.2	5.1
6. Own Tax Revenue	46.5	50.0	50.0	57.5	53.1	56.2	50.5	57.8	59.7	49.1	44.0	47.9
7. States' Non-tax Revenue	17.5	19.1	21.1	15.0	15.4	9.6	18.0	9.4	17.3	13.2	18.2	16.1
8. States' Own Total Revenue	64.0	69.1	71.1	72.4	68.5	65.7	68.5	67.3	66.4	66.6	62.2	64.0
9. Share Taxes	23.2	18.8	20.7	16.8	23.4	23.0	22.5	20.4	23.7	20.1	24.5	20.6
10. Grants from Centre	12.8	12.1	8.3	10.8	8.1	11.3	9.0	12.3	10.0	13.4	13.3	15.4
11. Total Central Transfers (9 + 10)	36.0	30.9	28.9	27.6	31.5	34.3	31.5	32.7	33.6	33.4	37.8	36.0
12. Total Revenue (8 + 11)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Revenue as percentage of GDP at current prices	17.4	21.8	16.3	18.1	17.1	21.2	17.9	17.6	15.9	18.4	15.4	17.6

* Includes West Bengal in addition to the four States included above.

Source: NIPFP Data Base on State Finances.

income States in the aggregate. Yet, it was much lower than in the two neighbouring States of Andhra Pradesh and Karnataka. This also requires a more detailed analysis.

d. Tax Performance in Kerala: The inter-State comparison shows that Kerala's tax performance has been well above the average. The per capita own tax revenue in Kerala in 1988-89 at Rs 379 (Table 1.9) was higher than both the average for the major States (Rs 289) and the average of middle income States (Rs 340). As a proportion of State Domestic Product (SDP), at about 12 per cent, Kerala's performance was the best. The tax-SDP ratio in the State, in fact, was higher than the all-major States' average by 3.5 percentage points. Even the Ninth Finance Commission's analysis of relative taxable capacity and effort shows that Kerala's tax effort was higher than all the States' average by about 4 per cent.

However, the estimate of tax effort of the State on the basis of 'average' behaviour of all the States does not explain the deterioration in the budgetary contribution to the Seventh plan noted earlier. To evaluate the fiscal performance of the State over time and to make realistic projections, it would be useful to take the State's own past performance as the norm in a time-series model. Projections can be made by using the 'average' past performance of the State itself. Based on the 'best' past performance, the maximum revenue potential can be arrived at separately for each of the taxes and then the aggregate picture can be obtained by adding the potential from individual taxes. Bagchi and Sen (1989), in an earlier study, have detailed the methodology for such an evaluation and projections. This exercise has been updated and the results of the study along with tax effort indices and projections are presented in the Appendix to the Chapter.

The analysis of tax effort based on the State's own performance over time indicates that it is difficult to discern any systematic pattern in the tax efforts of the State in respect of various taxes over time. Yet, in respect of the two major taxes, the sales tax and the State excise duty, the best performance were seen in the early seventies and the levels of tax effort reached in 1971-72 were never again reached. In 1990-91, the tax performance as compared to 1971-72 was lower by 40 per cent in the case of sales tax and by 29 per cent in the case of State excise duty. In other words, if the State was able to repeat its best performance (achieved in 1971-72), the revenue in 1990-91 would have been higher by 66 per cent in the case of sales tax and by 40 per cent in the case of State excise duty.

The foregoing analysis underlines the need for a more detailed study in some specific areas. In the case of tax revenues, though the growth of the State's tax revenue has not been disappointing, there are States which have shown better growth performances. Besides, the tax performance of Kerala in recent years has not matched

its own tax effort seen in the early 1970s. This is particularly true of sales tax and excise duty, the two major State taxes. It is, therefore, helpful to make a more detailed analysis of the structure and operation of these taxes and identify areas calling for simplification and rationalisation to achieve a greater exploitation of the tax potential with least harmful economic effects. This is carried out in the next two chapters. We have already pointed out that the stagnancy in non-tax revenues is a principal reason for the slow growth of non-tax revenues in Kerala. The non-recovery of costs of social and economic services provided in the State results in a large volume of subsidies and this has shown substantial increases over time. Not all of these are intended, nor are they targetted properly to benefit the intended groups. The analysis of non-tax revenues in general, and volume, composition and growth of subsidies in particular comprises chapter 4. Chapter 5 summarises the major findings of the study.

**Analysis of Tax Potential in Kerala: Projections
from 1991-92 to 1996-97.**

In an earlier study, Bagchi and Sen (1989) estimated revenue potential from various taxes in Kerala and projected it for the period 1990-95. To estimate the potential, revenue from various taxes in the State were regressed on the relevant tax bases or their proxies over the time period, 1974-75 to 1987-88. On the basis of the State's past 'average' as well as the best performance standards, projections of the potential were made for the time period, 1990-95. We have updated these estimates and the results of tax potential and effort in respect of various taxes obtained on the basis of the updated analysis are presented in this Appendix.

In this study, we confine ourselves to only the updated estimates of tax potential for five major taxes: land and agricultural taxes (land revenue plus agricultural income tax), stamp duties and registration fees, State excise duty, State sales tax, and motor vehicle taxes (including passenger and goods taxes). We have excluded electricity duty from this exercise due to the fact that the collection figures show tremendous fluctuations during the period 1987-92, which renders any forecasting exercise based on past values of revenue from this tax of dubious value. Besides, generally, the revenue potential from electricity duty is implicitly included while analysing the working of the State electricity boards and therefore, not separately considered. The methodology and the specifications remain exactly the same as in the earlier exercise. We have reestimated the basic specifications (not the preferred ones in the previous exercise) and gone through the process of arriving at the preferred equations in the same way as earlier on the basis of relevant statistical tests.

The extension of the data set requires some explanation. All the State domestic product (SDP) figures (and the disaggregation thereof) are obtained by merging two series: one with 1970-71 as the base year, and the other with 1980-81 as the base year. As is well-known, these two series are estimated on the basis of different methods and hence incompatible. We have estimated the figures for the year 1985-86 onwards, by applying the ratio of the figures for the earlier and the new series for the year 1984-85 to the figures for the new series, for each of the SDP variables used. Although this adjustment may take care of the scale difference, qualitative differences may still remain. Hence, in all the equations using any SDP-related variable, we have used a dummy variable taking the value zero for the years 1970-1985 and one for the years 1985-91 (the years for which we use adjusted new series figures). This is dropped in the final equations only when statistical tests indicated its redundancy. The population estimates used in the earlier study were from secondary sources. The present exercise uses annual population data estimated from actual Census figures for the years 1971, 1981 and 1991.

These are estimates for the middle of the financial year. The differences with the earlier data are minor in the case of total population; the figures for urbanisation differ significantly, however. Figures for other variables have been updated from the same sources as earlier and pose no comparability problem.

The list of variables used in the analysis are as follows:

LAGTAX=	Receipts from land revenue and agricultural income tax,
SDRF=	Receipts from stamp duties and registration fees,
EXCD=	Receipts from State excise duties,
GST=	Receipts from State sales tax,
MVT=	Receipts from motor vehicle tax and passenger and goods tax,
SDP=	State domestic product (in current prices),
SDPP=	State domestic product (in current prices) from the primary sector,
PCSDP=	Per capita SDP,
SDPAFF=	State domestic product (in current prices) from the primary sector minus the same from mining,
SDPMFG=	State domestic product (in current prices) from the manufacturing sector,
POPEN=	Estimated total population of the State,
URBN=	Percentage of estimated urban population in POPEN,
BANKS=	Number of branches of commercial banks in the State,
ALLVEH=	Total number of motor vehicles of all types on road,
D=	Dummy variable taking value 1 for 1985-86 onwards and 0 otherwise.

The preferred equations are reported in Table AI.5 in detail. The tax effort estimates below (Table AI.1) are derived by taking the ratio of actual values and the estimated values (in percentage terms) of the dependent variables, i.e. the revenue from the five taxes analysed.

The projections of the independent variables, needed to forecast tax revenue/capacity, are based on trend coefficients and a form of trend equation (linear, semilog, or double-log) that fit the data best. Unless the use of a shorter and recent subperiod was warranted by the pattern of growth of the variable concerned, we have used all the observations available for the projections. The projected values of the relevant variables are given below (Table AI.2).

As in the previous study [Bagchi and Sen (1989)], two variants of the tax potential estimated on the basis of the preferred equations and the projected values of the independent variables reported above are provided below (Tables AI.3 and AI.4). Variant A is the usual estimate, while variant B is the scaled up version, the scaling up factor being the best tax effort index since 1975-76. Thus, variant B can be interpreted as a realistic upper bound.

Table AI.1

Tax Effort of Kerala: 1970-71 to 1990-91

(per cent)

Year	Land Revenue and Agricultural Income-tax	Stamp duties and Registra- tion fees	State Excise Duty	GST	MVT
(1)	(2)	(3)	(4)	(5)	(6)
1970-71	83.64	92.16	330.96	150.82	84.08
-72	110.14	103.02	129.86	164.33	79.70
-73	97.46	98.99	78.96	109.86	113.25
-74	72.59	99.14	65.59	71.75	93.55
1974-75	76.70	104.93	68.83	82.43	80.35
-76	118.28	105.36	84.77	98.62	104.66
-77	99.04	107.33	100.09	95.74	129.60
-78	131.46	106.68	107.41	103.63	117.86
-79	135.77	116.78	96.66	106.51	103.86
1979-80	111.48	96.63	118.60	90.76	87.93
-81	108.19	106.63	103.35	96.75	91.77
-82	91.97	107.45	81.91	112.08	90.07
-83	89.64	95.14	103.91	104.83	98.81
-84	89.02	90.29	91.69	94.19	102.35
1984-85	108.09	91.74	102.29	100.03	110.39
-86	146.23	99.15	97.32	96.61	106.83
-87	106.11	95.24	97.63	98.90	103.91
-88	70.94	101.57	109.88	100.99	94.47
-89	91.41	114.44	108.42	101.90	102.56
1989-90	89.51	96.70	100.89	101.92	101.06
1990-91	111.03	96.42	92.68	98.72	95.92

Table AI.2**Projected Values of Variables used for
Estimating Tax Potential (1991-92 to 1996-97)**

(SDP in Rs. crore)

Year	SDPP	SDP	SDPAFF	SDPMFG	BANKS	POP (lakh)	URBN (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1991-92	4223.42	11701.82	4197.73	1804.61	3055	293	26.95
1992-93	4633.65	13027.27	4604.55	2024.54	3121	296	27.83
1993-94	5083.73	14502.84	5050.79	2271.28	3185	300	28.73
1994-95	5577.52	16145.55	5540.28	2548.09	3247	304	29.64
1995-96	6119.28	17974.33	6077.20	2858.64	3308	308	30.58
1996-97	6713.66	20010.25	6666.16	3207.03	3368	312	31.53

Table AI.3**Tax Potential of Kerala (Variant A):
1991-92 to 1996-97**

(Rs. crore)

Year	LAGTAX	SDRF	EXCD	GST	MVT
(1)	(2)	(3)	(4)	(5)	(6)
1991-92	35.28	138.96	199.47	854.55	88.33
1992-93	39.04	162.79	219.60	949.76	99.90
1993-94	43.20	190.58	241.56	1055.66	112.98
1994-95	47.81	222.97	265.52	1173.44	127.75
1995-96	52.91	260.69	291.68	1304.46	144.43
1996-97	58.55	304.58	320.26	1450.19	163.27

Table AI.4**Tax Potential of Kerala (Variant B):
1991-92 to 1996-97**

(Rs. crore)

Year	LAGTAX	SDRF	EXCD	GST	MVT
(1)	(2)	(3)	(4)	(5)	(6)
1991-92	51.59	162.28	236.57	957.78	114.46
1992-93	57.09	190.11	260.45	1064.49	129.47
1993-94	63.17	222.56	286.49	1183.18	146.42
1994-95	69.91	260.38	314.91	1315.19	165.56
1995-96	77.37	304.43	345.93	1462.04	187.18
1996-97	85.62	355.69	379.83	1625.37	211.60

Table AI.5

**Data on Independent Variables used
in the Tax Potential Exercise**

(Rs. crore)

Year	SDP at current prices	SDP at 1970-71 Prices	SDP (Primary)	SDP (Primary- Mining)	SDP (Mfg.)	Bank Branches (Number)	Popu- lation (lakh)	Urban- isation (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1970-71	1254.64	1254.64	620.30	619.34	156.32	845	211	16.20
-72	1276.06	1322.78	584.82	583.56	178.89	978	216	16.38
-73	1457.22	1355.00	685.73	684.54	199.70	1072	220	16.62
-74	1823.00	1348.97	924.96	923.37	229.20	1163	223	16.86
-75	2085.52	1363.11	1012.54	1010.66	262.04	1296	227	17.10
1975-76	2228.23	1423.23	1014.89	1012.90	296.46	1473	231	17.35
-77	2398.38	1406.05	1081.38	1077.73	321.09	1705	236	17.60
-78	2520.49	1425.54	1091.29	1087.73	337.88	2011	240	17.86
-79	2753.49	1456.45	1208.82	1204.66	377.63	2098	244	18.11
-80	3155.56	1520.31	1356.81	1350.83	473.87	2191	248	18.37
1980-81	3505.36	1571.33	1450.43	1445.12	545.24	2340	253	18.63
-82	3696.50	1599.10	1414.19	1407.18	608.22	2428	256	19.14
-83	4254.27	1611.70	1706.52	1697.95	672.38	2501	260	19.84
-84	5018.50	1621.74	2102.52	2094.45	743.36	2574	263	20.55
-85	5713.61	1696.71	2391.41	2382.31	825.17	2694	267	21.29
1985-86	6050.23	1759.94	2308.82	2300.61	896.70	2724	270	22.04
-87	6881.13	1714.12	2640.38	2632.42	936.61	2720	274	22.81
-88	7616.71	1762.57	2894.85	2884.49	1101.81	2775	278	23.60
-89	8587.04	1934.37	3397.58	3386.17	1209.73	2799	281	24.41
-90	9563.33	2047.98	3729.24	3716.54	1331.90	2829	285	25.24
1990-91	10808.84	2221.65	3816.61	3786.25	1785.90	2832	289	26.08

Source: *Economic Review*, Government of Kerala, various issues, *Annual Report* of the Reserve Bank of India, various issues, and our own estimates of total and urban population based on Census actuals for 1971, 1981 and 1991.

Table AI.6

Number of Motor Vehicles on Road in Kerala

Year	Goods Vehicles	Buses	Taxi Cabs	Two Wheelers	Auto-Rickshaw	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1970-71	13162	6563	8848	15117	1062	41482	86234
1971-72	13584	6840	9699	16959	1219	45408	93709
1972-73	14164	7176	10472	17715	1591	48341	99459
1973-74	13921	6795	10737	21492	1958	49562	104465
1974-75	15875	7830	11525	25769	3125	55546	119670
1975-76	15882	8268	11582	26110	3734	52500	118076
1976-77	17492	8711	12256	32080	4533	54180	129252
1977-78	17165	8651	12257	32031	4492	54597	129193
1978-79	18527	8120	15195	43686	5715	63352	154595
1979-80	21121	8705	17780	50943	7397	68758	174704
1980-81	24682	9159	18890	59531	9640	72695	194597
1981-82	27664	11030	21569	70498	12727	77245	220733
1982-83	31685	12320	23763	81838	15045	82272	246923
1983-84	34258	13647	25597	96478	17724	89276	276980
1984-85	40869	15234	28189	111629	24383	98955	319259
1985-86	45325	16149	30201	130992	30537	108113	361317
1986-87	51284	16704	32458	159863	35838	118163	414310
1987-88	57388	18121	33856	185349	44116	134959	473789
1988-89	58528	19034	36200	213849	49396	146336	523343
1989-90	61106	20290	37638	248374	58165	155481	581054
1990-91	66190	21454	37830	288498	31716	645364	647742

Source: Government of Kerala.

Table AI.7

Regression Results for Estimating Tax Potential
(Using Time Series Data for 1970-71 to 1990-91)

Dependent Variable	Regressors	Coefficients	t-values	\bar{R}^2	F-Statistic	D-W Statistic	Remarks
Log(LAGTAX)	Constant	-5.3604	-5.91	0.8809	74.97	1.38	OLS
	Log (SDP)	1.0929	8.51				
	D	-0.2003	-1.24				
Log (SDRF)	Constant	-8.5447	-9.69	0.9876	794.24	0.73	OLS
	Log (PCSDP)	1.4191	7.04				
	LOG (urb)	0.5045	0.66				
-Do-	-Do-	-9.7534	-7.72	0.9926	900.07	1.47	Exact AR (1) Inverse Interpolation method (converged after 5 iterations)
		1.1285	4.26				
		1.6301	1.62				
EXCD	Constant	-114.0674	-2.21	0.9799	488.10	1.20	OLS
	PCSDP	0.0495	8.00				
	POPNI	0.4109	1.68				
-Do-	-Do-	-128.0295	-1.80	0.9813	351.13	1.50	Exact AR (1) Inverse Interpolation method (converged after 6 iterations)
		0.0462	5.51				
		0.4878	1.45				
GST	Constant	-70.5305	-5.84	0.9967	1493.40	1.59	OLS
	SDPAFF	0.0989	5.78				
	SDPMFG	0.2527	7.27				
	BANKS	-0.0092	-1.03				
	D	81.9866	6.00				
MVT	Constant	-1.6666	-1.46	0.9824	1114.60	0.84	OLS
	ALLVEH	0.0001	33.39				
-Do-	-Do-	-1.1425	-0.57	0.9874	784.11	1.31	Exact AR (1) Inverse Interpolation method (converged after 5 iterations)
		0.0001	19.99				

CHAPTER II

SALES TAX

a. Introduction: In Kerala, as in other States, sales tax is the most lucrative revenue source. The revenue from sales tax in 1990-91 formed 38 per cent of total revenue receipts of the State and as a proportion of own tax revenues, its contribution was 67 per cent. The shares of the tax in both tax revenues and total revenues have been showing a steady increase, as the revenue from sales tax has been growing at a rate faster (16 per cent per annum) than both tax revenues and total revenues. Both own tax revenue and sales tax revenue show in Kerala the highest ratio with SDP among the major States in 1988-89 (Table 2.1). Nevertheless, it would not be correct to infer that the revenue potential of the tax has been fully exploited; for, as mentioned in the previous chapter, revenue effort of the tax relative to 1971-72 was lower by 40 per cent. Even in terms of the growth of the revenue from the tax, the performance of Karnataka and Andhra Pradesh was appreciably better, though it was not so in Tamil Nadu. This is not fully explained by the already high level of taxes, as statistical tests carried out while computing tax potential did not indicate any non-linearity in the base to tax relationship. In other words, in Kerala we should have observed a rise in sales tax collection proportionate to the increase in the tax bases; the actual collections were lower. To further improve the revenue productivity of the tax in the State, it is necessary, *inter alia*, to simplify and rationalise the tax for which the tax structure and the operation of the tax needs to be analysed in some detail.

b. Analysis of sales tax revenue: The breakup of total sales tax revenue between Central sales tax and State sales tax in Kerala (Table 2.2) shows the former to be a relatively small percentage of the total. This is probably explained by the fact that (a) export of manufactured goods from Kerala to other States is not substantial, (b) a large part of the production in the primary sector is exported out of the country which makes it non-taxable, and (c) the relative ease with which the Central sales tax on some of the agricultural commodities (particularly the high-value, low-volume commodities) evade the tax. These problems are well-known.² It is also well-known that the term 'dealer' does not include producers of agricultural commodities under the sales tax Act except for some plantation crops like rubber, cardamom, tea and coffee. A tax on first or last purchase is ineffective against inter-State sale by producers. If the definition of dealers cannot be altered to include agricultural producers, the obvious way of taxing these commodities is through agricultural income taxation or land revenue (or some

2. The insignificant coefficient of SDP from agriculture, forestry and fishing in the sales tax equation reported in the annexures provides some proof of propositions (b) and (c) above.

Table 2.1
Tax-SDP Ratio of Major States: 1988-89

(per cent)

State	Own Tax Revenue/SDP	Sales Tax/SDP
Andhra Pradesh	10.91	5.59
Bihar	4.79	3.35
Gujarat	9.68	6.70
Haryana	9.15	4.27
Karnataka	10.39	6.00
Kerala	11.92	7.72
Maharashtra	9.81	6.12
Madhya Pradesh	7.83	3.62
Orissa	4.94	2.82
Punjab	8.39	3.82
Rajasthan	7.27	4.41
Tamil Nadu	10.20	7.04
Uttar Pradesh	5.79	3.06
West Bengal	7.26	4.35

Note: All the net SDP figures used in the computation are taken from the new series as supplied by C.S.O. except for Madhya Pradesh, for which the figure from the old series is used.

Table 2.2
Growth of Tax Revenue in Kerala: 1980-90

(Rs. lakh)

Item	80-81	-82	-83	-84	-85	-86	-87	-88	-89	-90	-91
Own Tax Revenue	34399	38334	44777	49353	63294	74502	82563	94425	106547	123251	134034
Total Sales Tax	20394	24549	27520	30660	37519	45842	51672	59965	69041	76874	89743
(a) CST	2143	2135	1911	2334	2631	3290	3859	4464	5225	6597	9667
(b) GST	18251	22414	25609	28327	34888	42552	47813	55501	63816	70277	80076

variety thereof). This approach, with appropriate relief for small growers should compensate for the loss of sales tax revenue due to exports out of the country and evasion. While measures to this end had been taken earlier, they have progressively been weakened through increased exemptions and allowances. This is evident from the fact that receipts from agricultural income tax and land revenue together increased by only 90 per cent between 1980-81 and 1989-90, although the SDP from agriculture increased by about 156 per cent during this period. This trend must be reversed if additional tax revenue is to be generated without adverse economic effects.

Unfortunately, detailed disaggregated data on commodity-wise tax collection are not compiled by the sales tax department. The department has estimated broad commodity-wise breakup of revenue, but even this information is available only for the years 1985-86 to 1988-89. These are reported in Table 2.3. These data have their limitations due to the high degree of aggregation and also because a large part (about a quarter) of the total revenue is not classified under any commodity group. All the same, certain broad conclusions can be drawn from these data. To begin with, these data show heavy reliance on only one group of commodities, namely petroleum products. Over a quarter of sales tax revenue is being raised from this group of commodities alone. It may be surmised that this is due to the location of an important refinery inside the State (Cochin Refinery) and the fact that with the first-point taxation, all the major assesseees being public sector companies, are less likely to avoid/evade the tax. The next largest share is that of liquor (about 8.5 per cent). Excepting rubber and rubber products, which yielded about 4.5 per cent of the total revenue on an average, none of the other agricultural products exhibit a significant share. Between 1985-86 and 1988-89, the identifiable agricultural products taken together³ account for only 18 per cent of total sales tax revenue on an average between 1985-86 and 1988-89. This may be juxtaposed to the average share of agriculture in the total SDP of the State -- 32 per cent.

Identifiable inputs and capital goods⁴ account for a large share of about 50 per cent in total tax revenue. This points towards substantial cascading of sales tax, reinforced by the existence of largely first-point taxation.

Another noticeable feature of the sales tax collection in Kerala is the predominance of a few circles, known as 'special circles' in the revenue collection

3. Tea, coffee, rubber and rubber products, cardamom, pepper, cashew, coconut and copra, cereals and provisions, and arecanut.
4. Petroleum and petroleum products, rubber and rubber products, timber, coconut and copra, iron and steel, cement and cement products, building materials, fertilizers, and other industrial products.

Table 2.3
Commoditywise Sales Tax Collection

(Rs. lakh)

Serial Number	Commodity	Collection			
		1985-86	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)	(5)	(6)
1.	Petroleum Products	10687 (23.6)	12785 (24.9)	14828 (25.2)	16919 (26.7)
2.	Tea	676 (1.5)	603 (1.2)	907 (1.5)	776 (1.2)
3.	Coffee	449 (1.0)	621 (1.2)	433 (0.7)	545 (0.9)
4.	Rubber and Rubber Products	1850 (4.1)	1878 (3.7)	2798 (4.8)	4277 (6.7)
5.	Cardamom	240 (0.5)	147 (0.3)	172 (0.3)	263 (0.4)
6.	Pepper	401 (0.9)	827 (1.6)	329 (0.6)	328 (0.5)
7.	Cashew	319 (0.7)	722 (1.4)	775 (1.3)	615 (1.0)
8.	Timber	362 (0.8)	499 (1.0)	583 (1.0)	595 (0.9)
9.	Coconut and Copra	884 (1.9)	960 (1.9)	1375 (2.3)	1234 (1.9)
10.	Coconut Oil	228 (0.5)	360 (0.7)	552 (0.9)	1617 (2.6)
11.	Iron and Steel	781 (1.7)	723 (1.4)	946 (1.6)	953 (1.5)
12.	Automobile and Auto parts	2252 (5.0)	2058 (4.0)	1507 (2.6)	1311 (2.1)
13.	Cement and Cement Products	1379 (3.0)	1329 (2.6)	2838 (4.8)	3119 (4.9)
14.	Cereals and Provisions	2493 (5.5)	3260 (6.3)	3593 (6.1)	3795 (6.0)
15.	Building Materials	508 (1.1)	507 (1.0)	536 (0.9)	463 (0.7)
16.	Stationery/ Plastic Goods	735 (1.6)	1021 (2.0)	1153 (2.0)	1181 (1.9)
17.	Electrical Goods	1106 (2.4)	1005 (2.0)	1409 (2.4)	1216 (1.9)
18.	Electronic Goods	396 (0.9)	1099 (2.1)	768 (1.3)	1449 (2.3)

(contd.)

Table 2.3(contd.)
Commoditywise Sales Tax Collection

(Rs. lakh)

Serial Commodity Number		Collection			
		1985-86	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)	(5)	(6)
19.	Liquor	2564 (5.7)	4077 (7.9)	5176 (8.8)	5310 (8.4)
	a. Foreign Liquor	N.A.	N.A.	110 (0.2)	4 (0.0)
	b. IMFL	N.A.	N.A.	3998 (6.8)	3668 (5.8)
	c. Country Liquor	N.A.	N.A.	1068 (1.8)	1638 (2.6)
20.	Fertilizers	416 (0.9)	427 (0.8)	335 (0.6)	326 (0.5)
21.	Medicine	1089 (2.4)	1189 (2.3)	1424 (2.4)	1754 (2.8)
22.	Other Industrial Products	1541 (3.4)	2326 (4.5)	2890 (4.9)	4074 (6.4)
23.	Jewellery	323 (0.7)	437 (0.8)	519 (0.9)	591 (0.9)
24.	Coir and Coir Products	8 (0.0)	4 (0.0)	-- (0.0)	155 (0.2)
25.	Arecanut	445 (1.0)	-- (0.0)	353 (0.6)	365 (0.6)
26.	Marine Products	15 (0.0)	16 (0.0)	94 (0.2)	8 (0.0)
27.	Unclassified Commodities	13212 (29.1)	12536 (24.4)	12530 (21.3)	10140 (16.0)
TOTAL		45359 (100)	51418 (100)	58822 (100)	63379 (100)
Coverage of Total Sales Tax Revenue (%)		98.9	99.5	98.1	91.8

Note: The numbers within parentheses are percentages to the total.

Source: Sales Tax Department, Kerala.

Table 2.4

Sales Tax Collection from Special Circles: Kerala

(Rs. lakh)

Circle and District	1987-88	1988-89	1989-90	1990-91	1991-92
(1)	(2)	(3)	(4)	(5)	(6)
1. Thiruvananthapuram	5200.00	7310.00	8439.90	9952.06	12778.41
2. Kollam	1702.34	1631.12	1785.10	1605.67	3100.03
3. Alappuzha	2193.13	1854.00	1876.43	975.35	1114.25
4. Kottayam	2015.02	2206.61	2350.05	2787.80	3366.36
5. Ernakulam I	9794.79	11610.83	13139.18	5800.62	6987.63
6. Ernakulam II	11672.95	13431.61	15537.03	32580.37	39195.78
7. Ernakulam III	3184.00	3758.95	5758.01	4478.55	6225.95
8. Mattancherry	2640.84	3424.04	3422.50	3623.17	4237.80
9. -do- (produce)	1651.83	2060.37	2907.76	3332.59	3452.85
10. Thrissur	1212.54	1200.05	1042.00	1084.22	1262.54
11. Palakkad	2221.00	2723.00	2879.40	2735.63	3170.94
12. Kozhikode I	1488.07	1699.16	1903.62	2178.35	2755.92
13. Kozhikode II	1347.90	1648.00	1493.48	1654.68	2018.57
14. Kannur	742.87	848.18	1008.03	1151.50	1982.03
All 14 Circles	47067.28	55405.94	63542.49	75140.56	91649.03

Source: Sales Tax Department, Kerala.

(Table 2.4). These 14 special circles accounted for about 80 per cent of the total collection on an average between 1987-88 and 1991-92. Of these, only 3 -- Ernakulam I and II, and Thiruvananthapuram special circles -- collected almost 45 per cent of the total during the period. This could partly be due to the lack of large scale manufacturing activity in other parts of the State. However, given that the extent of poverty in Kerala is lower than in most parts of India, there ought to be a more even distribution of trading activity within the State. Hence, a sales tax system different from the present first-point levy is likely to result in a lower concentration of receipts.

The sales tax department does not compile figures on the distribution of dealers by size of turnover, or by the amount of tax paid. This makes it difficult to assess trends regarding the impact of the tax on dealers in different size groups, or to suggest specific administrative measures with respect to dealers differentiated by size, keeping revenue interest in mind. The Resources Commission (1992) has also noted this lacuna and has suggested certain measures like compounding and simplified assessment for small and 'no-demand' dealers: these have been implemented through the Finance Act, 1992 by amending sub-section (4) of section 17 suitably. In the absence of hard data on this aspect, it is difficult to estimate the impact of this change. It should, however, be noted that the general idea of conserving manpower and using them for detailed assessments of cases with higher revenue potential seems to be a sound one in principle. In almost all other States, small and no-tax dealers constitute a large percentage of the total number of dealers and there is no reason to believe that this is not true in Kerala as well. Therefore, the step taken should help to expedite the disposal of cases and improve the quality of assessments appreciably.

c. Tax structure: The structure of a tax has three elements: the point of levy, the rate structure, and the exemptions allowed. We discuss below each of these elements in some detail.

(i) *Point of levy:* In Kerala, as in almost all the other States in India, sales tax is levied predominantly at the first point in the chain of organised commercial transactions. We have no information on the proportion of revenue derived from the first point levy in the State, but given the fact that liquors (in certain cases) and rubber are the only commodities with substantial revenue significance which are subject to tax at points other than the first sale, the number must be high. In a State with large industrial production, such a levy would assume the character of an excise duty; this, however, is not the case in Kerala, and a large part of its consumption is imported (from other States).

The first point levy is advocated primarily on administrative grounds: it is presumed to be easier to tax a commodity in the hands of a few dealers than if it was distributed over a large number. Further, a first point tax ensures that the tax becomes

leviable even on eventual inter-State sales to begin with; the onus is on the exporter to lower the tax rate by either resorting to consignment transfer or producing the requisite forms to get taxed under the CST. To the extent that an eventual inter-State sale fails to extract the most favourable treatment permitted by law, a State is able to pass on to the residents of other States a part of its sales tax burden⁵. At the same time, the first point levy has the drawbacks that it is prone to evasion (this is true for any single point tax) and that it gives rise to greater 'cascading' as compared to either a multi-point or the last point (where there is no cascading) levy.

A careful analysis, however, shows that the administrative advantage argument does not appear to be strong, unless controlling evasion is *not* considered a part of tax administration. Under the first point taxation, a sales tax official must, to prevent evasion of the tax through false claims of sales other than at the first point, trace the chain of transactions of dealers backwards until he is satisfied that sales tax has indeed been paid at least on a random sample basis. This involves usually a substantial amount of work [Purohit, (1988)]. With a multi-point tax without tax offsetting, on the other hand, the job becomes simpler as every dealer is taxable and the official does not have to trace the chain of transactions at all. Even with tax offsetting (a system close to value added taxation), the work load should be the same as under the first point taxation because, this system would also require the officials to check the veracity of the tax offset claimed. Thus, it would appear that the administrative ease argument for the first point taxation is based on the simplistic notion of fewer taxpayers and that it is not necessary to trace the chains of transactions to ensure tax compliance.

Another problem often raised by the advocates of first-point levy is that the first sellers are usually large dealers who maintain proper books of account whereas other smaller dealers may not maintain them. While this argument has some merit, two points must be noted. First, such arguments have a tendency to be self-fulfilling; unless a dealer is required to maintain proper accounts, he may not ever do so. Second, this argument has some validity in India in general due to the low level of literacy. However, in a highly literate State like Kerala, the argument does not hold much water. Further, an important disadvantage of any single point levy relates to judicial reclassification of commodities after assessment and payment of taxes. When such reclassification results in changed sales tax liability, the dealer either gets a windfall or has to bear the burden of

5. An example may clarify the point being made. Suppose commodity A is produced by dealer X, who sells it to dealer Y. Dealer Y sells commodity A to another dealer in a different State, obtaining the necessary documents. Under first point taxation, commodity A gets taxed twice, once during the first sale (by X to Y) under the State sales tax Act and once during the inter State sale under the Central sales tax Act. With last point taxation, only CST would be leviable and with multi-point taxation, although both the taxes would be applicable, the burden of the State sales tax would be less as compared to first point taxation.

the extra tax payable. With a value added tax, such problems can be tackled at subsequent stages also in many of the cases.

It has been amply demonstrated in the literature that value added taxation is the ideal that the indirect tax structures should strive for, in the interests of efficiency. Introduction of value added taxation has been the most common factor in the tax reform experiences of developing countries. We have shown above that the arguments for the first point taxation are not compelling, while the problems it creates are significant enough to call for urgent remedial measures. Hence, we would like to recommend steps that would lead to a system of value added taxation gradually. This can be achieved through three different types of intermediate steps. One possible way is to extend the two-point sales tax system introduced recently to all major manufacturing items and slowly introduce setoffs at a later stage after commensurate adjustment of tax rates, and finally extend the tax to all stages with setoff for tax paid. The second way would be to introduce multipoint taxation without setoff and then introduce the setoff at a subsequent stage to approximate VAT. The third, and our preferred method would be to introduce VAT on a few commodities right away and then slowly extend the scope. The first method has the problem that introducing setoffs in a system of two-point (first and last) levy runs into severe administrative problems when middle stages exist. There is no foolproof mechanism that would transmit the tax credit on the first-point levy to the last point. The problem with the second method is that a multipoint levy can be introduced without setoff fairly easily; however, the second stage of introducing setoffs tends to get postponed forever. Without the setoff, the multipoint tax has serious adverse economic effects. The third method of introducing VAT on a few selected commodities to begin with thus seems most appropriate. The process can start by introduction of VAT on the commodities which bear at present a two part tax (except liquor), and perhaps a few other commodities which are similar in nature (final goods, in essence). A VAT on these would have the least administrative difficulties, and the experience gained can be usefully employed while extending the VAT in stages to other commodities. Kerala should now take the lead in this major reform of introducing value added taxes in a phased manner so that the most important tax levied by the State does not impede allocative efficiency. This measure alone would be the greatest incentive for new industry to come up in the State. We have no doubt that the reform, if successfully carried out, would be emulated by other States.

(ii) *Rate structure:* In view of the above suggestion of gradual substitution of the single point system by a multipoint system with setoff (a variety of VAT), we do not suggest any change in the rate structure, as it would require an in-depth study beyond the scope of the present one. However, we suggest below some minimal changes for the interim period. These can be ignored if the changeover can be achieved expeditiously.

The rate structure has very recently been modified through the latest Finance Bill, largely to adjust the rates upwards to compensate for the revenue loss implied by the simultaneous removal of the additional sales tax. A special two per cent rate is also applicable to industrial inputs under conditions specified. As it stands now, there are 15 rates for single point taxation, of which two are special rates applicable to narcotics and IMFL (75 per cent) and foreign liquor (100 per cent). Besides, there are 5 double-point rates, of which one is a special rate for arrack (50 + 12.5 per cent). Since the double-point system has to provide for a combined rate in case the two points of sale do not exist for the designated commodities in particular transactions, the rate schedule simply uses the sum of the rates at the two points for such transactions. Treating the elements of and the sum of the rates under the two point system as different rates, we thus have 15 different rates in Kerala excluding 3 special rates on excisables. These are: 1, 2, 2.5, 4, 5, 6, 7, 8, 10, 12, 12.5, 14, 15, 20 and 25 per cent. This seems to be an unnecessarily high degree of rate differentiation with the potential of creating confusion and causing errors. These problems are likely to be even more significant in case VAT is introduced. To make it simpler, it would be desirable to reduce the number of rates. We would suggest that commodities taxed at 6, 7, and 8 per cent be taxed at the uniform rate of 7.5 per cent. As the residual category of goods are now taxed at 8 per cent, these would also be taxed at 7.5 per cent. Further, commodities taxed at 12 and 12.5 per cent, and those taxed at 14 and 15 per cent can be uniformly taxed at 12.5 per cent and 15 per cent. Commodities taxed at one per cent can be exempted without much loss of revenue. Similarly, commodities taxed at 2.5 per cent can be taxed at two per cent. However, jewellery, which is currently taxed at one per cent, can be taxed at two per cent. These changes would bring down the number of tax rates (excluding the special rates) to 9. If the suggested changes are adopted for the two elements of double-point tax rates, it would imply rise in rates for three groups of commodities. To avoid a large change in the overall tax burden on these, the following substitution for the two-point rates may be required:

<i>Existing Rates</i>	<i>Suggested Rates of VAT</i>
6 + 4, 10	10
8 + 6, 14	15
6 + 6, 12	12.5.

In the absence of a proper information system, particularly the commodity-wise details of sales tax, it is difficult to make studied recommendations on the changes in the rate structure. However, after the suggested changes are carried out and experience gained, and a better information system is functional, further rationalisation in terms of reducing the rate differentiation should be carried out. For the present, we refrain from making any other recommendations regarding tax rates.

iii. Exemptions: The list of unconditionally exempted commodities is not very large in Kerala, and consists of commodities exempted everywhere in general. It has been suggested earlier [GOK, (1986)] that magazines and periodicals can perhaps be taxed, but we believe that this will be a futile exercise, as there are legal difficulties in attempting such a tax. Magazines and periodicals can technically be called newspapers as these are registered under the same Act as newspapers. A tax on newspaper is not within the competence of the Legislative Assembly of a State; only the Parliament can levy such a tax. We do not suggest taxing any of the exempted commodities; we have actually recommended additions to it in the earlier section by suggesting that commodities taxed at one per cent can be exempted. This would put cereals as well as beaten rice and parched rice in the list of exempted goods. Actually, when the government is spending so much resources on food subsidy, mainly on rice and wheat, it appears to us an anachronism to tax the same commodities.

d. Incentives to Industrial Units: As far as tax incentives are concerned, the basic issue would seem to relate to the usefulness of sales tax incentives in promoting industrialisation in the State. Although a detailed analysis would be necessary even to make a good guess regarding the effect of sales tax incentives *per se*, certain general observations on this issue would be in order. Often, the effectiveness of sales tax incentives are overemphasised only because the financial implications are direct and easily identified. In fact, any decision regarding the location of an industrial unit must, of necessity, be made after looking into several aspects that affect the cost of production and profitability. These include, *inter alia*, factors like assured supply of inputs, adequacy of infrastructural facilities, proximity to the markets for its products, availability of skilled manpower and the industrial relations environment. Sales tax incentive is only one of these, and may not be very important at the margin. If Kerala has to counteract the existing biases against setting up a unit in the State,⁶ several aspects of industrial policy need to be looked into. This is especially important because two of the neighbouring States, Tamil Nadu and Karnataka, have the advantage of a thriving industrial sector, which usually attracts further investment. In contrast, Kerala's industrialisation is yet to take off.

Further, to the extent that an industrial unit involves a certain amount of gestation period, the effectiveness of sales tax incentives to new units is diluted, as the incentives are effective only when sales take place. The provision in several States

6. Entrepreneurial perception of the labour scene in Kerala is generally negative. This is acknowledged in recent official documents like the *Industrial Policy 1991* which says, "A major deterrent to increased investment within the State has been entrepreneurial perceptions regarding the attitudes of labour." (as quoted in *Draft Eighth Five Year Plan, 1992-97 and Annual Plan 1992-93*, vol. I, State Planning Board, Thiruvananthapuram, 1991.

(including Kerala) allowing the purchase of inputs at concessional sales tax rates is more useful for such cases.⁷ With value added taxation, inputs are automatically freed from taxation for all enterprises. It is also possible that alternative methods of encouraging industrialisation would bear better fruits.

Another problem with tax incentives in the context of Indian States has been that any major change in these in one State has almost invariably triggered competition among other States to provide better packages to potential investors, leading to lower tax rates all round, with no major gain for any State. This may be a desirable outcome for certain schools of thought that believe that the governments have grown too big, though even they would concede that such tax incentives cause unintended distortions. However, when additional revenues are being sought while trying to push up rate of industrialisation desperately, the self-defeating nature of high tax incentives can be extremely frustrating.

In what follows, we assume that the factors mentioned above have been duly considered and yet, tax incentives have been considered necessary. We assess the tax incentives being offered on three criteria: (i) the extent of similar incentives available in the neighbouring States of Karnataka and Tamil Nadu in view of the high capital mobility between these States, (ii) the likely effectiveness of the schemes, and (iii) the cost of these schemes. A summary of the tax incentives offered by these three States would thus seem to be in order.

The Industrial Policy, 1991 announced exemption from all State taxes for new industrial units in Kerala for the first seven years. All medium and large scale units (MLUs) have this benefit with respect to sales tax subject to a ceiling of 100 per cent of the fixed capital invested (FCI). Alternatively, the MLUs can opt for a tax deferral for a period of 10 years, subject to the same ceiling. Small scale units (SSUs) have the same benefits without any ceiling. All these benefits are available for existing units undertaking expansion, diversification and modernisation as well.

The rates of sales tax on goods produced by units in the State sold to some designated bodies like the Indian Railways have a ceiling of 4 per cent. Central sales tax on inter-State sale by new units in the State is pegged at 2 per cent for the first seven years.

7. These provisions, however, can very easily be misused by existing units through dummy units. Also, the restrictions often imposed regarding exports/ consignment transfers/ inter-State sales are difficult to administer effectively.

In Karnataka, new SSUs or tiny units (including expansion of existing ones in designated parts of the State) enjoy tax exemption for 5 years. New MLUs in backward areas can avail of a loan equal to sales tax paid on their products for 3 years subject to a ceiling of Rs. 50 lakh. SSUs get a loan of maximum 25 per cent of fixed capital for the first five years after starting operation or expansion to acquire plant and machinery, raw material etc. The 1990 industrial policy package, however, offers complete exemption for all units if these fall in specified types of industries, like electronics, telecommunications, and 100 per cent export-oriented units.

Tamil Nadu has no exemption scheme, but a 9-year loan for an amount equal to sales tax paid each year in the first 6 years of operation is available to MLUs subject to three limits -- 20 per cent of FCI, Rs. 20 lakh per annum, and Rs. one crore overall. New SSUs also get this benefit for the first 6 years, but only an annual ceiling of Rs. 4 lakh is applicable. For expansions, all units get a loan equal to the sales tax paid in 3 previous years subject to the overall limits of 25 per cent of FCI and Rs. 50 lakh. This loan is repayable after 6 years.

The concessions regarding taxation of inputs are summarised in the Table below:

Table 2.5
Concessional Rates of Sales Tax on Industrial Inputs

State	Rate	Not available for:
Karnataka	4	sales/ consignment transfers out of State
Kerala	2	exports out of the country/ consignment transfers out of State
Tamil Nadu	3	sales/ consignment transfers out of state

The brief summary above shows the sales tax incentives in Kerala to be more generous than the other two States. As far as MLUs are concerned, the latter do not provide exemptions, while Kerala does. Also, between two theoretically equivalent incentives -- loans and deferrals --, Kerala completely relies on deferrals, while the other two States have a combination of loans and deferrals. In practice, entrepreneurs prefer

deferrals as it saves them substantial paperwork and usual bureaucratic delays. Also, in Kerala, both limits are higher and duration is longer for deferrals as compared to deferrals/loans in Karnataka and Tamil Nadu.

As far as SSUs are concerned, Kerala gives practically the same incentives to SSUs as to MLUs. In the other two States, there is a clear preference for SSUs noticeable in the sales tax incentives available. Even the preferential treatment, however, fall short of the benefits available in Kerala in terms of duration, deferral period, amount and limits.

It can thus be said that Kerala need not worry about capital flight into neighbouring States due to sales tax incentives as things stand now. In fact, to the extent that the incentives offered are more generous, some rationalisation is possible. We now turn to this aspect.

Adopting the classification postulated in Rao et al (1991), Kerala's sales tax incentives can be called restricted and comprehensive for MLUs but open-ended and comprehensive for SSUs. Even for the MLUs, the ceiling is quite high at 100 per cent of FCI (virtually open-ended), which could make this scheme quite costly in terms of tax revenue forgone. It is therefore necessary to see whether the benefits can be restricted somewhat without harming the prospects of industrialisation.

To begin with, the fact that very few States provide complete exemption to MLUs practically unconditionally needs due consideration. For the potential investor, the choice between exemptions and deferrals is likely to depend upon (a) cost disabilities that it may suffer from and (b) need for cash flow. New units are thought to suffer from higher cost of production per unit of sales which limits their ability to compete with existing units in terms of price, given minimum return required on their investment. This disadvantage can be offset to some extent by exempting a new unit from sales tax on its product, until it is over the initial hump. This, however, does not generate any investible fund for the units. Deferral, on the other hand, implies collection of sales tax on the sales of the unit which can then be used as debt capital by the unit to be repaid after the stipulated period. It follows that units with major cash flow problems would prefer deferral of sales tax.

MLUs that are being set up now, because of the changed industrial policies for the country, are not likely to suffer from cost disadvantages as compared to existing units; access to better technology may allow them to compete effectively with older units in the product market. Only when these units are located in areas with insufficient infrastructure would there be some cost disability. Alternatively, when the unit is basically not viable, there may be such disabilities. For the first type of cost disability, the correct remedy is to provide exemptions on the basis of location -- only

those units which are set up in areas which lack sufficient industrial infrastructure (the whole State cannot be lacking such infrastructure) should be eligible. Even this benefit should be given after due deliberation of the issue of the importance of industrial dispersal within the State. As for the second type of cost disability, the State would be better off without such units, as they would be chronically sick. We would thus argue that a comprehensive exemption scheme for MLUs is unnecessary and the exemption should be confined to units located in relatively backward areas which can be designated as such by law for this purpose.

As far as the deferral scheme is concerned, it is likely to be useful for MLUs, and in any case the available benefits in Tamil Nadu indicate that Kerala must have such a scheme. However, the ceiling in Kerala appears to be too high. The 100 per cent ceiling, apart from costs of tax expenditure, underwrites capital costs to such an extent that it may encourage highly capital intensive industries, with little gain on the employment front. Also, a limited capital subsidy can perhaps be defended on the ground that such a subsidy for a few initial years may provide a boost to industrialisation by lowering required rates of return; subsequently, the subsidised units would be able to function profitably on their own. This argument, however, loses its merit as the rate of capital subsidy becomes higher and higher. This is because of the fact that a very high rate of capital subsidy (which is what the sales tax incentives are) lowers the required rate of return so much that projects which are basically uneconomical become profitable; unfortunately, they are viable only as long as the subsidy is available. Industrialisation with such units would be a very short-sighted policy. Considering this aspect, the floor set by the provisions in the neighbouring States and the potential tax expenditure involved, the ceiling may be lowered to 50 per cent of the FCI for MLUs.

It would also be inadvisable to provide incentives indiscriminately to all sorts of industrial units. When a 'big push' is being given in industrialisation, it must be selective in that it should not encourage units in areas which are already saturated. Such units are likely to fail, and that would cause a setback to the process of industrialisation. Hence, sectors with existing excess capacity must be identified and specifically excluded from the incentives being offered.

For small scale industries, the present provisions seem to require no change. However, the scheme of depositing the tax in a specified fund of the government that was mooted is likely to fail due to inherent problems. An SSU would choose the deferral scheme only when cash flow was important for it; it would therefore be unlikely to deposit the amount anywhere unless full liquidity is assured.

e. **Arrears:** All efforts at resource mobilisation may come to naught if tax collections are not commensurate with assessments. Arrears of tax revenue amounted to Rs. 73.8 crore as on 31.3.1989 which increased to Rs. 105.3 crore as on 31.3.1990. As

percentages of total own tax revenue, these figures represent 6.9 per cent and 8.5 per cent respectively.⁸ Since sales tax constitutes the bulk of arrears in both the years, and also because this tax is the mainstay of the State tax system, a closer look at the extent and pattern of arrears of sales tax revenue seems to be warranted.

Table 2.6 provides the information on arrears of sales tax revenue. As far as the distribution over the years is concerned, much of the arrears (more than 70 per cent) relate to the previous four years. Out of these, amounts likely to be written off are negligible and hence need not cause any worry, unless these are significantly underestimated. Of the arrears relating to the previous four years, for almost 50 per cent action under Revenue Recovery Act was underway; however, recovery of a significant portion of these arrears (more than 30 per cent) was blocked due to stays by various authorities. We do not have the amounts of arrears involved in stays granted by different authorities; but the detailed figures in *Report of the Comptroller and Auditor General of India, No. 1 - Revenue Receipts, 1989-90*, for the Government of Kerala shows that (p. 37) if we considered the sales tax arrears relating to the latest three years with reference to the year under report, stays granted by the government involved more than Rs. 18 crore, while stays granted by courts and by 'other' authorities amounted to about Rs. 12 crore and about Rs. 14 crore respectively. While stays granted by the judicial system is largely beyond the control of the State government⁹, it appears that avoidable stays by the government and other authorities (presumably departmental appellate mechanism) constitute the bulk of stays. The inadvisability of the government granting stays on its own revenue has been pointed out earlier [Bagchi and Rao(1986) and GOK(1986)]. We reiterate that the government should refrain from granting stays. This is because, such stays not only reduce revenue collections, but also adversely affects the morale of the tax officials. Further, although it is unavoidable that a fair appellate mechanism within the department would involve a certain amount of stays, the department can surely make efforts to speed up disposal of appeals and thereby reduce arrears.

f. Disposal of assessment cases: Given the predominance of revenue from sales tax in the revenue receipts of the State, this is another area of weakness which can come in the way of a resource mobilisation effort and therefore, needs a close look. The statistics of disposal of assessment cases for the years 1985-86 to 1991-92 (Table 2.7) do give cause for alarm. Roughly, only one half of the current and arrear assessments are being completed every year. Since the number of current assessments are greater than the number of arrear assessments, this implies that the number of arrear cases go on

8. These figures are derived from the information provided in the article on State government finances in the *Reserve Bank of India Bulletin*, April 1992.

9. Even for these stays, the Report of the CAG, referred to above, points out that less than adequate follow-up by the department results in substantial non-recovery of arrears (pp. 52-66).

mounting every year. Revenue implications of such a trend need not be laboured upon. The recent administrative change towards effective self-assessment may improve the situation if a substantial portion of the pending assessments relate to small dealers or no-tax dealers; if it is not so, then a special drive to clear pending assessments is clearly called for.

g. Computerisation: All informed policymaking must be based on some amount of prior information; given the decision-making ability, better the quality of the information, better would be the decision. In the case of sales tax in Kerala, unfortunately, there is no worthwhile information system at all. It is indeed surprising that the detailed information that was available ten years ago regarding the working of the sales tax department is not available now. In the absence of important information, no rational policy changes can be formulated nor can the tax system be properly administered and enforced. In this context, the issue of computerisation assumes critical importance. Information processing is undoubtedly greatly facilitated by the use of computers; it is likely to have other benefits which will be of even greater importance. Policy changes can be made in consonance with desired outcomes, assessments can be considerably speeded up, arrears can be monitored much more effectively, and most important of all, it will become possible to cross check transactions of different dealers. We have recommended a gradual transition to taxation based on value added principle above. For administering refunds under the value added tax, computerisation of tax returns is critical to ensure authenticity of tax deduction and refund claims. Needless to add, computerisation will not only help in evolving an efficient tax structure but also greatly aid in its administration and enforcement. Karnataka, Tamil Nadu, Andhra Pradesh and Gujarat have been attempting to computerise their tax returns and it would be useful to share their experience. Officials with proper background should be deputed to study the information system prevailing in these States, examine the progress in computerisation of returns and the procedural changes including redesigning of returns and forms required to undertake computerisation on scientific lines. This aspect must be given the top most priority, for proper information system is the backbone of a rational tax structure and its efficient administration.

Table 2.6

**Arrears under Sales Tax in Kerala
(as on March 31, 1991)**

(Rs. lakh)

Due from the year	Stay by various Authorities	Likely to be written off	Under rectification/ review	Action under Revenue Recovery Act	Other action	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
upto 1983-84	605.60 (16.67)	708.02 (19.49)	28.36 (0.78)	2075.40 (57.13)	215.70 (5.94)	3633.16 (14.36)
1984-85	169.04 (18.93)	93.57 (10.48)	24.92 (2.79)	367.29 (41.14)	238.06 (26.66)	892.88 (3.53)
1985-86	160.77 (17.84)	38.86 (4.31)	7.62 (0.85)	475.03 (52.70)	219.02 (24.30)	901.30 (3.56)
1986-87	677.55 (34.52)	258.78 (13.18)	9.50 (0.48)	892.43 (45.46)	124.64 (6.35)	1962.90 (7.76)
1987-88	1716.33 (53.82)	5.46 (0.17)	10.25 (0.32)	1011.95 (31.73)	445.28 (13.96)	3189.27 (12.61)
1988-89	1058.26 (34.81)	57.73 (1.90)	6.88 (0.23)	1101.12 (36.22)	816.40 (26.85)	3040.39 (12.02)
1989-90	1395.56 (30.68)	5.47 (0.12)	17.16 (0.38)	2275.17 (50.02)	855.03 (18.80)	4548.39 (17.98)
1990-91	2365.87 (33.18)	18.00 (0.25)	14.16 (0.20)	3501.38 (49.11)	1230.31 (17.26)	7129.72 (28.18)
Total	8148.98 (32.21)	1185.89 (4.69)	118.85 (0.47)	11699.85 (46.25)	4144.44 (16.38)	25298.01 (100.00)

Source: Sales Tax department, Kerala.

Note: The numbers within parentheses in the last column are percentages to the column total. In all other columns the numbers within parentheses are percentages to the row totals.

Table 2.7

Pendency of Assessments under Sales Tax in Kerala

Year	Assessments due for Completion during the year			Assessments Completed			Assessments pending at the end of the year		
	Arrear Cases	Current Cases	Remanded Cases	Arrear Cases	Current Cases	Remanded Cases	Arrear Cases	Current Cases	Remanded Cases
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1985-86	88,493	90,251	4,237	50,082	44,504	2,146	38,411 (43)	45,747 (51)	2,091 (49)
1986-87	88,627	92,664	3,565	50,682	44,798	1,498	37,945 (43)	47,866 (52)	2,067 (58)
1987-88	89,850	103,213	4,322	47,119	57,634	2,133	42,731 (48)	45,579 (44)	2,189 (51)
1988-89	90,356	104,810	3,715	46,509	61,300	1,679	43,847 (49)	43,510 (42)	2,036 (55)
1989-90	94,131	103,646	3,683	46,344	55,994	1,553	47,787 (51)	47,652 (46)	2,130 (58)
1990-91	97,634	107,105	3,470	53,589	55,861	1,420	44,045 (45)	51,244 (48)	2,050 (59)
1991-92	94,720	102,100	3,638	44,653	50,923	1,456	50,067 (53)	51,177 (50)	2,182 (60)

Source: Sales Tax department, Kerala.

Note: The numbers in parentheses represent the number of assessments pending at the end of the year as a percentage of assessments due for completion at the beginning of the year.

Table 2.8

Vintage of Pending Cases under Sales Tax in Kerala

Pending from	1988-89	1989-90
1981-82 or before	2,193 (2.4)	1,747 (2.3)
1982-83	1,760 (1.9)	953 (1.2)
1983-84	2,715 (3.0)	2,184 (2.8)
1984-85	5,314 (5.8)	2,521 (3.3)
1985-86	9,021 (9.9)	4,169 (5.4)
1986-87	16,904 (18.5)	6,204 (8.0)
1987-88	35,547 (38.9)	9,121 (11.8)
1988-89	17,935 (19.6)	16,768 (21.7)
1989-90	-- (--)	33,644 (43.5)
Total	91,389	77,311

Source: Sales Tax department, Kerala.

Note: The values in parentheses are percentages to the column totals.

CHAPTER III

EXCISE DUTY

The question of any possible reform in excise duty structure is closely linked to the extent of governmental intervention in and control of production and trade in liquor. Moreover, given that liquor is also subject to sales taxation at very high rates, it is necessary to consider overall taxation of liquor rather than through any one of the taxes. But first, it is necessary to properly understand the tax system and its implications before any policy recommendations can be attempted. We confine ourselves to liquor only, as revenue from other excisables is not significant (Table 3.1).

a. **The Present System:** In the case of country liquor (arrack), the most important excisable item from the revenue point of view, the basic raw material (molasses/alcohol) is procured by the government both from within the State and outside (allotments are made by the Central government). Distilleries within the State produce alcohol from molasses. Alcohol is blended in the blending and bottling units for distribution among retailers. At all stages, excise supervision is expected to ensure no leakage or adulteration. While the price of arrack is not controlled, the government retains the power to intervene, if found necessary. All production and trading units have to obtain specific licences from the excise department after paying the necessary licence fees. Retail vends are auctioned and proceeds of these auctions constitute the largest element of excise receipts from arrack. The excise duty (this is a specific duty) on arrack is paid by the retailer when he lifts his quota. Sales tax on arrack is levied at the first and the last sale points.

The production of country fermented liquor (toddy) is a fairly simple process of tapping the specified trees (Palmyrah, Coconut, and Sago) and fermenting the juice. Tree taxes are levied at different rates for the three species (mentioned above) used for making toddy. The fermentation units and retail shops have to pay licence fees and the retailers have to pay shop rent determined through auctions. The usual specific duty is paid by the retailers. There is no price control, nor is there any sales tax on toddy.

As far as foreign liquor (including India made foreign liquor) and beer are concerned, their production, import and export, and retail as well as wholesale trade is again supervised by the excise department. Moreover, Kerala State Beverages (Manufacturing and Marketing) Corporation (Beverages co. for short), a public sector company, has been given the exclusive rights to be the single channel through which suppliers can reach wholesalers and retailers. Units engaged in production of and trading in foreign liquor and beer are taxed through various licence fees, import/export fees, gallonage fee on rectified spirit, vending fee, excise duties leviable and sales tax (at the

Table 3.1
Revenue from State Excise in Kerala

(Rs. lakh)

Item	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90
Total Receipts (Net)	6523	5399	7336	8073	10030	10407	11760	14569	16792	17468
Country Spirits (arrack)	3402	1734	3452	4050	5951	6720	6938	9221	10032	10538
Excise Duty	434	301	631	1169	1511	1340	869	1583	1640	1470
Shop Rent	2968	1437	2821	2881	4440	5379	6069	7638	8393	9068
Toddy	890	1071	755	914	619	878	989	1428	1228	1536
Tree tax	67	98	64	90	90	101	91	252	193	264
Shop Rent	823	973	691	824	530	777	898	1176	1035	1272
Foreign Liquors, Spirits and beer	1698	2142	2354	2342	2940	2265	3147	2908	4108	4274
Excise Duty and Gallonage fee	833	877	935	946	1056	940	1616	1285	1025	1760
Shop Rent and licence fees	865	1263	1416	1392	1626	1318	1522	1362	2458	1894
Other Receipts	533	453	769	767	530	551	687	1014	1426	1121

Source: NIPFP database.

point of sale by the Beverages co.).The shop rentals, determined through auctions, for wholesale and retail sales of foreign liquor and beer are also payable.

In addition to to the various types of receipts mentioned above, the excise department collects from the various units under supervision the costs of such supervision.

b. General Considerations: The above summary shows the complicated structure of taxation of liquor. With such a structure, even when evasion of tax is evident [GOK(1992)], it is difficult to identify the loophole, let alone plug it. The issue is further complicated by two conflicting considerations: (a) drinking is a social 'bad' and any government would feel justified in taxing it as much as it can, and (b) too heavy a taxation may lead to diversion of demand for liquor to the illicit liquor trade with the disastrous results that we have seen over the years in various States including Gujarat where prohibition policy has been in force all along. The importance of the latter consideration hinges critically on the price elasticity of demand for licit liquor; while we are not aware of any such estimate for Kerala, empirical studies abroad [e.g., McGuinness(1980) and Cook and Tauchen (1982)] as well as a study of the neighbouring State of Karnataka [Musgrave and Stern (1985)] show that the elasticity is significantly less than zero. To the extent price increase does not reduce demand, it would cut into the expenditure on other, in all probability more socially useful, consumption. The clinching argument is provided by the empirical finding of Musgrave and Stern that apart from the price elasticity, the ratio of tax element in the price had a significant impact on (licit) liquor consumption, clear indication of the fact that higher taxation causes increased evasion.

Another relevant *a priori* observation is that there is likely to be, *ceteris paribus*, a negative relationship between the *rates* of excise duty and sales tax on the one hand, and the revenue raised through shop rent (auction bids). This is because, one would expect the auction bids to go up to the full amount of expected pure profits, if the auction is fair. If tax rates are raised, expected profits would fall, and hence auction bids would be lower¹⁰. Given this reasoning, it would make no sense to tinker with the tax rates to raise additional revenue. Musgrave and Stern show that the optimal combination of auction revenue and a liquor tax is actually a corner solution of only auction revenue with no taxation. While this is an acceptable theoretical result, it would not be safe to apply it in practice, because any imperfections in the auction process would then affect excise revenue greatly. It is difficult to agree with their other result that the government should encourage a monopoly in the interest of revenue.¹¹ Experience of other States

10. This is actually a testable hypothesis. See the appendix to this chapter for the results of the statistical test carried out by us.

indicates that even from the narrow point of view of revenue, encouraging monopolies may create problems of a different nature; such monopolies tend to acquire the character of a strong lobby politically and get several concessions in due course. In the short run, they are quick to corrupt the auction process to their advantage.

c. **Suggestions:** (i) *Foreign liquor and beer:* Price and income factors would suggest that the probability of consumers of foreign liquor (India made or otherwise) switching to illicit liquor is not very high. Therefore, in the foreign liquor trade, evasion of excise duty and sales tax is the only concern; the fear of driving consumers to illicitly produced liquor is not very important. It also follows that the price of foreign liquor should not really be a major policy concern of the State government. Contrarily, keeping prices stable at lower than market levels would only lead to higher consumption of liquor which may not be desirable. In this background, it is difficult to understand the rationale for the existence of the Beverages Corporation and further, conferring of a monopoly status on it. If the idea is to make profits, then it has not worked well at all, as the profit figures for the years 1984-85 to 1988-89 show (Table 3.2 below). In any case, the corporation itself believes that its brief is to keep prices down, as the following extract shows:

"Since there is no control on the prices at which the wholesalers, retailers and bars may sell liquor to the consumers, the presence of the wholesale shops directly run by the Corporation had a salutary stabilising influence on the liquor prices in the State. Further, as the Corporation was the only channel through which manufacturers could reach the consumers in the State, there was keen competition among the suppliers to offer liquor to the Corporation and hence the Corporation was able to wangle very favourable terms and prices from them. The *objective of making available quality liquor at reasonable prices* to the consumer was thus to a great extent fulfilled....." (Annual Report for the year 1984-85, emphasis ours).

Although the initial objective of the government was to let this Corporation handle both arrack and foreign liquor, for some reason the Corporation has confined itself to foreign liquor and beer. As it is, we see no reason for its continuation. We would suggest that the government should leave the trading in foreign liquor and beer to the private sector and amend the Abkari policy a little to both raise additional resources and reduce alcohol consumption, in the manner explained below.

It is universally accepted that beer, with its low alcohol content, is a better substitute for hard liquor like rum and whiskey. Hence, in most countries of the world, beer is taxed relatively lightly and is also made available more freely. We would suggest that the government create a specific category of licences for 'beer bars', and give such

11. They, of course, modify this recommendation in view of the fact that a monopoly would charge higher consumer price and restrict output, thus increasing the risk of encouraging illicit liquor trade. They end up recommending government monopoly.

Table 3.2

Profits of the Beverages Corporation

Year	Profit* (Rs. lakh)	Sales (Rs. lakh)	Profit/Sales (percentage)
(1)	(2)	(3)	(4)
1984-85	16	4352	0.37
1985-86	0	5043	0.00
1986-87	-45	6086	-0.74
1987-88	50	5894	0.85
1988-89	36	4711	0.76

Note: Profits represent profits after tax and prior period adjustments.

Source: Annual Reports of the Corporation.

licences liberally. These should sell only beer, and should preferably be restaurants as well. If such a category of licences already exists, the issue of such licences should be considerably liberalised. This should be accompanied by appropriate changes in the excise duty structure, raising the rate of tax on liquors with higher alcohol content and lowering the rate on beer with alcohol content below a specified limit (say 5 per cent v/v). The present rate difference between 'hard' liquor and beer (Rs. 15 and Re. 1) is partly illusory because IMFL is taxed per proof litre while beer is taxed per bulk litre. Similarly, the difference between the current vending fees for beer and IMFL is very small, the gap needs to be enlarged by lowering the rate for beer and raising it for IMFL. Quality regulation can probably be safely left to the market, since the consumers are likely to be well-informed.

A final comment regarding foreign liquor pertains to export duty on IMFL. When the State has to import IMFL from other States, there is no reason why the export duty should not be increased to discourage exports out of the State, and we agree with GOK(1992) that such a step would raise revenues without any adverse effect.

With regard to toddy, the existing system seems to work reasonably well and we have no specific suggestion to offer.

Arrack is the key element with respect to both revenue consideration and socioeconomic impact. This being the cheap liquor, low-income drinkers are likely to be its main consumers and hence, higher price of arrack could result in switching over to consumption of illicit liquor. It is, therefore, essential that the quality of the product is regulated and the product is not priced at very high rates. At the same time, the State should be able to raise revenues.

Our discussions with the officials of excise department, however, leads us to the conclusion that the evasion of the tax is phenomenal. The interim report of the Resource Commission has estimated that the arrack actually sold by the contractors can be as much as five to 20 times the quantity supplied by the distilleries. This implies not only that the State government has been losing sizeable amounts of revenue, but also that there is virtually no regulative control on the quality of liquor sold. Hence, the issue of having a proper regulatory system to monitor the quality and quantity of product sold is of utmost importance. However, there does not seem to be any practicable method of doing this, even if the government completely took over import, production and wholesale distribution as suggested by Musgrave and Stern (1985). It is difficult for the government, as experience in the State shows, to monitor the supply of arrack available from unregulated imports and illicit distillation. Nor does the government have any comparative advantage in either manufacturing or retailing country liquor. The critical issue is of regulating the quality of arrack which, at present, is totally non-existent on the quantities processed through unregulated imports and illicit distillation. It is imperative that the government strengthen the regulatory set up to ensure that the quality of the product sold is acceptable.

The questions of monitoring the sale of liquor and collection of revenue to the State exchequer are far too complicated and calls for a much more detailed study. Also, we do not have the needed expertise to understand all the critical implications of alternative policy options. Therefore, we refrain from making any policy suggestions in this regard.

Finally, we would like to point out that the practice of recovering costs of excise supervision in full from the units under supervision has a built-in incentive for the government to increase the degree of supervision. This is patently unfair, as the units may be made to pay for even unnecessary supervision. To provide an incentive to the government to keep such supervision at the minimum necessary levels, we suggest that such costs should be split equally between the government and the unit under supervision.

APPENDIX A.III

The theoretical argument for expecting a *ceteris paribus* inverse relationship between the rates of excise duty (or excise duty collections) and the shop rents determined through auctions is quite straightforward. In general, if auctions take place in a competitive environment, the auction bids will go up until they equal the full amount of expected pure profits. Pure profits are defined as sales minus costs including taxes. Hence, any increase in taxes (excise duty) would reduce expected pure profits and thus the shop rent.

Empirical testing of this hypothesis is possible through the use of a time series analysis, a cross-section analysis or a combination of both. For the present, we are concerned with only the State of Kerala, and hence only a time series analysis will suffice. We have data on shop rent and excise duty collected over a period of 11 years starting from 1980-81 through 1990-91. Over time, we can expect the shop rentals to be affected by consumption of liquor, wholesale price of liquor, consumer price of liquor and excise duty paid so that

$$RA = f(\text{CONS, WPL, CPL, EXC}_{t-1}) \dots \dots \dots (A.1),$$

where RA= shop rentals, CONS= consumption, WPL= wholesale price, CPL= consumer price, and EXC_{t-1}= excise duty collected with one year lag. The lagged value of the last variable is taken as we are really talking about expected profits, and the latest known indicator of the burden of excise duty at the time of auction of the shops is collection of the prior year.

If the above function can be statistically estimated, the coefficient of EXC_{t-1} will directly indicate the relationship between excise duty collections and shop rentals. We do not have the information on CONS, WPL and CPL for the State. As an inferior short cut, we used time as an explanatory variable to represent all three variables as all of them have probably increased over the sample period steadily. The equation then reduces to

$$RA = f(\text{TIME, EXC}_{t-1}) \dots \dots \dots (A.2).$$

We estimated this equation, for illustration purpose only, for arrack, as that is the category for which we are actually suggesting abolition of excise duty. The estimated equation is

$$RA = -292.64 + 940.12\text{TIME} - 0.05\text{EXC}_{t-1}, \quad R^2 = 0.9861,$$

(-0.94) (12.82) (-0.12)

F = 249.19, D-W statistic = 2.15, t-values in parentheses.

The estimated equation does not have any obvious statistical problems in the error terms like that of serial correlation, non-normal distribution or heteroscedasticity and the functional form is

statistically appropriate. The coefficient that we are interested in -- that for EXC_{t-1} -- is negative, but not significantly different from zero as indicated by the t-test. Thus, this result does not fully support our *a priori* expectation of a significant negative coefficient. However, in our defence we would like to say that the test is not conclusive due to the short cut we had to adopt. If equation A.1 is directly estimated with the appropriate data, then the result will be more robust.

CHAPTER IV

NON-TAX REVENUES AND IMPLICIT SUBSIDIES

a. Introduction

In Chapter 1, we had noted that one of the principal reasons for the fiscal imbalance in Kerala has been the sluggish growth of non-tax revenues. During the 1980's, while the States' own tax revenues recorded an impressive growth of 16 per cent per year on the average, the non-tax revenues grew at a mere 4 per cent per year. Consequently, the State's own total revenues increased at an average annual rate of only 13 per cent, much below the growth of revenue expenditures. In 1980-81, non-tax revenues constituted 23 per cent of the State's own revenues but by 1989-90, their share was just about 12 per cent. Considering the enormous and further increasing volume of investments made by the State government in social and economic infrastructure, the low and declining share of non-tax revenues poses a severe constraint on further investment in these activities. The poor non-tax revenue productivity is indicative of the inability of the State in effecting proper recoveries through user charges on the services rendered as well as the poor physical productivity of the public sector.

A disaggregated analysis of non-tax revenues shows that in respect of all the major items, low growth was accompanied by wide year to year fluctuations. The revenue from forests has been declining even in absolute terms, reflecting partly the environmental concern of conserving forest resources. The revenue from the major departmental commercial undertaking - irrigation, has shown an increase of only 4 per cent per year. Interest on loans and dividends on investments in non-departmental commercial enterprises shows a reasonably high growth if 1980-81 is taken as the base year, but since 1984-85, this has shown a substantial decline even in absolute terms. The low growth of revenues from administrative services has not helped either; it increased at about 6 per cent per year only. The uneconomic pricing of social and economic services provided directly by the government and through public enterprises resulting in a low and declining proportion of non-tax revenues in own total revenues points towards the existence of a large volume of hidden subsidies.

b. Subsidies - Definitions

We have attempted to estimate the total volume of budgetary subsidies, both implicit and explicit, involved in the State's provision of social and economic

services. For this purpose, subsidies have been defined in the broadest sense - to include all unrecovered costs of providing social and economic services.¹²

'Non-rivalry' and 'non-excludability' in consumption renders the determination of the prices of 'public' goods provided by the States difficult and therefore, such services cannot be sold to the consumers in the market. They have to be financed out of the general revenues. The administrative services, maintenance of law and order, and natural calamity control and relief fall into this category. In respect of all other social and economic services provided by the government, in principle, market solution is possible. However, for ensuring optimal supply when spillovers exist or for merit goods reasons or for redistributive purposes,¹³ the government may decide to charge less than the market price or provide open subsidies to encourage the consumption of specific services.

Conceptually, it is useful to distinguish between direct transfer payments and subsidies. Direct transfer payments are the cash income transfers made directly to the beneficiaries and the only problem in administering such transfers is to identify the intended beneficiaries. As the benefits directly accrue to the targeted, it is efficient to make all redistributive payments through direct transfers. Income transfer for the destitutes, widows, agricultural workers, and transfers made towards poverty alleviation programmes are some of the major items of transfer payments.

'Subsidy', on the other hand, is the payment made to the producer to ensure optimal provision of specified public services in the case of spillovers to the consumer to encourage the consumption of particular services by specified sectors of population when these services are found to be meritorious. Of course, these merit goods generally have redistributive elements in them and therefore, properly targeted subsidies are also redistributive. Subsidy can be given in the form of either cash payments to the producers or consumers or by levying user charges lower than their efficient average cost. Subsidy may also accrue from various tax concessions given and wage payments made to employees at rates higher than their average productivity. In this exercise, however, we have quantified the volume of open subsidies and hidden subsidies as given by the unrecovered costs on various social and economic services provided by the State government. This does not take account of the subsidies arising from various tax incentives besides assuming that the social and economic services are provided in cost efficient manner. In particular, subsidy arising from sales tax concessions to new industrial units could be substantial.

12. For details on the concept, see, Mundle and Rao, (1991).

13. A pure redistributive subsidy, however, is best done through providing direct transfers to the targeted groups for, subsidy given to alter price and output decisions of the producers may have resource allocation effects and corresponding welfare losses.

c. Estimation of Subsidies

The methodology for estimating budgetary subsidies in respect of various social and economic services provided by the State is detailed elsewhere (Mundle and Rao, 1991 and Rao and Mundle, 1992). Briefly stated, the methodology involves the estimation of cost of providing each item of social and economic services and cost recoveries from them. The unrecovered cost is taken to be the subsidy element. Cost of providing public services is estimated by adding the revenue expenditure, depreciation and interest cost on the total capital outlay incurred and interest payment on the cumulative amount of loans advanced to third parties under each of the major heads. Depreciation rate is assumed to be two per cent and the average cost of borrowing by the State government is taken as the interest cost.¹⁴ The cost recovery is estimated by summing up revenue receipts (from user charges and other miscellaneous receipts) and interest and dividend receipts under each of the major heads. The analysis is carried out for 2 years, 1977-78 and 1989-90 to get a broad view of the trends in costs, recoveries, subsidies and direct transfer payments.

The total volume of budgetary subsidies in Kerala in 1989-90 is estimated at Rs 1615 crore (Table 4.1). This is in addition to the direct transfer payments to individuals amounting to Rs 151 crore under various schemes such as social security and welfare payments and various poverty alleviation measures. About 65 per cent of the total subsidy or Rs 1042 crore was on account of social services and subsidy on economic services amounted to Rs 574 crore. In the aggregate, the amount of subsidy increased from Rs 276 crore in 1977-78 to Rs 1615 crore in 1989-90 thus registering an average annual growth rate of 16 per cent. In per capita terms, and in 1978-79 prices, the subsidy almost doubled from Rs 115 in 1977-78 to Rs 226 in 1989-90.

Although the cost of providing both social and economic services increased at a little over 14 per cent per year, the subsidies in economic services recorded an annual increase of almost 19 per cent and increase in the case of social services was about 15 per cent. The faster growth of subsidies in economic services was mainly due to the virtual stagnancy in cost recoveries. With cost recoveries increasing at only 2 per cent per year, the share of subsidies on economic services in total subsidies increased from 27 per cent in 1977-78 to 35 per cent in 1989-90.

As already mentioned, the cost recoveries have stagnated while the cost of providing social and economic services have recorded very high growth rates. Consequently, the recovery rates have shown a phenomenal decline over the 12 year period. In the case of social services, the recovery rate declined from 3.7 per cent in 1977-78 to less than 2 per cent in 1989-90. In other words, social services are provided

14. The average cost of State's borrowing was 5 per cent in 1977-78 and 9 per cent in 1989-90.

Table 4.1

Budgetary Subsidy in Kerala - 1977-78 and 1989-90

(Rs. Lakh)

	Cost of Public Services			Cost Recoveries			Subsidies			Recovery Rate (Per cent)	
	1977-78	1989-90	Annual Growth Rate (%)	1977-78	1989-90	Annual Growth Rate (%)	1977-78	1989-90	Annual Growth Rate (%)	1977-78	1989-90
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. General Services	7593	56299	18.2	-	-	-	-	-	-	-	-
2. Social Services	20965	106182	14.5	775	1980	8.1	20190	104201	14.7	3.70	1.87
3. Economic Services	12892	64269	14.3	5476	6919	2.0	7416	57350	18.6	42.48	10.77
4. Total - Social and Economic Services	33857	170450	14.4	6251	8899	3.0	27606	161551	15.9	18.46	5.22
5. Transfers	1837	15109	19.2	-	-	-	-	-	-	-	-
Total including General Services and Transfers	43287	241858	15.4								

virtually free in the State. In the case of economic services, the recovery rates declined from 42 per cent in 1977-78 to about 11 per cent in 1989-90.

It must be stated here that the mere existence of a large volume of subsidies and transfers or their fast growth over time by themselves cannot be judged as undesirable. There are a number of meritorious public services and those with high degree of externalities whose consumption ought to be encouraged, for which these services must be priced below their average cost. Elementary education and basic preventive and protective health care falls into this category.

At the same time, given the high private rate of return on higher education, more so in the case of technical and medical education, there is no reason why recoveries at least to cover a substantial portion of the cost cannot be made. This argument gets reinforced as a large proportion of students admitted to higher education belong to more affluent sections. Accessibility of higher education to poorer but meritorious students can be ensured through appropriately targeting the subsidies. Sometimes, from the point of view of improving agricultural productivity, it may be desirable to subsidise the use of fertilisers and hybrid seeds. However, once the purpose of demonstration is served and the farmers are made aware of the benefits of such use, such subsidies should be withdrawn in order to prevent the overuse of the inputs and unwarranted changes in cropping pattern. In other words, subsidies in the provision of public services or making transfer payments should be done as a conscious policy measure; it should not be the result of pressure from vested interests. Identification of the beneficiaries, proper targeting of the benefits and analysis of the economic effects of the subsidies and transfers can be done only when it results from a conscious policy measure. The disaggregated analysis of subsidies arising from the provision of various social and economic services helps us to draw some conclusions on the broad activities where phasing out or better targeting of subsidies is desirable.

i. Social Services: The details of subsidy on social services are given in Table 4.2. Almost two-thirds of of subsidy in social services in 1989-90 was attributable to the education sector; medical and public health account for 16 per cent and water supply accounted for another 10 per cent. Within the education sector subsidy on account of secondary and higher education contributed 51 per cent of the total education subsidy. Surely, this subsidy accrues to those privileged who already have had access to education upto the higher secondary level. Given that the affluent sections of society enjoy disproportionate political power and influence, it would not be incorrect to state that a large proportion of the subsidy on higher education, medical and public health, water supply and sanitation as well as housing and urban development accrue to them.

As mentioned earlier, the social services are provided virtually free. The recoveries by way of user charges on various social services provided in the State amounted to just about 1.9 per cent of the cost of providing these services. In 1977-78,

Table 4.2
Subsidy in Social Services - Kerala
1977-78 and 1989-90

(Rs Lakh)

	Cost of Public Services			Cost Recoveries			Subsidies			Recovery Rate (Per cent)	
	1977-78	1989-90	Annual Growth Rate (%)	1977-78	1989-90	Annual Growth Rate (%)	1977-78	1989-90	Annual Growth Rate (%)	1977-78	1989-90
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Education	15248	67543	13.2	426	1345	10.1	14822	66198	13.3	2.79	1.99
a. Primary education	8248	32708	12.2	4	40	21.0	8244	32667	12.2	0.05	0.12
b. Secondary education	3438	17839	14.7	81	310	11.9	3357	17529	14.8	2.35	1.74
c. Higher education	3252	15716	14.0	335	936	9.0	2918	14779	14.5	10.29	5.96
d. Sports and Youth Services, Art and Culture	310	1281	12.5	7	58	19.5	303	1223	12.3	2.22	4.54
2. Medical and Public Health	3276	17206	14.8	82	317	11.9	3194	16889	14.9	2.50	1.84
3. Water supply and Sanitation	1248	10514	19.4	167	1	-35.6	1081	10513	20.9	13.36	0.01
4. Housing and Urban Development	531	2684	14.5	60	165	8.8	471	2519	15.0	11.29	6.16
5. Other Social Services	663	8234	23.4	40	152	11.7	623	8082	23.8	6.05	1.85
Total Social Services	20965	106182	14.5	775	1980	8.1	20190	104201	14.7	3.70	1.87

the recovery rate was somewhat higher at 3.7 per cent and even at that rate the State in 1989-90 would have obtained about Rs 20 crore more than what was actually recovered. Substantial decline in recovery rates is seen in the case of each of the major items under social services. Even the services which benefit the relatively more affluent are provided virtually free. The recovery rate both in higher education and housing and urban development was 6 per cent, in medical and public health it was 1.8 per cent and in water supply and sanitation it was negligible.

Underpricing of public services, unfortunately, causes decline in the quality of these services. Heavy demand for the public services, reinforced partly by low user charges results in the overuse of existing facilities, thus causing decline in the quality. Overcrowding in colleges and universities and inadequate outlays provided for library and laboratory facilities surely are some of the major reasons for the declining educational standards.

It has also been found that the rate of return on human capital, particularly in technical education, is very high. Charging economic rates for the affluent students availing higher education could augment the resources which could be used to improve the quality of education. The improved resource position could also help in better targetting of the subsidies on meritorious but economically weak students through properly designed loan scholarships. The educational opportunities can also be augmented by encouraging private sector participation particularly in technical education with appropriate regulatory framework to ensure the quality of education. These require a detailed review of education policy in the State including the issues of autonomy of higher educational institutions in raising resources through fees, the extent and method of supporting the meritorious but economically weak students through scholarships and the type of regulatory framework needed to ensure improved quality in education.

In the case of health services also the difficult resources position partly caused by low recoveries has resulted in the poor maintenance of medical equipments and buildings. Many of the equipments simply go out of use for want of adequate funds for repair and replacement. In the event, the quality of the service deteriorates and the patients get treated in unhygienic conditions with rusted equipments. The negligible user charges result in overcrowding in hospitals, worsening the unhygienic conditions further, which the existing hospital infrastructure cannot simply accommodate. It is possible to recover quite a good part of the current expenditures under medical and public health, given the inelastic nature of the demand and use the funds to provide improved medical facilities. This calls for differential pricing for identified groups among the consumers. The poorer sections should be identified and medical facilities could be provided free to them. The middle sections could be provided the facilities at subsidised rates and the better-off section need not be provided with any subsidy. In fact, it is possible to charge very high rates on the better-off by providing some ancillary services like nursing home facilities while providing identical medical care. If a large number of private nursing homes charging exorbitant rates can thrive in the State, there is no reason why the

Table 4.3
Subsidy in Economic Services - Kerala
1977-78 and 1989-90

(Rs lakh)

(1)	Cost of Public Services			Cost Recoveries			Subsidies			Recovery Rate (Per cent)	
	1977-78	1989-90	Annual Growth Rate (%)	1977-78	1989-90	Annual Growth Rate (%)	1977-78	1989-90	Annual Growth Rate (%)	1977-78	1989-90
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Agriculture and Allied Activities	2888	16259	15.5	424	1304	9.8	2464	14954	16.2	14.7	8.0
2. Forestry and Wild Life	776	3010	12.0	3178	3216	0.1	-2402	-286	-	409.4	106.9
3. Major and Medium Irrigation	1750	13590	18.6	98	164	4.4	1653	13427	19.1	5.6	1.2
4. Minor Irrigation	637	3148	14.2	18	79	13.3	619	3069	14.3	2.8	2.5
5. Common Area Development and Flood Control	777	3396	13.1	3	4	0.9	773	3392	13.1	0.4	0.1
6. Power and Energy	1390	2817	6.1	805	13	-29.2	585	2804	13.9	57.9	0.5
7. Industry	1104	7322	17.1	93	895	20.8	1011	6427	16.7	8.4	12.2
8. Transport	2528	12395	14.2	135	631	13.7	2392	11764	14.2	5.3	5.1
9. Other Economic Services	1042	2332	6.9	722	613	-1.4	319	1718	15.1	69.4	26.3
10. Total Economic Services	12892	64269	14.3	5476	6919	2.0	7416	57350	18.6	42.5	10.0

State run hospitals with more competent and better qualified doctors cannot make adequate recoveries from these consumers. Again, there is no reason why proper cost recoveries cannot be made in respect of specialised services like pathological tests and x-rays and use the proceeds to maintain better flow of services from these equipments.

ii. **Economic Services:** As already mentioned, economic services accounted for subsidy amounting to Rs 574 crore forming 35 per cent of the total subsidy bill in the State (Table 4.4). The subsidy on economic services since 1977-78 increased at the annual average rate of about 19 per cent mainly because cost recoveries were virtually stagnant even in nominal terms. The recovery rate showed a sharp decline from 42.5 per cent in 1977-78 to a mere 11 per cent in 1989-90.

From the policy point of view, it would be helpful to concentrate on subsidies in economic services flowing through departmental and non-departmental enterprises. As shown in Table 4.3, total subsidy payments through departmental and non-departmental enterprises accounted for Rs 328 crore or 57 per cent of the total subsidies on economic services. It may be noted that these enterprises are supposed to be run on commercial principles.

The largest part of subsidy through public enterprises amounting to about Rs 165 crore was in the irrigation sector. The subsidy attributable to major and medium irrigation projects was Rs 134 crore and Rs 31 crore was on account of minor irrigation. Cost recovery on the irrigation sector was just about 1.4 per cent or the subsidy element constituted about 98.6 per cent of the cost of providing the service! Surely, this order of subsidy even in a heavy rainfall State like Kerala, besides disproportionately benefiting larger farmers would also have the effect of altering the cropping pattern towards water-intensive crops. Neither from equity grounds nor for efficiency reasons can such an order of subsidy be justified. In the interest of properly maintaining the major and medium irrigation works, the water supplied to the farmers ought to be priced at more economical rates. The larger proceeds obtained through higher recoveries can also help in completing the large number of irrigation projects which have remained incomplete for want of resources.¹⁵ Water charges, therefore, must be levied at economic rates.

d. Public Enterprises in Kerala

The detailed analysis of non-departmental enterprises in Kerala clearly shows that in 1989-90, of the 88 government companies, only 32 showed any profit, 48 units incurred losses and for the rest, either the details were not available or production had not commenced. Similarly of the eight statutory bodies only four showed some profits. In the aggregate, just the cash losses of loss making units (both government

15. For details, see Bagchi and Rao (1987).

Table 4.4

Investments and Losses in Loss Making State Enterprises in Kerala

(Rs lakh)

Name of Undertakings	Capital Invested		Profit/Loss	
	1988-89	1989-90	1988-89	1989-90
(1)	(2)	(3)	(4)	(5)
I. Development and Infrastructural Agencies				
1. Kerala State Industrial Development Corporation	6995	8002	-266	-162
2. Kerala Financial Corporation	15623	19362	-77	57
3. Kerala Tourism Development Corporation	1175	1289	-74	-69
4. Kerala Small Industries Development Corporation	818	928	-79	-126
5. Kerala State Film Development Corporation	1172	1233	-57	-28
6. Kerala State Warehousing Corporation	586	622	-20	17
II. Ceramics and Refractories				
1. Kedrala Construction Components	49	49	-6	-2
2. Kerala Premo Pipe Factory	173	174	-15	-18
3. Kerala Ceramics Ltd.	1105	1283	-112	5
4. Chalakudy Refractories Ltd.	395	452	53	35
5. Kerala Special Refractories Ltd.	421	440	-34	-18
III. Chemicals				
1. The Kerala Minerals and Metals Ltd.	13550	14321	-276	-1527
2. The Kerala State Detergents and Chemicals	844	1096	-170	-171
3. Kerala State Drug and Pharmaceuticals Ltd.	1647	1837	-175	-120
4. The Kerala Soaps and Oils Ltd.	1134	1277	-247	-226
5. Malabar Cements Ltd.	6362	6427	70	-154
6. Travancore Cements Ltd.	85	65	-3	46
IV. Electrical Equipment				
1. Metropolitan Co. Ltd.	194	217	-27	-26
2. United Electrical Works	385	402	-90	37
3. Transformer and Electricals Kerala Ltd.	3766	4075	-356	-91
V. Electronics				
1. Kerala State Electronics Development Corporation	7707	9531	-268	50
2. Keltron Counters Ltd.	597	630	2	-80
3. Keltron Electro Ceramics Ltd.	356	381	1	-31

Table 4.4 (Contd.)

(1)	(2)	(3)	(4)	(5)
4. Keltron Resistors Ltd.	248	253	-14	n
5. Keltron Power Devices	860	930	-65	-140
6. Keltron Rectifiers Ltd.	637	688	-67	-74
7. Sidkel Television Ltd.	36	36	-18	-31
VI. Engineering				
1. Steel Complex Ltd.	302	298	-178	-172
2. Steel Industries Kerala Ltd.	1810	2009	-11	-32
3. Kerala State Construction Corpn. Ltd.	293	293	-9	-9
4. Scooters Kerala Ltd.	262	262	-19	-28
5. Astral Watches Ltd.	50	55	-11	3
6. Kerala Automobiles Ltd.	1105	1217	-140	-123
7. Steel and Industrial Forgings	1126	1375	-91	-146
8. Autocast Ltd.	2330	2588	-149	-215
VII. Agro-based Industries				
1. Kerala Agro-industries Corporation	506	510	-53	-49
2. Kerala Forest Development Corporation	825	827	-40	-36
3. Kerala State Coconut Development Corporation	383	389	-138	-141
4. Kerala Livestock Development Corporation	707	717	-7	-6
5. Meat Products of India Ltd.	178	196	-19	-12
6. Travancore Sugars and Chemicals Ltd.	51	51	37	-4
VIII. Textiles				
1. Kerala Garments Ltd.	32	37	-10	-12
2. Kerala State Textile Corporation	1462	1890	-202	22
3. Sitaram Textiles Ltd.	1280	1406	-167	-140
4. Trivandrum Spinning Mills	472	495	-74	3
IX. Wood Based Industries				
1. Kerala State Wood Industries	804	899	-106	-86
2. Kerala Plywood Industries Ltd.	313	350	-101	-137
X. Traditional Industries				
1. Foam Matings (India) Ltd.	181	196	-9	-9
2. Kerala State Bamboo Corporation	200	257	-33	-7
3. Kerala State Handloom Development Corpn.	595	653	-7	-10
4. Kerala State Coir Corporation	397	418	-16	-29
5. Kerala State Cashew Development Corpn.	3759	3834	-295	68

Table 4.4 (Concl.)

(1)	(2)	(3)	(4)	(5)
XI. Trading				
1. Kerala State Civil Supplies Corporation	1764	1762	-189	-1342
XII. Welfare Agencies				
1. Kerala Artisan Development Corporation Ltd.	37	49	-8	-9
2. Kerala School Teachers and Non-Teaching Staff Welfare Corporation Ltd.	96	108	-2	-5
3. Kerala State Handicapped Persons' Welfare Corporation Ltd.	10	12	1	-3
4. Kerala State Women Development Corporation	59	93	1	-3
XIII. Public Utilities				
1. Kerala Shipping and Inland Navigation Corporation	411	411	1	-5
2. Kerala State Electricity Board	70814	82976	-1434	-1047
3. Kerala State Road Transport Corporation	13634	15195	-2366	-2619
4. Kerala Water Authority	60455	64617	-2697	-2717
5. Kerala State Housing Board	11561	14100	-363	-549

Source: *A Review of Public Enterprises in Kerala, 1989-90*, Bureau of Public Enterprises, Government of Kerala, Thiruvananthapuram.

companies and statutory bodies) amounted to Rs 103 crore. In the aggregate, the total capital investment of Rs 2912 crore yielded a net loss of Rs 75.81 crore or the rate of return worked out to -2.6 per cent. It must be noted that many of the enterprises did not pay interest on the long term borrowings from the State government and if this is taken account of, the cash losses would work out to be even higher. Apart from the major public utilities discussed later in the chapter, substantial losses were also reported in the case of sectors such as trading, chemicals and electronics.

The detailed analysis of the information given in the Review of Public Enterprises in Kerala (1989-90) brings out the following important facts:

- (i) The poor financial performance is not just confined to core sector enterprises with high degrees of externalities (Table 4.4). Many units producing *consumer goods* have been making substantial losses. Even the reported losses are underestimates as many of the units have not paid interest to the State government on their borrowings and many pay interest on loan at concessional rates.
- (ii) Every unit irrespective of its financial performance and the nature of its activity has granted loans to the employees. Bonus is paid even by units whose entire capital base has been wiped out by accumulated losses. This implies that remuneration to employees has had no relationship with the financial misfortunes of the unit. This reflects the lack of accountability and incentives in State run enterprises. In addition, experience in the country has shown that public enterprises have the greatest potential for being used for dispensing favours by politicians and bureaucrats.

In order to reduce the drain on resources and to have an efficient public sector, it is vital to phase out the public sector units which are not in the core sector and do not serve serious promotional purposes. Even in the case of these, it is necessary to review their performance from time to time and find ways to impart accountability and incentives. To begin with, the State should sell off all the loss making units in ceramics and refractories, chemicals, electrical equipment, electronics and engineering, textiles, agro-based industries and wood-based industries. Even in the case of the units classified as "infrastructure", there is no reason why the State government should continue running hotels in an inefficient manner and make losses; nor can there be any justification to call Film Development Corporation as infrastructure and justify losses therein. In any of these activities, if it is felt that the State must play a promotional role, it would be better served by open and targetted subsidies.

The welfare losses of hidden subsidies arising from the poor performance of public sector units are very high. These losses accrue due to both inefficiency and equity reasons. As was pointed out, at the margin, the effect of resource crunch was to prevent adequate outlay on capital expenditure on social and economic infrastructure and

on maintenance of capital assets, both having adverse effects on productivity and growth in the economy. The funds saved by phasing out these hidden subsidies can be used to complete a large number of irrigation projects which could not be completed for years, leading to increased employment for unskilled and semi-skilled labour and improvement in agricultural productivity. Similarly, adequate allocation for the maintenance of infrastructure could lead to overall improvement in the economy, leading to higher employment and output levels. From this perspective, the unqualified protection given to organised labour in the public sector has adversely affected the unorganised sections of working class.

Over a period of time, it would be desirable to dispose of even the units which are not making losses presently so long as these are in the non-core sector. The limited skills and abilities available with the government must be used to provide proper regulatory framework, peace and stability and social and economic infrastructure and should not be wasted in various production and trading activities in which the State government has no particular comparative advantage. The government cannot go on harbouring organised sectors through its public enterprises at the cost of the unorganised labourer.

There is no single method of disposing of public enterprises and the strategy would depend upon the circumstances in each case. In some cases, it may be preferable to gift the units to the employee organisations and allow them to partake in the fortunes of the unit. In some other cases, the government may simply disband the unit, sell off the prime land owned by such units and compensate the labour. In some cases, the entire unit may be sold off to the private sector and the proceeds used to compensate the labour. It may also be necessary to sell off profit making and loss making units as a package deal. In all these cases, it is important to ensure that the claims of the employees should get priority over others' and for this purpose, the State government should constitute a renewal fund on the lines of the National Renewal Fund.

The two most important non-departmental enterprises in the State are the Kerala State Electricity Board ((KSEB)) and Kerala State Road Transport Corporation (KSRTC). As already mentioned, the budgetary subsidies involved in the operation is Rs 26 crore in the case of KSEB and Rs 7 crore in the case of KSRTC. In the case of the former, the net loss in 1989-90 was about Rs 10.5 crore even without paying the Rs 25 crore interest due to the State government.

It must be noted that as the production is entirely hydel based the unit cost of operation of KSEB is the lowest. Yet, transmission and distribution losses accounted for 22 per cent of the energy generated. Even though the Board has been making losses, it had to give a month's salary to its employees as bonus. Further, like in other States, the below cost pricing for agricultural use of energy too is one of the major causes of poor performance of the Board. While in the aggregate the price charged per unit of energy in 1989-90 was Rs 0.55, the price charged for irrigation was just about Rs 0.19.

Besides adopting measures to improve productivity, more rational pricing of electricity to the farmers is an important imperative to improve the finances of the State Electricity Board.

The problem is similar in the case of KSRTC. The net losses of KSRTC in 1989-90 worked out to Rs 26 crore in spite of not paying Rs 42 crore interest due to the State government. Yet the employees were given a bonus equivalent to one month's emoluments. The major reasons for the poor financial performance of KSRTC are overaged buses, poor fuel efficiency, very high staff-bus ratio and unrealistic fare structure. These were brought out in the Bagchi-Rao Study (1987) and we have not gone into such details here. In a State like Kerala with very heavy density of population, earning profits from transport undertaking should not be a problem and if the KSRTC has not been able to do so, this cannot be attributed in any significant measure to any social obligation. It is perhaps opportune for the State government to gradually privatise the road transport sector. In fact, the State government can think of donating buses along with the route permit to groups of employees as a compensation package.

e. Policy imperatives

We have already noted that budgetary subsidies implicit in the provision of social and economic services in Kerala amounted to over 1600 crore. Of these, subsidies flowing through departmental and non-departmental enterprises amounted to Rs 574 crore which implies that over Rs 1000 crore of subsidies were paid through direct spending operation of the government. In addition, there were direct transfer payments amounting to Rs 150 crore.

For want of time, it has not been possible for us to go into the merits of these subsidies. Though many of the direct subsidies and transfers were introduced to serve a social purpose, these have outlived their utility. The welfare losses by continuing them would be significant particularly if the funds released by phasing out these subsidies are employed to complete the existing irrigation projects, maintain the roads and improve the quality of social infrastructure. There are a number of schemes subsidising virtually every agricultural, horticultural and poultry produce. These are additional fertiliser subsidies, dewatering subsidy, subsidy for conducting festive markets, subsidised credits to various corporations including interest subsidy on permanent servants' housing societies. Subsidy given for the modernisation of handloom units and distribution of looms to handloom weavers alone in 1990-91 cost the exchequer Rs 55 crore and the cost of other assistance to handloom workers society was Rs 10 crore. The cost of construction of worksheds and establishment of Institute of Textile Technology was another Rs 50 crore. Market development assistance and rebate to handlooms are other major subsidy items. The Bagchi and Rao (1987) study makes a detailed analysis of various transfer payments and we do not intend to go into the issue here once again. We would only like to reiterate that it is important to make a careful review of the subsidy/transfer payments given by each of the department, examine their

usefulness and discontinue those which have outlived their utility and restructure the remaining to target them to reach the intended groups.

One of the major explicit subsidies which has assumed menacing proportions is the additional food subsidy on the rice distributed through the public distribution system. The decision to absorb the liabilities arising from the increases in issue prices of food items by the Central government put a heavy burden on the State's exchequer. Indeed, it is necessary to provide a safety net to the vulnerable sections during periods of inflation. But the benefits should be extended only to the vulnerable sections and not to the middle class consumers. In any case, at a time of financial crisis like the one facing Kerala, it is extremely difficult to justify giving additional food subsidy through the State exchequer.

In this chapter, we have tried to identify some important sources of implicit and explicit subsidies and transfer payment. Better targetting of these subsidies, as detailed in the chapter, would be possible only when hard political decisions are taken. In particular, levy of proper user charges on social and economic services provided by the State government, reduction in budgetary support to public enterprises by a combination of strategies through decision on rational pricing, improvement in productivity and closure of loss making units in the non-core sector must be undertaken. It must be understood that the failure to undertake these measures results in considerable net welfare losses.

APPENDIX TABLE

(Values in Rs Lakh unless mentioned otherwise)

	Cost of Public Services			Cost Recovery			Subsidy	Per Capita Subsidy (Rs.)	Subsidy as per cent of Total Subsidy	Recovery Rate (Per cent)
	Revenue Expenditure	Total Int + Depn Cost	Total Cost of Services	Revenue Receipts	Interest + Dividend receipts	Total Recovery				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1977-78										
I. General Services	7421	172	7593	-	-	-	-	-	-	-
II. Social Services										
1. Education	14756	492	15248	412	14	426	14822	61.8	53.7	2.79
a. Primary Education	8199	49	8248	4	0	4	8244	34.4	29.9	0.05
b. Secondary Education	3393	45	3438	67	14	81	3357	14.0	12.2	2.35
c. Higher Education	2856	396	3252	335	0	335	2918	12.2	10.6	10.29
d. Sports, Youth Services and Art and Culture	308	2	310	7	0	7	303	1.3	1.1	2.22
2. Medical and Public Health	3251	25	3276	82	0	82	3194	13.3	11.6	2.50
3. Water Supply & Sanitation	220	1020	1248	167	0	167	1081	4.5	3.9	13.36
4. Housing and Urban Devpt	318	213	531	20	39	60	471	2.0	1.7	11.29
5. Other Social Services	634	29	663	40	0	40	623	2.6	2.3	6.05
Total - Social Services	19187	1778	20965	722	53	775	20190	84.2	73.1	3.70
III. Economic Services										
1. Agriculture and Allied Activities	2691	197	2888	344	79	424	2464	10.3	8.9	14.67
2. Forestry and Wild Life	665	112	776	3178	0	3178	-2402	-10.0	-8.7	409.37
3. Major and Medium Irrigation	65	1686	1750	98	0	98	1653	6.9	6.0	5.50
4. Minor Irrigation	434	203	637	18	0	18	619	2.6	2.2	2.77
5. Command Area Development and Flood Control	294	483	777	3	0	3	773	3.2	2.8	0.44
6. Power and Energy	500	890	1390	0	805	805	585	2.4	2.1	57.89
7. Industry	626	478	1104	23	70	93	1011	4.2	3.7	8.40
8. Transport	1659	868	2528	129	6	135	2392	10.0	8.7	5.35
9. Other Economic Services	1000	42	1042	554	168	722	319	1.3	1.2	69.35
Total - Economic Services	7934	4958	12892	4348	1128	5476	7416	30.9	26.9	42.48
Total - Social + Economic Services	27120	6737	33857	5069	1182	6251	27606	115.2	100.0	18.46
IV. TRANSFERS	1837		1837							
TRANSFERS + GENERAL + SOCIAL + ECONOMIC SERVICES	36378	6909	43287							

Contd...

APPENDIX TABLE (Concl.)

(Values in Rs Lakh unless mentioned otherwise)

	Cost of Public Services			Cost Recovery			Subsidy	Per Capita Subsidy (Rs.)	Subsidy as per cent of Total Subsidy	Recovery Rate (Per cent)
	Revenue Expenditure	Total Int + Depn Cost	Total Cost of Services	Revenue Receipts	Interest + Dividend receipts	Total Recovery				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1989-90										
I. General Services	54954	1344	56299	-	-	-	-	-	-	-
II. Social Services										
1. Education	65953	1589	67543	1345	0	1345	66198	232.3	41.0	1.99
a. Primary Education	32354	354	32708	40	0	40	32667	114.6	20.2	0.12
b. Secondary Education	17421	418	17839	310	0	310	17529	61.5	10.9	1.74
c. Higher Education	15018	697	15716	936	0	936	14779	51.9	9.1	5.96
d. Sports, Youth Services and Art and Culture	1160	120	1281	58	0	58	1223	4.3	0.8	4.54
2. Medical and Public Health	15305	1902	17206	317	0	317	16889	59.3	10.5	1.84
3. Water Supply & Sanitation	5860	4654	10514	1	0	1	10513	36.9	6.5	0.01
4. Housing and Urban Devpt	1542	1143	2684	114	51	165	2519	8.8	1.6	6.16
5. Other Social Services	7968	266	8234	149	3	152	8082	28.4	5.0	1.85
Total - Social Services	96628	9553	106182	1926	54	1980	104210	365.7	54.5	1.87
III. Economic Services										
1. Agriculture and Allied Activities	13651	2600	16259	1205	100	1307	14954	52.5	9.3	8.02
2. Forestry and Wild Life	2533	477	3010	3216	0	3216	-206	-0.7	-0.1	106.86
3. Major and Medium Irrigation	967	12624	13590	164	0	164	13427	47.1	8.3	1.20
4. Minor Irrigation	2151	997	3148	79	0	79	3069	10.8	1.9	2.50
5. Command Area Development and Flood Control	1424	1972	3396	4	0	4	3392	11.9	2.1	0.11
6. Power and Energy	135	2681	2817	0	13	13	2804	9.8	1.7	0.46
7. Industry	3429	3894	7322	335	560	895	6427	22.6	4.0	12.22
8. Road and Transport	5533	6862	12395	621	10	631	11764	41.3	7.3	5.09
9. Other Economic Services	1876	456	2332	422	192	613	1718	6.0	1.1	26.31
Total - Economic Services	31698	32570	62269	6045	874	6919	57350	201.2	35.5	10.77
Total - Social + Economic Services	128327	42123	170450	7971	929	8899	161551	566.9	100.0	5.22
IV. TRANSFERS	15109		15109							
TRANSFERS + GENERAL + SOCIAL + ECONOMIC SERVICES	198390	43468	241858							

CHAPTER V

SUMMARY AND CONCLUSIONS

a. General Issues

The fiscal position in Kerala can be characterised as precarious. The resource constraint faced in the State is much more severe than that faced in other States. The continuous outpacing of the revenue receipts by the revenue expenditures by a substantial margin, compounded by the inherent bias towards larger revenue expenditures due to the emphasis placed on social services in the State has caused a substantial diversion of borrowed funds to meet current expenditures. The analysis of plan financing during the Seventh Plan in the State shows that the budgetary dissavings and loan repayments consumed the whole of grant portion of Central plan assistance and consequently, the entire plan expenditure had to be financed through borrowed resources. Given that almost 50 per cent of plan outlay is spent on the revenue account, only about one half of the borrowed funds was actually utilised for spending on capital account in the State.

While the growth of revenue expenditure has become self-propelling, expenditure on capital assets have not generated the required direct or indirect returns to meet debt servicing obligations. Spreading the resources thinly on a large number of projects has caused severe cost and time overruns in the completion of various projects. Inadequate provision for the maintenance of capital assets too has adversely affected the productivity of the existing capital stock. In fact, the growth of own revenues in Kerala was the lowest among the neighbouring States.

The State's own tax revenue, however, has grown at a reasonably high rate. Among the tax revenues, sales tax and State excise duty together contributed over two-thirds of the total tax revenue collected by the State government. The performance of the State in tax collection was certainly better than many other States as well as all-State average. However, if the State's performance in recent years is compared to its own performance in the early seventies, one can draw the conclusion that substantial improvement in the yields of both sales tax and State excise duty is possible. In addition, it is important to remove the anomalies and distortions in the structure of these taxes to make them facilitate growth as well as benefit from growth. This calls for a more detailed scrutiny of these taxes. However, due to constraints of time, we have not been able to go deep into the structure and operation of these taxes. Yet, an attempt has been made to suggest measures for improving the tax systems so as to endow them with the qualities of being growth oriented as well as growth responsive.

b. Sales Tax

In the absence of a proper information system, a detailed analysis of the structure and operation of sales tax is difficult. More importantly, efficient administration and effective enforcement of the tax cannot be undertaken unless a proper information system is built up on a priority basis. However, with the limited information at our disposal we have tried to draw some broad inferences.

Although in comparison with the other States, Kerala's performance in sales tax collections is seen in a favourable light, the comparison with the State's own past performance shows that there is still scope for improving the revenue productivity. This, however, has to be achieved through a better administration and enforcement of the tax, and simplification and rationalisation of the tax system.

The broad commoditywise break-up of sales tax revenue, (albeit not very reliable) indicates that three major commodity groups, namely petroleum products (27 per cent), alcoholic beverages (8.5 per cent) and rubber and its products (5 per cent) constitute the predominant proportion of sales tax revenue. It is also seen that agricultural and allied activities contribute about 32 per cent of SDP, yet the contribution of the agricultural products to sales tax is much lower at just about 18 per cent. The analysis also highlights the heavy reliance on taxation of inputs and capital goods which constitute almost one half of the total sales tax revenue. The areawise analysis of sales tax revenue shows the predominance of a few circles.

Like in other States, in Kerala, the sales tax is levied predominantly at the first-point of sale. This results in narrowing of the tax base, causes cascading of the tax and alters the relative prices of the commodities in unintended ways besides providing an easy avenue for evasion and avoidance of the tax. It is also seen on a closer scrutiny that the credited administrative advantages of the first-point tax are more apparent than real. For proper administration and enforcement of the tax, cross-checking the returns of the resellers is necessary. The attempt of tax reform must be to expand the tax base, reduce the tax rates and avoid taxation of inputs. To do this, it is necessary to transform the sales tax into a value added tax.

The severe inter-State tax competition and exportation of the tax burden to the residents of other States have, among other reasons, contributed to the evolution of irrational sales tax structures. While some degree of rationalisation is possible only after a general consensus by all the States is reached, there is no reason why the State of Kerala cannot, on its own, move towards a growth oriented and growth responsive system by giving setoff on the tax on inputs and moving towards a value added type of taxation, at least selectively. This, by itself, can be an important tax incentive for the producers and in the medium and long term context, might attract substantial investment into the State. Therefore, we have suggested the adoption of a multi-point sales tax with setoff on the tax paid in respect of selected manufactured goods. In this system,

however, a registered dealer (importer, manufacturer and reseller) may be allowed to claim setoff on the local sales tax paid (and not the Central sales tax).

We have not suggested any fundamental changes in the rate structure except as a measure of some simplification and rationalisation. We have suggested the reduction in rate differential from the present 15 rates to 9 rates and consolidation of the items under certain rate categories. Eventually, it is important that the State should move towards an extremely simplified tax system with two or three rates; but for this to come about, some degree of consensus with the neighbouring States would have to be achieved. More drastic changes in the rate structure cannot be recommended due to our inability to assess revenue implications on account of an unsatisfactory information system.

We have also made some minor recommendations for the extension of the scope of exempted goods, particularly to foodgrains and beaten rice. It does not really seem rational to tax the foodgrains on the one hand and provide food subsidy on the other.

The policy of promoting sales tax incentives is guided more by faith and judgement than by hard evidence. In their eagerness to attract capital, all the States have been competing with one another to provide more and more incentives. Even so, the sales tax incentive policy in Kerala appears to be much more liberal than that prevailing in the neighbouring States, particularly in regard to the medium and large scale units. The incentive is comprehensive in that it applies to all industries. Although there is a ceiling on the subsidies (100 per cent of capital investment), this is quite liberal. Such a liberal policy may distort relative prices and also alter relative profitability between the old and new units and thereby cause very high mortality rates in industrial units. In our view, therefore, it is necessary to study the cost and efficacy of fiscal incentives given to industries through the sales tax concession and design a structure of incentives based thereon, instead of indulging in unhealthy competition.

One of the important issues in the sales tax administration is the accumulation of arrears of tax revenue. While some arrears may be unavoidable because of stays granted by the court and other authorities, there is no reason why the government itself should stay the collection of tax. The inadvisability of government granting stays on its own revenue was pointed out even earlier and we would like to reiterate the undesirability of continuing such a practice.

The recently adopted administrative measure of self- assessment of a large number of small dealers should help to ease the problem of mounting arrear assessments. It is a step in the right direction and given that quite a large proportion of the tax revenue accrues from a small number of large dealers, it would be advisable to concentrate the limited administrative skills available with the department to make a proper assessment of these dealers in time.

We would like to emphasise once again that a proper information system is necessary for both evolving a rational tax system and its effective administration and enforcement. Unless an attempt is made to computerise the sales tax returns and cross-check the returns even on a selective basis, it would be extremely difficult to check the evasion of the tax. The information thus generated could provide useful inputs into evolving a rational structure of the tax. The simplification and rationalisation of the tax can be done only when the revenue implications of the rate changes are properly estimated. Computerisation of the sales tax returns and generating proper information system, therefore, should receive the utmost priority.

c. Excise Duty

The excise duty on alcoholic beverages has a complicated structure and the levy and collection of the tax must recognise the inherent conflicts between the objectives of revenue and regulation of quality and quantity of liquor consumption. Any suggestions for reform, therefore, must be made after a detailed understanding of the structure and operation of excise duty, the organisation of the liquor trade and consumption habits of the people. Unfortunately, both for reasons of time and lack of adequate expertise on the subject, we have not been able to go deep into the subject. However, after identifying certain obvious problems pertaining to the levy, we have made some suggestions.

In the case of foreign liquor and beer, the revenue accrued mainly from license fees, import/export fees, gallonage fees on rectified spirit, vendors' fee and excise duty leviable besides the shop rentals determined through the auctions. It may also be noted that the beverages corporation has been given a monopoly status for channelising foreign liquor from the manufacturers to wholesalers and retailers. The objective of having such a monopoly agency, however, is unclear. For, regulation of liquor price cannot be considered a high priority area for the government particularly as the consumers of foreign liquor are not likely to switch over to illicit liquor. On the other hand, if making profits is the objective, the corporation has failed in achieving it. Considering these, we do not find any rationale for the continuation of the corporation. The government should leave the trading of foreign liquor and beer to the private sector and amend the Abkari policy accordingly.

Another recommendation we have made in this report pertains to the need for promoting the consumption of beer in the place of hard liquor. We have suggested a more liberal licensing policy for opening beer bars and keeping the excise duties on beer lower than on hard liquor. We have also suggested the need to keep the current vending fees for beer lower than that for foreign liquor (IMFL).

Another recommendation relating to the sale of foreign liquor is the need to enhance the export duty to discourage exports out of the State. In view of the fact that

the import of IMFL into the State is substantial and really there is no need for any exports.

We have not made any specific recommendations regarding excise duty structure on toddy.

Excise duty on country liquor is the most crucial element of the excise policy, for, the consumption of country liquor forms a large proportion of the total liquor consumption. Further, as the consumers mainly belong to the low income strata, increase in the price could result in illicit consumption and could, in turn, affect the health of the people adversely.

Widespread evasion of the tax on arrack through unregulated imports and illicit distillation has been very well recognised in the Interim Report of the Resource Commission. The Commission has estimated that the arrack actually sold by the contractors can be as much as five to 20 times the quantities supplied by the distilleries. This implies that virtually there is no regulation or control on the quantity or quality of liquor sold and the pilferage of revenue too has been significant. It is, therefore, extremely important that the government should strengthen the regulatory setup to ensure that the quality of the product sold is acceptable. However, the question of monitoring the sale of liquor and collection of revenue is far too complicated and given our lack of expertise in the area, we have refrained from making any specific suggestion. The pilferage of revenue by and large will have to be checked through specific administrative measures and proper enforcement of the Abkari policy.

d. Non-tax Revenues and Implicit Subsidies

The inability of the State in effecting adequate cost recoveries has resulted in poor non-tax revenue productivity in the State. Consequently, the virtual stagnancy of non-tax revenue has resulted in its declining share in total revenue of the State. What is more, there has been substantial year to year fluctuations in the non-tax revenues.

Uneconomic pricing of social and economic services provided by the government through public agencies is a major reason for the low growth of non-tax revenue. As a result, the implicit budgetary subsidies have not only been very high but have been increasing at an alarming rate over the years. The total volume of implicit budgetary subsidy in the State in 1989-90 is estimated at over Rs 1615 crore in addition to the direct transfer payment of Rs 150 crore. Further, both the subsidies and transfers have been increasing rapidly. The subsidies have been increasing at 16 per cent per annum, and the transfer payments have been increasing at over 19 per cent per year. Cost recoveries, on the contrary, have been increasing at only three per cent per annum and the recovery rate has shown a significant decline from 18.5 per cent in 1977-78 to just over five per cent in 1989-90.

The sizeable volume of subsidy by itself does not mean that these subsidies are undesirable. What is important is to examine whether these subsidies are given as a deliberate policy measure and whether these are targetted properly to benefit only the intended groups. Our analysis shows that in a number of areas, immediate measures are needed to eliminate the subsidies and target them properly so that the intended objectives of allocative efficiency and equity are properly served. In the case of social services, it is important to reduce the subsidies on higher education and on certain types of health care facilities while continuing to provide the poorer sections of the community access to better quality of services through targetted transfers like scholarships.

Subsidy on social services constitutes about two-thirds of the total subsidies in the State. Most social services are provided virtually free and within the social services, about two-thirds of subsidies are attributable to the education sector alone. Within the education sector, subsidy on account of post-secondary education is over 50 per cent and higher education subsidy constituted 25 per cent of the total education subsidy.

About 35 per cent of the total subsidies accrued in the provision of economic services and the subsidy on these has been growing at almost 19 per cent per year. The recovery rate in respect of economic services has shown a sharp decline from 42.5 per cent in 1977-78 to 11 per cent in 1989-90. A major component of subsidy in economic services is in the irrigation sector, and the cost recovery in this sector is just about 1.4 per cent. Subsidy of such a magnitude tends to distort resource use besides accentuating inequities.

Quite a large proportion of the subsidy accrues on account of budgetary support to public enterprises. In the aggregate, the total investment of over Rs 2900 crore in the State resulted in a net loss of Rs 76 crore, or the rate of return in the State public enterprises was (-)2 per cent. It is seen that the poor financial performance is not confined to the core sector alone. Further, compensation to employees had no relationship with either productivity or the financial fortunes of the company; even when the entire capital base was wiped out by the accumulated losses, employees were given bonuses.

From our analysis it is very clear that a number of loss making public enterprises should be phased out. This is particularly important as the welfare costs of hidden subsidies arising from the poor performance of public sector units is extremely high as they prevent increased employment generation of unorganised labour as well as improvement in overall productivity in the economy. Over a period of time, it would be desirable to privatise even those units which are not currently making losses as the government has no particular advantage in running commercial enterprises. Instead, the

government should use its limited skills to provide proper regulatory framework, peace and stability and social and economic infrastructure.

Two of the major public enterprises which have been making substantial losses are the Kerala State Electricity Board and Kerala State Road Transport Corporation. In the case of the former, besides improving productivity, more rational pricing of electricity to the farmers is an important imperative to improve the finances. In the case of the latter, it would now be advisable for the State government to gradually privatise the road transport sector.

As mentioned earlier, subsidies flowing through departmental and non-departmental enterprises amounted to Rs 575 crore or over 35 per cent of the total subsidy in the State and therefore quite a large proportion of the saving could come by having a rational policy towards public enterprises in terms of both pricing and privatisation.

In addition to the above, a major form of implicit subsidy is the food subsidy on account of the rice distributed through the public distribution system. We are in complete agreement with the recommendation contained in the interim report of the Resource Commission that these subsidies must be removed. We are aware that the Government of Kerala has taken some measures to reduce the volume of subsidy on this account and is attempting to target it to vulnerable sections. We would like to suggest that in the course of time, this State subsidy should be minimised or even phased out altogether depending on the extent of Central subsidy.

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