# PART II

# CASE STUDIES OF INDIVIDUAL STATES

*Chapter 6*

# State Finances in Tamil Nadu, 1960-90

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## INTRODUCTION AND OVERVIEW

This chapter reviews state finances in Tamil Nadu during 1960-90, with particular reference to developments in the 1980s. In surveying the budgetary operations of the state government, the chapter looks at levels, structure, trends, issues, and interstate comparisons. It also examines the financial performance of the State Electricity Board and of state public enterprises. The primary data set relied upon is the annual issues of the Economic Classification of the Tamil Nadu Budget, available since 1960, supplemented with more disaggregated data from state budget documents. Annual RBI surveys of state finances and reports of Finance Commissions have been used for interstate comparisons. The Economic Classification and state budget time-series provide actuals for earlier years and Revised Estimates for 1989-90. In the RBI surveys, Revised Estimates for 1988-89 and Budget Estimates for 1989-90 have been used, since actuals are available only for earlier years.

After looking at revenue receipts, this chapter moves on to discuss expenditures and thereafter to examine the related issues of unrecovered costs and returns from public sector enterprises. The concluding section on debt and financing of capital formation completes the financial circuit. In the rest of this introductory section we shall bring out, in very broad brush, the main conclusions and the policy implications that follow.

Tables 6.1 and 6.2 present data on aggregate receipts and outlays in the budgetary operations of the Tamil Nadu Government for 1960-90, broken up in decadal intervals. Receipts and outlays have grown more than 13-fold in current prices between 1960-70 and 1980-90. As a share of net state domestic product (NSDP) at current prices, the increase has been from 13.5 percent in 1960-70 to 19.9 percent in 1980-85. Budgetary operations have reached a significant level in relation to NSDP in terms of their draft on, and their contribution to, the welfare and economy of the state. It is against this background that the sources and uses of funds and the related functions that Tamil Nadu has assumed have to be examined.

The state has taken upon itself diverse, important, and growing functions. On the investment side, it is concerned with irrigation and power, roads and transportation, industrial promotion and urban development. Adequate resources for these purposes can be secured only if current outlays are contained, but the demands on the latter are also large and growing on account of needs related to basic administration, merit goods, social infrastructure, and social welfare. The states, unlike the center, have to operate within a "hard budget constraint" in that they cannot resort to deficit financing, and their access to borrowing is strictly regulated. Under these circumstances, economically appropriate, politically acceptable, and administratively feasible balances have to be continually sought -- between consumption and capital formation; between priorities and purposes related to each of these broad categories; and, in raising resources, between taxation and direct recoveries from users or beneficiaries.

Tamil Nadu has had an outstanding record in mobilizing tax revenue, with a current (1984-87) tax-to-NSDP ratio of over 12 percent, the highest among all the states in India. Constraints on future revenue growth are clearly emerging, however. In the case of sales taxes, which have been the mainstay, commodity-wise rates are already high and will not bear further increases of any revenue significance without exacerbating regressive, inflationary, cascading and trade diversionary effects. Measures such as additional sales tax and local surcharges also have reached a plateau. In the case of state excise taxes, Tamil Nadu has gone through several vicissitudes in its prohibition policy, which remains vulnerable to changing currents of politics and public opinion.[1] Improvements are possible through

1. Most recently, the Tamil Nadu Government has once again banned the consumption and sale of country spirits (arrack) with effect from July 16, 1991.

checking evasion of stamps and registration fees; in the urban land tax through updating the reference year for base land values; and in motor vehicles taxes and entertainment taxes, which are wholly or largely specific, through providing for periodic rate increases. But these are not large revenue yielders. As is the case generally all over India, the incidence of taxation on agricultural incomes is very low in Tamil Nadu. An increase to any reasonably appropriate level will have unacceptable political and other costs. There is scope for feasible increases in agricultural taxation, however, mainly through taxation of remunerative commercial crops, a measure that would be progressive and would to some extent compensate for highly subsidized ground water irrigation used mostly in their cultivation.

Along with other states, Tamil Nadu obviously could benefit from a larger quantum of central revenue transfers of different kinds. The proportion of vertical tax-sharing has more-or-less plateaued since 1984 in the awards of the Eighth and Ninth Finance Commissions. To some degree this is an adjustment to the quantum jump in the share of the states in Union excise duties from 20 to 40 percent under the award of the Seventh Finance Commission (1979-84). Future increases in central transfers are bound to be quite gradual, even negligible, because of the serious structural disequilibrium in the center's own revenue account. The same constraint will also affect aggregate central plan assistance to states.

Tamil Nadu also cannot hope to improve its position in the zero-sum game of horizontal sharing among states, given the redistributive criteria favoring low-income states which have been increasingly adopted in the last decade by Finance Commissions and in modifications of the Gadgil formula. As a lower middle-income state, Tamil Nadu, despite a creditable tax effort, does not generate an adequate volume of own revenues to make do with low levels of central support, unlike the high-income states. As a prudent state, it has not qualified itself as did West Bengal, a higher middle-income state, to gap grants under Article 275 or to special treatment in plan assistance; and Tamil Nadu is not low-income enough to be favored on grounds of equity.

Turning to nontax revenues, Tamil Nadu does not benefit from significant forest or mineral royalty revenues. Growth in forest receipts may actually decline over the long term because of the emphasis on social forestry as opposed to commercial plantations. Mineral royalties, presently confined to a modest amount from low-calorific Neyveli lignite, could, however, increase on the basis of oil finds in the Cauvery basin.

Much more important issues related to nontax revenues concern cost recovery for services provided by the state government and returns from state public enterprises, notably the Electricity Board. The overall extent of directly unrecovered costs (DUC) depends not only on the recovery ratio in individual sectors but, quite importantly, on the sectoral distribution of outlays. Moreover, the pressure on revenue needs for financing current and capital outlays and the constraints on raising tax revenues or gaining access to higher central transfers underline the need for maximum feasible revenue mobilization through cost recovery and higher returns from PSEs.

The review of expenditures in Tamil Nadu in the third section of this paper will show that about 75 percent of total outlays are for current consumption and that the share of outlays for capital formation has decreased over time, particularly since the 1970s, for a number of reasons. First, in recent years there has been a considerable enlargement and extension of schemes and projects which, wholly or mainly, involve current outlays. Second, there has been a large increase in the 1980s in direct subsidies and in unrequited transfers. Third, apart from the "padding" that is a feature of bureaucracies, the sectoral distribution of outlays has itself been staff-intensive; at the same time, unit costs of staff have accelerated in the 1980s, culminating in parity with central pay scales in 1989. Fourth, chronic pressures for increasing current outlays have not, in Tamil Nadu, faced a countervailing demand for capital investments. In irrigation, for example, the state has already utilized a large part of its surface irrigation potential. This is not to say that there are no public investment needs or opportunities in power, industry, urban development, roads or the modernization of surface irrigation systems. But such needs have not been given adequate attention either in planning or in resource allocation, and the apparent lack of ready investment opportunities has encouraged a shift of incremental resources from capital to current outlays.

In this context it becomes necessary to examine possibilities for greater cost recovery, entailing the containment and rolling-back of subsidies and improving returns of public sector enterprises (PSEs). The overall direct cost recovery rate in the state budget is only 12 percent. The scope for reducing the quantum of DUC for pure public goods (basic administrative services such as police and administration of justice), merit goods (such as education, health and water supply), social infrastructure (such as urban development and housing), and welfare-oriented or redistributive transfers (IRDP and employment schemes, welfare of SC/ST and backward classes, nutrition, social security and the food subsidy) would appear to be prima facie limited. Nevertheless, the thrust of policy could be three-fold: (1) contain the growth of these outlays which, incidentally, are also staff-intensive; (2) achieve higher cost-effectiveness and economy through better targeting and elimination of waste and leakages; and (3) attempt to increase recovery wherever appropriate, for example in secondary and higher education and through timely and adequate adjustments in issue prices for PDS.

It is a different matter when we turn to DUC in sectors that provide infrastructure or incentives to remunerative economic activities (such as irrigation, power, agriculture and industry), with the benefits accruing to relatively affluent sections of the population. Tamil Nadu is plagued by a very large subsidy on electric pumpset irrigation. Subsidies in surface irrigation have grown as well, because, while there has been no improvement in the recovery rate, a number of hydrologically undependable projects have been implemented in recent years on account of local pressures. In these areas, a radical reorientation of policy is called for, even if, operationally, it were to take the form of a gradual phasing out of subsidies.

There are several reasons for the poor financial performance of PSEs. Policy-induced subsidies affecting the State Electricity Board, State Road Transport Corporation, and Civil Supplies Corporation -- exacerbated by continual increases in the centrally-administered prices of inputs like coal, diesel, and rice -- are by far the most important factor. In recent years a number of welcome steps have been taken to improve returns from PSEs, to close down some, and to restructure others. Since 1989 there has also been a shift in industrial policy from a philosophy of direct public sector presence and control in manufacturing enterprises to promotional measures, such as growth centers, subsidies and joint ventures subject to disinvestment. The decision of the DMK government in 1989 not to appoint non-officials and politicians to head any of the PSEs in Tamil Nadu is noteworthy in this context. Needless to say, there is still much need and scope to achieve fair returns from PSEs and to dispose of dead wood.

This chapter closes by examining the debt position of Tamil Nadu and the relative contributions of current savings and of capital receipts to capital formation. Although the contribution of current receipts to capital formation declined in the late 1980s, it is still positive; moreover, the situation could improve, as the share of salary costs can be expected to plateau out (having crossed the Pay Commission hump in 1989-90), and if reasonable measures are taken to contain current outlays and to improve DUC on all fronts. At the same time, Tamil

Nadu is "under-borrowed" in comparison with other states. These factors taken together suggest that, apart from increasing current surpluses, Tamil Nadu should also seek greater access to debt financing for high-priority, relatively high-return capital investments, through institutional lending, private capital, provident funds, and small savings.

## REVENUE RECEIPTS

Receipts on revenue account (or "revenue receipts") consist of Tamil Nadu's own tax and nontax revenues and central transfers to the revenue account (or "central revenue transfers"), the latter comprising shares in the shareable taxes and central grants for plan and nonplan purposes. Table 6.3 shows that the proportion of central revenue transfers in total revenue receipts has increased from 27 percent in 1965-70 to 29.2 percent in 1970-80 and 31.9 percent in 1980-90. The share of the state's own tax revenue has increased from 50.5 percent in 1965-70 to 58.4 percent in 1980-90, while correspondingly its own nontax revenues have declined quite steeply from 22.5 percent to 9.7 percent.

In 1985-90, compared to the all-states averages, Tamil Nadu relied more on its own tax and nontax revenues (67.8 percent versus 59.3 percent for all states) and less on central revenue transfers, mainly on account of smaller grants (32.2 percent in Tamil Nadu versus 40.7 percent for all states). The proportion of tax revenues in total own revenues was much higher in Tamil Nadu (59.5 percent versus 44.1 percent for all states), while the share of nontax revenues was much lower (8.3 percent versus 15.2 percent).

### Own Tax Revenues

Tamil Nadu has maintained an outstanding performance in terms of tax effort. Tax revenues as a proportion of NSDP increased steadily from 5.8 percent in 1960-70 to 8.4 percent in 1970-80 and 11.5 percent in 1980-85. Tamil Nadu was the most heavily taxed state in terms of the tax-NSDP ratio among major states in 1980-85, as well as in the most recent triennium of 1984-87 for which comparable data are available (see Table 6.4). The relevant ratios were 11.5 percent in 1980-85 and 12.1 percent in 1984-87 for Tamil Nadu, as compared with averages for all major states of 7.5 percent and 8.2 percent respectively.

The structure of Tamil Nadu's own tax revenues is shown in Table 6.5. In 1985-90 major tax sources were sales taxes (67.4 percent), state excise duties (11.3 percent), motor vehicle taxes (8.0 percent), stamp duties (6.6 percent) and entertainment tax (3.3 percent), which together accounted for 96.6 percent of total own tax revenues. Other indirect taxes (registration fees, electricity duty, betting tax, luxury tax, sugarcane cess) together contributed 2.0 percent. Direct taxes on income and property -- land revenue, agricultural income tax and urban land tax -- together accounted for only 1.4 percent. A comparison with the all-states tax structure in 1985-90 shows that taxes on commodities and services accounted for a little more in Tamil Nadu (90.8 percent) than in other states (89.8 percent); the share of taxes on property and transactions (8.6 percent) was slightly less than average (8.7 percent); and the share of taxes on income was noticeably lower (0.6 percent in Tamil Nadu versus the all-states average of 1.5 percent). The most important difference, however, is that in Tamil Nadu the weight of sales taxes (67.3 percent) was significantly higher than the average (58.3 percent).

Changes in the tax structure in 1960-90 reflect varying rates of growth in individual taxes, resulting from factors such as additional taxation, inflation, tax responsiveness to NSDP growth (or elasticity) and differences in the efficiency of tax collection. It can be seen from Table 6.5 that the relative importance of direct taxes has sharply declined from 12.6 percent in 1960-70 to 2.1 percent in 1980-90. Among indirect taxes, sales taxes have throughout remained the single most important source of revenue and have also registered the fastest rate of growth, their share in total tax revenues rising from 48 percent in 1960-70 to 66.1 percent in 1980-90. While changes in prohibition policy from time to time (which will be described later) have lent a great deal of volatility to state excise revenues, with a share of 11.3 percent they represented the second most important tax revenue source in 1985-90. The share of all other indirect taxes was only 19.9 percent during the same period.

We have estimated the contribution to the growth of tax revenues between 1980-81 and 1987-88 from (1) real NSDP growth, (2) additional tax measures, including the effect of price increases, and (3) inflation. Central sales taxes and state excise revenues have been excluded from the analysis, because the levy is by the central government in the case of the former and the latter has been subject to policy changes due to prohibition. NSDP deflators have been used to take inflation into account. The exercise indicates that additional taxation (along with inflation thereon) was responsible for 44.7 percent of the increase in tax revenues between 1980-81 and 1987-88; inflation contributed 28.3 percent; and the balance of 27 percent was due to elasticity. The elasticity ratio was 0.84 overall and 0.77 for sales taxes. With this background, we can turn to a discussion of the major taxes.[2]

*Direct agricultural taxation.* Direct taxes on agriculture consist of land revenue and the agricultural income tax. In Tamil Nadu the consolidated land revenue assessment on irrigated land classified as "wet" (*nanjai*) includes an element of water charges which, being a cost-recovery item for water use, must be deducted in computing the incidence of land revenue proper. Local cess at 45 paise per rupee of land revenue and local cess surcharge up to a ceiling of Rs. 2.50 per rupee of land revenue are collected along with land revenue on behalf of Panchayat Unions and Panchayats. Inasmuch as they are based on land revenue, the cess and the surcharge can be viewed as a component of agricultural taxation. The agricultural income tax (AIT), introduced in 1955, initially covered only plantation crops (coffee, tea, rubber, cardamon and cinchona) but was extended to all agricultural crops in 1958. In principle, the AIT is progressive and responsive to increases in output, but these features have been eroded over the years through exemptions, compounding facilities, liberalization in the definition of standard acres, and avoidance through partitions.

Direct taxes on agriculture have all along accounted for less than two percent of NSDP in agriculture and allied activities. They actually declined from 1.9 percent in the early 1960s to about one percent in the early 1980s, during a period in which agricultural incomes rose on account of new technology and the spread of irrigation, especially from pumpsets, with particular benefit to larger farmers and cultivators of remunerative cash crops. Furthermore, the agricultural sector has benefited from substantial subsidies related to irrigation and inputs and debt reduction in the 1980s.

Agricultural taxes are thus very low, not progressive in relation to the incomes of the assessees, and unresponsive to the growth of incomes in the sector. This is partly due to inherent features of land revenue, which is a per-acre levy that does not take into account either the extent of land ownership or the present value of output. Another reason is that state policy has over the years consistently diluted and de-emphasized the role of agricultural taxation. After initial settlements of land revenue in Tamil Nadu toward the end of the 19th century, there was only one revision in the 1930s, before

2. For basic information on individual taxes in Tamil Nadu see Guhan (1986).

resettlements were formally suspended in 1937. Assessments on "dry" lands were waived in 1967, and in 1971 the land revenue component of the consolidated wet assessment for holdings of less than five acres was waived. An attempt was made to increase agricultural taxation in 1976, when a special assessment was introduced on remunerative commercial crops (grapes, sugarcane, plantain, betelvine, turmeric, tobacco, chillies, irrigated cotton and irrigated groundnut). This measure was substantially eroded by concessions in 1977 and was completely repealed in 1981.

*Sales taxes.* Sales taxes have been by far the single most important and fastest growing source of revenue. Additional taxation measures relating to sales taxes have been the mainstay of Tamil Nadu's resource mobilization. In 1980-88 sales taxes contributed 85 percent of the yield from all additional tax measures (other than those relating to state excise revenues).

Sales taxes include the central sales tax (CST) and the general sales tax (GST), into which the motor spirits tax has been merged. Apart from the basic levy under GST, additional sales tax is levied on a turnover basis. The latter is meant to be a levy on trading margins and is not supposed to be passed on to consumers. Surcharges, applicable to notified local areas, are also levied as a percentage of the basic levy. In 1989-90 CST comprised about 17.3 percent of total sales tax revenues, while the various levies in the GST accounted for the balance.

Tamil Nadu had pioneered the introduction of the sales tax in 1939, starting as a low 0.5 percent levy on taxable turnover. The rates, coverage and features of the sales tax system were enhanced subsequently. From the late 1950s the trend has been away from multi-point levies and toward a single-point levy in the chain of sales. This culminated in 1990-91 with a complete shift to a single-point levy. The levy is on sales or purchases, generally at the point of first sale, with different rates on listed commodities and generally an eight percent levy on unlisted ones. Apart from exempted goods, and "declared goods", for which the maximum rate cannot exceed the CST rate (currently four percent), listed commodities are subject to levies at rates generally ranging from 2 to 18 percent, with some items (e.g. liquor and aviation fuel) attracting higher rates. In the aggregate, the ratio of revenue to taxable turnover works out to about seven percent.

Problematic aspects of sales taxes have been widely noted: regressiveness; inflationary effects; and the cascading effect related to central excises and also arising from taxation of both final goods and intermediates and inputs. Reliable studies are not available for exploring these issues at the state level, however.[3] All that is possible is to examine the yield-cum-rate structure for an indication of the incidence on different types of commodities. Fortunately, the Tamil Nadu sales tax administration compiles commodity-wise revenue statistics on a regular basis.

Table 6.6 shows the composition of GST revenue from major groups of commodities in 1988-89. Fuel items were the single most important source, accounting for 21.4 percent of total GST revenue. In descending order of importance thereafter come building materials (15.2), machinery, equipment and parts (12.9 percent), intermediates and chemicals (11.7 percent), general consumption goods (8.5 percent), agricultural and marine products (7.5 percent), durable consumer goods (7.4 percent), liquor (7.2 percent), food and food products (6.3 percent) and chemical fertilizers and pesticides (1.9 percent). The table also shows the share of revenue within each commodity group at different rates of levy, indicating the structure of incidence.

The fuel group comprises kerosene, diesel (highspeed and lowspeed), fuel gas, petrol, aviation fuel, furnace oil, crude oil and coal and coke. About 57 percent of the revenue comes from diesel (taxed at 14 percent), about 18 percent from kerosene (4 percent) and about 16 percent from petrol (18 percent). The levy being *ad valorem*, increases in the administered prices of petroleum products have been reflected in rising revenue receipts.

In the building and construction materials group, about 36 percent of revenue comes from cement (12 percent) and about 35 percent from iron and steel (4 percent). Other important commodities in this group, such as paints, plywoods, pipes and asbestos cement articles, bear a relatively high tax rate of nine percent.

Machinery, equipment (including transport equipment), parts (notably auto parts, for which Tamil Nadu has a significant manufacturing base), and accessories (notably tyres and tubes) carry a wide spectrum of rates clustered in the 8 to 12 percent range.

A large number of industrial raw materials, intermediates and chemicals are subject to tax at rates clustered around nine percent. Yarn, which bears the relatively low rate of three percent, accounts for 36 percent of total revenue in the group. The concentration of yield is at 9 per cent for the rest. Machinery, equipment (including

3. References to some of the available studies will be found in Guhan (1986).

transport equipment), parts (notably auto parts, for which Tamil Nadu has a significant manufacturing base), and accessories (notably tyres and tubes) carry a wide spectrum of rates with the yield clustered in the 8 to 12 per cent range.

More than 31 percent of the revenue from general consumption goods is contributed by drugs, which are taxed at a relatively high rate (considering their essentiality) of eight percent. Machine-made matches and paper carry a rate of four percent, hand-made matches being exempt. Other items of revenue significance are taxed mostly in the 6-9 percent range.

By far the most important revenue-yielder in the agricultural and marine products group is the 12 percent purchase tax on sugarcane, which accounts for about 55 percent of revenue in this category. The tax is on sugar mills (not on the cane grower) and is difficult to collect in bad years of the sugar cycle, especially because of continuous increases in notified or "announced" cane prices and variations in the quantum of levy sugar. Cotton, oilseeds, and groundnuts bear a preferential tax rate of three percent, while basic cereals such as paddy, wheat, and coarse grains are exempt. The rate for spices and condiments has been reduced from eight to six percent.

Durable consumer goods of various sorts are generally taxed in the higher brackets of 9-12 percent. Preferential rates have been extended to electronic items (two percent), as a promotional incentive and to safeguard against trade diversion, and to cycles (three percent), because they are a means of mass private transport and also an item in which Tamil Nadu has a strong manufacturing base.

Liquor (including country spirits), is taxable at 20 percent or above (50 percent for foreign liquor). Consistent with the relaxation of prohibition, sales taxes and state excise duties on liquor acquired importance under the DMK government. Subsequently moves have been made to return to tighter restrictions on liquor.

In the food and food products group, about 56 percent of the revenue comes from vegetable oils, oil cake and pulses (taxed at four percent). Higher rates apply to coffee and tea (six percent) and vanaspati and aerated drinks (eight percent). Finally, chemical fertilizers and pesticides carry a rate of 3.5 percent.

This review shows that tax rates in Tamil Nadu are already on the high side. They also appear to have achieved a certain degree of stability in the sense that changes in individual rates in recent years have been confined to marginal adjustments up or down, in response to changing rates in neighboring states. Any substantial removal of exemptions or significant increases in rates would accentuate regressiveness, inflation, trade diversion, and cascading effects. In fact, there is a case for reducing rates on agricultural products, food items, essential consumption goods (such as medicines) and industrial inputs and intermediates, but any comprehensive exercise along these lines would entail considerable revenue loss.

Additional tax effort with respect to the GST in recent years has for the most part involved increasing the rates of additional sales tax, expanding geographical coverage, and raising rates of surcharge. The additional sales tax, which is not permitted to be passed on directly to the consumer, goes up to two percent of taxable turnover when the latter exceeds Rs. 10 million. Since it affects manufacturing or trading profits, the levy faces considerable resistance, to the point of provoking capital flight from the state.

Tamil Nadu, unlike some other states (notably Maharashtra), does not have octroi. In principle, the surcharges on sales tax in notified local areas such as Municipalities and Corporations are a substitute for octroi and have definite administrative advantages, compared with octroi, in reducing evasion and harassment. The coverage of surcharges is, however, already extensive, with even non-municipal urban areas brought into the net. Rates are currently 20 percent in Madras City (including a special five percent surcharge for financing the Telugu Ganga Water Supply Project), 12 percent in the two other corporations (Madurai and Coimbatore) and in special grade municipalities, and eight percent elsewhere. No significant further increases would appear to be possible.

All in all, it is clear that additional resource mobilization from sales taxes, by far the most important component of tax effort in the 1980s, is likely to face severe constraints in the future. Given the less than unitary elasticity of sales taxes and their dominance in the tax structure, Tamil Nadu may find it difficult to maintain its high tax to NSDP ratio.

*Liquor revenue*. Tamil Nadu has had a checkered history of prohibition. Prohibition was introduced in one district (Salem) by the first Congress Ministry in 1937 and was withdrawn in 1945 with the dissolution of popular governments. The state went completely dry in 1948, after Independence, and remained so until 1971, when prohibition was suspended by the DMK government. The same government reintroduced prohibition in stages in 1973 and 1974. The AIADMK government relaxed prohibition in 1981 but banned the sale and consumption of country spirits (arrack) with effect from 1st January 1987. The DMK government took certain major steps in 1989 to mobilize additional revenue from this source and to plug leakages and loopholes in excise administration. The excise duty on IMFS (Indian-made foreign spirits such as whisky, brandy, gin and rum) was sharply raised from Rs. 25 to Rs. 55 per proof litre. Liquor shops which had been given licenses by the previous administration for a modest fee of Rs. 25,000 were let out on auction, fetching substantial rental revenue. This was followed in 1990 by lifting the ban on arrack consumption. At the same time, a government monopoly was introduced in the blending and wholesale distribution of arrack, a reform of significant importance in curbing illicit manufacture and sale.[4]

At present, toddy continues to be banned, and the main sources of revenue consist of excise duties and vend fees on IMFS and on arrack, as well as revenue from the auction-sale of IMFS and arrack shops. With the relaxation of prohibition, excise revenues steadily increased from Rs. 110 crores in 1981-82 to Rs. 287 crores in 1986-87, but they dropped to Rs. 120 crores in 1987-88 with the ban on arrack. The duty increases and other reforms of 1989 nearly doubled revenue from Rs. 148 crores in 1988-89 to Rs. 282 crores in 1989-90. A further increase of Rs. 150 crores was expected in 1990-91 because of the reintroduction of arrack.

Excise revenues, which are the most important source of tax revenue next to sales taxes, have been volatile due to policy changes in the past and will continue to be unstable in the future. Public opinion in Tamil Nadu has not reconciled itself either to complete prohibition or to complete freedom in the matter of alcohol consumption. This uncertainty generates scope for political corruption at both local and higher levels. The banning of arrack, for instance, gives a fillip to illicit manufacture and sale and to interstate smuggling, providing a lucrative source of income for local political workers; at the same time, it results in a higher consumption of low price range IMFS, thereby increasing the profits of private manufacturers and distributors who can be tapped for political contributions. The same result can also be achieved, as was the case in the pre-1989 period, by relatively low excise duties and the letting out of retail shops for moderate license fees instead of on an auction basis. The reforms of 1989 and 1990 represent a major effort to plug these loopholes and to win back substantial revenues to the exchequer. But further revenue increases can be expected only from increases in consumption, since the levies are specific on a volume basis. Per-capita liquor consumption in Tamil Nadu appears to be already high in relation to that in most other

4. These reforms are very much along the lines considered optimal in the study of alcohol taxation in Karnataka by Musgrave and Stern (1985).

states, however. The AIADMK Government which came into office in June 1991 banned the consumption and sale of arrack, which will result in an estimated loss of revenue of Rs. 400 crore on a full-year basis, aside from encouraging illicit activities.

*Motor Vehicles Tax (MVT).* The MVT is a specific tax on vehicles of all kinds, related to the type and/or laden weight of the vehicle and to the number of seats in the case of buses. Growth of receipts accordingly depends on increases in the number of vehicles.[5] The bulk of this levy falls on public transport, that is trucks and buses. With increases in the prices of diesel and petrol, profits in the public transport sector have been squeezed; increased taxation in the future would lead to rate increases likely to encounter resistance from traders and commuters. In as much as the levy is on vehicles, the MVT can be considered a recovery from road users rather than a tax; moreover, as we shall see later, this recovery already exceeds outlays on the roads sector. Thus both the scope and justification for sizable increases in the MVT are limited.

*Stamps and registration fees.* The bulk of revenue from stamps comes from non-judicial stamps, which along with registration fees are mainly tied to sales of immovable properties such as land and buildings. Determined as fixed percentages of the registered value, these levies are not progressive, but they are elastic with respect to increases in property values and growth of transactions. In Tamil Nadu, as elsewhere, there is considerable under-reporting of sale values and, consequently, substantial tax evasion. This has been sought to be tackled through the adoption of normative values and through coordination with valuations arrived at by the income tax authorities. These measures have resulted in good revenue growth during 1980-90. The current 13 percent stamp duty and one percent registration fee on property values are on the high side. Checking of evasion (if necessary through lowered rates) rather than rate increases would appear to be the feasible course for additional resource mobilization.

*Entertainment taxes.* Entertainment taxes are an important source of revenue in Tamil Nadu given the popularity of the cinema. Since 1989 the *ad valorem* levy on the price of cinema tickets and specific rates per show have been consolidated and modified into a "compounded" levy which is a percentage of the gross admission (i.e. seating) capacity in cinema theaters. This system is now applicable to

5. In 1989 there was an increase due to the levy of a "one-time" tax on new two-wheelers.

all areas other than Madras, Madurai, and Coimbatore, in which *ad valorem* taxes continue. The "compounding" system sacrifices elasticity arising from increases in ticket prices and from higher attendance in theaters but serves as a means of preventing evasion (as well as corruption and harassment). The implication, however, is that only in the three Corporations will this tax be elastic in the future.

### The State's Own Nontax Revenue

We have already noted that Tamil Nadu's own nontax revenues constituted barely eight percent of total revenue receipts in 1985-90 and that their share has steadily declined over the years. The composition of own nontax revenues in Tamil Nadu for 1980-85 and 1985-90 and a comparison with the all-states averages are shown in Table 6.7. In 1985-90 Tamil Nadu derived about 30 percent of its own nontax revenues from interest receipts, 58 percent from recoveries on various state-provided services, 11 percent from forests, and less than one percent from profits and dividends of public enterprises. For all states, interest receipts and recoveries had a somewhat lower share, while the contribution of forest revenue was higher.

Table 6.7 also shows that recoveries covered only three percent of outlays for social and community services in Tamil Nadu in 1985-90, compared with about four percent in 1980-85. Recoveries as a proportion of outlays on economic services (including forests) were 12.8 percent in 1980-85 and 10.5 percent in 1985-90. In both quinquennia, the cost recovery rate for economic services was distinctly higher in other states (29.5 percent in 1980-85 and 25.5 percent in 1985-90), apparently mostly due to larger forest receipts.

Own nontax revenues, being a function of cost recoveries, interest receipts, and returns from departmental and nondepartmental public enterprise, are appropriately discussed in the overall context of indirect subsidies and returns from investments later in this chapter.

### Central Revenue Transfers

As shown in Table 6.3, central transfers on the revenue account contributed about 32 percent of total revenue receipts in 1985-90, up from 27 percent in the late 1960s. Shared taxes constitute about two-thirds of all revenue transfers, with the balance being central grants for plan and nonplan purposes. Table 6.8 shows the detailed breakdown of central revenue transfers in 1980-85 and 1985-90.

Tamil Nadu shares in the two shareable taxes, income tax and union excise duties, according to the awards of successive Finance Commissions (Table 6.9). As far as income tax is concerned, there has been a marginal drop from 8.4 percent in the award period of the Second Finance Commission (1957-62) to 7.9 percent under the award of the Ninth Finance Commission (NFC, 1990-95). This is due to a lower weight for the collection factor in income tax sharing in recent awards, combined with a decline in Tamil Nadu's share of the all-India population. Nevertheless, the NFC share of 7.9 percent is higher than Tamil Nadu's 1971 population share of 7.5 percent and its 1981 population share of 7.1 percent. As a state with low population growth, Tamil Nadu has benefited from the use of 1971 census figures for tax-sharing under criteria adopted by Finance Commissions.

Sharing in basic union excise duties is, however, much more important than sharing of income taxes, since this accounts for more than 70 percent of central tax transfers and is also more buoyant than income taxes. The share of Tamil Nadu reached a peak of 7.6 percent in the shareable pool of union excise duties under the Seventh Finance Commission (1979-84). Subsequently the Eighth and Ninth Finance Commissions segmented the pool into two parts, one component available to all states and another confined to post-devolution deficit states. Since Tamil Nadu is not such a "deficit" state, it benefits only from the component available to all states. This was 40 percent in 1984-89 (Eighth Commission) and in 1989-90 (First award of the NFC) but has been reduced to 37.575 percent in 1990-95 (Final award of the NFC). Table 6.9 shows that while Tamil Nadu's share in the component available to all states since 1984 has remained at about the level reached under the Seventh Finance Commission, its share in the overall divisible pool (including the component available only to deficit states) has dropped to 6.4 percent in 1990-95. This is a significant reduction from 7.6 percent in 1979-84.

Another major respect in which Tamil Nadu has been adversely affected in the dispensation of the NFC relates to the NFC's allocation of Rs. 9001 crores by way of so-called "plan deficit grants" based on criteria which are open to serious question (see Guhan, 1990). Tamil Nadu draws only Rs. 43.79 crores, or 0.5 percent, from this pool, while had it been distributed on the basis of excise-sharing or under the Gadgil formula applicable to plan grants, Tamil Nadu's share would have been over six percent.

Central grants include (1) grants for state plan schemes; (2) plan grants for central and centrally sponsored schemes; and (3) nonplan grants, which comprise (a) statutory grants under Article 275 of the Constitution, (b) grants for the relief of natural calamities and (c) other nonplan grants. About 85 percent of total central grants to Tamil Nadu in the 1980s have been plan grants, and about 60 percent of the latter are accounted for by grants for central and centrally-sponsored plan schemes, the high proportion being mainly on account of increased allocations for centrally sponsored anti-poverty programs such as the IRDP, NREP, RLGEP and the Jawahar Rozgar Yojana.

Assistance from the center for state plan schemes has been determined since 1980 on the basis of the "modified Gadgil formula", with 30 percent of such assistance being in the form of grants. The amount available is arrived at after setting apart allocations required for externally aided projects and for area programs (such as hill and tribal areas). Within this amount, 30 percent was allocated in the Seventh Plan to "special category" states, with the balance being available for other states. The latter sum was distributed on the basis of population (60 percent), tax effort (10 percent), per-capita income (20 percent, restricted to states with per-capita income below the national average) and 10 percent for "special problems".

Per-capita central plan assistance to Tamil Nadu has been below the average for major states (see Guhan, 1986, Table 36). In the Seventh Plan, allocations under "normal Gadgil assistance" amounted to 21.7 percent of Tamil Nadu's state plan outlay, which was less than the average of 23.5 percent for all non-special category states. Under the tax effort criterion, Tamil Nadu is estimated to have received Rs. 41 per capita in the Seventh Plan, compared to the all-states average of Rs. 32, but its relative benefit would have been higher if, as is logical, tax effort had been weighted by population. Tamil Nadu has not benefited at all from the 20 percent earmarked under the per-capita income criterion, since its per-capita income in the reference period has been just above the national average. It has received some compensation on this score, however, for "special problems", under which it is estimated to have received Rs. 67 per capita, compared to the all-states average of Rs. 31. Outside the normal Gadgil allocations, Tamil Nadu is estimated to have received Rs. 72 per capita for externally-aided projects in the Seventh Plan, compared to the all states average of Rs. 87. Its share under area programs is not appreciable, since hill areas in the state are not extensive and the tribal population comprises only about one percent of total population. Under grants for centrally sponsored schemes, Tamil Nadu is estimated to have received only Rs. 160 per capita, significantly less than the all-states average of Rs. 236.[6]

Turning to nonplan grants, Tamil Nadu, not being a post-

6. These figures are based on data to be found in Planning Commission (1990).

devolution deficit state, has not qualified for "gap" grants. The grants it has received under Article 275 represent some upgradation grants, the grant in lieu of the repealed railway passenger fare tax, and margin money grants. Table 6.8 shows that grants for the relief of natural calamities and other nonplan purposes have not been significant.

In sum, Tamil Nadu has been relatively disadvantaged with respect to central revenue transfers on both plan and nonplan accounts because it is a middle-income, non-deficit state. It does not benefit from the earmarked excise pool for deficit states, from Article 275 grants, or from allocations under the per-capita income criterion in the Gadgil formula. Constraints on the quantum of vertical sharing between the center and the states in Finance Commission awards and the trend of more progressive horizontal sharing among states in both Finance Commission and plan transfers will continue to affect central support for a state like Tamil Nadu.

## EXPENDITURE

Expenditure patterns can be analyzed on the basis of different data formats. The Economic Classification gives final gross outlays on current expenditure, capital expenditure, and loans and advances, as well as net outlays (gross outlays net of loan repayments to the state government). Table 6.2 showed that final net outlays have steadily increased over time. Gross outlays as a proportion of NSDP (new series) went up from 13.5 percent in 1960-70 to 16.6 percent in 1970-80 and 19.9 percent in 1980-85.

### Outlays on Consumption and Capital Formation

Consumption outlays include current expenditures and loans for current consumption in the Economic Classification format, while spending on capital formation includes capital expenditures and loans for capital formation. Consumption outlays comprised about two-thirds of gross outlays in 1960-70, went up to about 70 percent in 1970-80, declined slightly in 1980-85, and rose to about three-fourths in 1985-90 (Table 6.10). Capital formation has never accounted for more than about a third of gross outlays, declining to about one-fourth in the late 1980s. As a share of NSDP, consumption outlays have gone up from around 11 percent in the 1970s to around 16.5 percent in the 1980s; capital formation went up from 3.7 percent of NSDP in 1970-75 to 7.5 percent in 1980-85 but then fell to 5.8 percent in 1985-90. These fluctuations were due in part to increased availability of receipts (for instance, from excise revenues in 1971-74 and again since 1982 and from Finance Commission awards, most notably in 1979-84), which encouraged larger consumption outlays (in the late 1980s) or enabled higher allocations to capital investment (in the 1970s and early 1980s). Another factor has been the availability and absorptive capacity of major projects, particularly in the power sector.

**Sectoral Composition of Outlays**

The Economic Classification time-series is also available in "functional" or major sectoral categories, from 1975 (Table 6.11). The sectoral pattern of outlays in 1975-90 has been more or less stable. General services claim about 20 percent of total outlays, social and community services about 40 percent, and economic services a little more than 35 percent. Education represents the single largest expenditure sector, with about 20 percent of total outlays and more than 25 percent of current outlays. Among social and community services, the share of health, water supply and sanitation has somewhat declined (from around 11 percent in 1975-85 to about eight percent in 1985-90), the share of housing and urban development has increased (from 2.5 percent in 1975-85 to 4.5 percent in 1985-90), and that of social welfare has risen (from around five percent in 1975-85 to eight percent in 1985-90).[7] Under economic services, the important sectors are currently agriculture and allied activities (including rural development and employment programs) and water and power development, each with shares of 10-15 percent, while industry and minerals and transport and communication each account for only about three percent.

**Budgetary Classification of Expenditure**

We now turn to the format used in the annual RBI surveys of state finances, based on standard budget classifications of expenditures in terms of development/nondevelopment, plan/nonplan and revenue/capital/loans. The RBI surveys permit comparison of the expenditure pattern in Tamil Nadu with aggregated data for all states (see Table 6.12). The main observations that can be made on the basis of the table include the following:

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7. Social welfare expenditure growth mainly represents increased allocations for nutrition and for the welfare of SC/ST and backward classes.

(1) The ratio of plan expenditure to total expenditure has remained distinctly lower in Tamil Nadu than the average for all states in 1980-85 and 1985-90 (about 28 percent versus an average of 36 percent for all states).
(2) Within plan outlays, the proportion of plan revenue expenditure (broadly corresponding to current plan outlays) is higher in Tamil Nadu (64 percent in 1980-85 and 73 percent in 1985-90) than the average for all states (43 percent and 50 percent respectively).
(3) Within revenue expenditure, the proportion of development spending (which predominantly represents outlays on maintenance or continuation of current outlays under the plan) is also higher in Tamil Nadu (74 percent in 1980-85 and 73 percent in 1985-90) compared to the all states average (71 percent and 69 percent respectively).
(4) While the proportion of revenue expenditure in Tamil Nadu is somewhat higher than the average for all states, the share of capital expenditure is much lower. This implies that the share of loans and advances in Tamil Nadu is much higher than average.
(5) Irrigation and roads in particular have lower shares in capital outlays in Tamil Nadu than in other states. These two sectors mainly account for the lower share of capital outlays as a whole. (Investment in power is discussed separately since it takes place through Electricity Boards and is not conducive to direct comparison in terms of the budgetary classification.)

**Plan Outlays**

The sectoral composition of plan outlays in Tamil Nadu is shown in Table 6.13. The main trends that emerge are:

(1) The share of agriculture and allied activities in the past generally fluctuated between 15 and 25 percent of total plan outlays but has declined to about 12 percent in the Seventh Plan.
(2) The share of social and community services, which was around 20 percent up to the end of the 1960s, increased to about 25 percent in the 1970s and more sharply to around 35 percent in the 1980s.
(3) Irrigation had a share as high as 25 percent in the First Plan, which declined to nine percent in 1956-66 and subsequently to around five percent.

(4) The power sector held on to a share of 35-40 percent until the 1980s. There was then a sharp decline to 26 percent in 1980-85 and a revival to 35 percent in 1985-90.
(5) Industry and minerals have generally claimed a 5-6 percent share. Transport and communications peaked in the Fifth and Sixth Plans at 11.3 percent and 7.5 percent respectively, compared to 3-5 percent in earlier plan periods, but the share declined again to five percent in the Seventh Plan.

Table 6.14 compares the sectoral composition of plan outlays in Tamil Nadu with the average for all states in the Sixth and Seventh plan periods. There are no major differences in sectoral shares for agriculture and allied sectors. The share of power in Tamil Nadu improved over the all-states average in the Seventh plan, while that for transport and communications dipped lower. Most distinctively, for social and community services Tamil Nadu's proportion is about 15 percentage points higher and for irrigation it is about 15 percentage points lower than the all-states averages, indicating a drift in Tamil Nadu from capital investments on irrigation to current outlays on social and community services, when compared to all-states averages.

**General Characteristics**

Since the 1970s Tamil Nadu has opted for large current expenditures at the expense of capital outlays. The share of plan spending in total expenditure is low, and within the plan the proportion of revenue (or current) expenditure is high. The share of development expenditure in overall revenue expenditure also is high, however. These characteristics are interrelated and mutually reinforcing. Expenditures on continuation and maintenance of basic needs and welfare programs (education, health, welfare of SC/ST and backward classes, nutrition, etc.), initiated or enlarged in each successive plan period, become committed, nonplan, development-oriented revenue expenditures in subsequent plan periods, leaving fewer resources for incremental plan expenditures and thereby resulting in a lower proportion of plan to nonplan expenditure. Increasing current outlays within limited overall levels of plan spending have further constrained outlays for investment.

On the demand side, trends are related to the lack of ready investment potential in the irrigation sector. The ultimate irrigation potential in Tamil Nadu is itself very low, and the state has already utilized a very high proportion of its canal irrigation possibilities --

about 80 percent by the mid-1950s. This explains the sharp decline since then in outlays on irrigation. Apart from medium-sized irrigation projects of marginal viability, a few modernization projects in canal irrigation have been taken up in recent plan periods (e.g. the World Bank financed Periyar-Vaigai and National Water Management projects). But the major possibility in this category, irrigation modernization in the Cauvery delta, has been held up because of the water dispute with Karnataka. Nevertheless, investments could have been made to improve the efficiency of tank irrigation, which accounts for about 30 percent of total irrigation in Tamil Nadu and only recently has begun to receive the attention it deserves. The paucity of ready investment opportunities in irrigation could have permitted added investments in the power sector, but for several reasons this has not happened, with the consequence that Tamil Nadu has been subjected to severe power cuts in the last several years, with adverse effects on both industrial and agricultural production.[8] The rapid growth of groundwater irrigation in the private sector through electrical pumpsets and additional generating capacity from the lignite-based Neyveli plants and the nuclear plant at Kalpakkam, both in the central sector, have to some extent alleviated the situation with respect to irrigation and power. Pumpset irrigation, however, is highly subsidized, as will be seen later in the chapter, with considerable impact on the availability of investible resources for the State Electricity Board.

### Actual Versus Normative Levels of Expenditure

It is interesting to compare average per-capita expenditures in major sectors in Tamil Nadu with those in other states, based on the report of the Ninth Finance Commission (NFC), which provides information on actual per-capita expenditures in various sectors as well as corresponding "normative" levels. In the case of administrative and general services, normative levels have been estimated on the basis of the justifiable costs of providing average standards of such services already attained in the states. The data in the NFC report relate to 1986-87. Apart from methodological problems involved in the NFC's estimates, cost increases since 1986-87 render absolute figures for actual and normative expenditures out of date; nevertheless, some suggestive conclusions can be drawn (see Table 6.15). Per-capita

8. On irrigation and power development in Tamil Nadu, further information can be found in Chapters 6 and 8 of Madras Institute of Development Studies (1988).

spending on police in Tamil Nadu was below the average for major states, while that on general administrative services was only marginally higher. For both items, actual expenditures were less than normative levels. In primary and secondary education, medical, family welfare and public health services and social services, actual expenditures were less than normative levels, but in higher education and in agricultural services they were significantly above both normative levels and the averages for major states. In the aggregate, the NFC's trend estimates for nonplan revenue expenditures in Tamil Nadu for 1990-95 were slightly below (about 98 percent of) the normative estimates. These comparisons suggest that although the pattern of expenditure in Tamil Nadu is distinctly slanted toward current outlays, the unit costs of such outlays are not *prima facie* "unjustifiable" in terms of "normative" levels.

**Main Components of Revenue Expenditure**

The composition of current (or revenue) expenditures can be analyzed to identify possible sources of economy. In the 1990-91 Budget, salaries, wages, allowances and other establishment-related costs (such as travel, rent and motor vehicles) accounted for 38 percent of total revenue expenditure; current transfers in the form of grants-in-aid, subsidies, scholarships, assignments to local bodies and so on accounted for about 30 percent; and committed liabilities, such as interest payments and pensions and gratuities, comprised about 18 percent. Direct non-salary expenditures of the government, such as maintenance and repair of works, purchase of materials and supplies, diet and drug expenditures, equipment for schools and so on, accounted for about 15 percent. In other words, leaving out current transfers and committed liabilities, salaries and other establishment-related expenditures took up more than 72 percent of the remaining direct revenue expenditures of the state government.

Table 6.16, based on the Economic Classification of the budget, brings out quite forcefully the escalation in expenditures on compensation of employees (including pensions) since 1960-70 and especially in the 1980s. In relation to final (net) outlays, the share of such expenditures rose from 23 percent in the 1960s to about 28 percent in the 1970s and early 1980s and thereafter to 34 percent in 1985-90 and 38 percent in 1990-91. The share of employee compensation in total current expenditure rose from 33 percent in the 1960s to 41 percent in the 1970s, 68 percent in 1980-85, and 76 percent in 1985-90. With the implementation of the Fifth Pay Commission's recommendations in 1989, the ratio went up further to over 78 percent in 1990-91

(Budget Estimates). These figures are actually underestimates, since a substantial proportion of grants-in-aid to local bodies and to government-supported educational institutions also cover salary costs.

**Establishment Levels and Costs**

Salary expenditures being a function of staff strength and emolument levels, it is necessary to look at these two parameters separately. According to the Report of the Fifth Tamil Nadu Pay Commission (1989) there were 1,113,000 employees in the state government, local bodies and government-aided institutions on 31 March 1988. This included 282,000 people on consolidated pay (mainly those engaged for the noon-meals scheme) and about 18,000 college teachers on UGC scales. Table 6.17, based on NFC data, shows that as of the beginning of 1989 the number of government, local body and aided employees per 1000 population in Tamil Nadu (18.05) was 20 percent higher than the average for all major states (15.06). The much wider differential with respect to staff per 100,000 sq. km. of area -- 67.23 for Tamil Nadu versus 35.24 for all major states -- is partly to be expected given the higher density of population. Staff strength in Tamil Nadu appears to have grown at a faster pace than the average for all 14 major states (42.6 percent in 1972-82 for Tamil Nadu as opposed to 33.4 percent for all major states and 39.9 percent and 22.6 percent respectively in 1982-88).

In terms of emolument levels, Tamil Nadu traditionally tended to lag behind many of the major states, but the gap began to narrow in the 1980s. While there was an interval of 10 years between the First (1960) and Second Pay Commissions (1970) in Tamil Nadu, the Third (1978), Fourth (1985) and particularly the Fifth (1988) were constituted at shorter intervals in response to strong union demands and agitations of public employees, including teachers. The culmination of the process was the adoption in 1989 of central government pay rates and indices for Dearness Allowance revisions. Some of the other allowances, notably house rent allowance, are still below central levels, however. On the basis of figures available in the Budget documents, it can be estimated that the average cost per employee for salary and basic allowances has gone up four-fold in the 1980s, from about Rs. 5,000 in 1980-81 to nearly Rs. 20,000 in the Budget of 1990-91.

The distribution of staff among broad sectors of services provided by the state government, local bodies, and aided institutions is shown in Table 6.18. About 25 percent are in general services (mainly police and revenue administration), 35 percent in education (mainly school teachers) and 25 percent in other social services, mainly health, social welfare and nutrition. This does not include over 200,000 employees on consolidated pay engaged in the noon meals scheme. Among economic services, agricultural and allied activities is the largest, with a weight of about 10 percent.

The employment profile is tilted toward the lower rungs: about 80 percent of employees are on scales where basic pay is less than Rs. 1,600 per month and about 33 percent below Rs. 900. The latter are generally unskilled employees, the most numerous single category of whom are office assistants ("peons" in colonial and common terminology). The Fifth Pay Commission drew attention to the fact that the number of office assistants increased from about 20,000 in 1970 to 30,000 in 1978 and 48,000 in 1988.

In sum, the level of government staffing in Tamil Nadu is noticeably on the high side. Its rate of growth has been higher than average among major states in the 1970s and particularly in the 1980s. In part this is related to the sectoral shift of expenditures toward social services (e.g. nutrition), which are employment-intensive. Despite high levels of staffing, the wage bill was contained to some extent until the late 1980s, because emoluments in Tamil Nadu were held below the all-states average. With the extension of central government pay scales and Dearness Allowance since 1989, salary costs have increased sharply. At the beginning of the 1990s, the cost per government employee was about four times what it had been a decade ago. Increased expenditures on staff are crowding out both capital outlays and high priority non-salary current outlays such as maintenance of assets, food and drugs, equipment, materials for schools, etc. In this context, it will be important to pursue all avenues to contain and reduce the growth in staff strength through higher productivity, reducing surplus employees to meet incremental staffing requirements, discouraging staff-intensive and staff-perpetuating programs, and the like.

Apart from salaries, grants to aided institutions (largely for educational expenditures), tax assignments to local bodies, and subsidies of various kinds account for the bulk of revenue expenditures other than committed liabilities such as interest payments and retirement benefits. Assignment of taxes and grants (both statutory and specific grants for entrusted functions) to local bodies currently accounts for two percent of revenue expenditures. Of total assignments and grants, the local share of entertainment tax accounted for 38 percent, the local cess matching grant to Panchayat Unions for 27 percent, and other important statutory grants (like the house tax matching grant, local irrigation grant and local roads grant) for 12 percent. Specific grants, mostly for education, health, family welfare and water supply, make up the balance of 23 percent. The low level of fiscal support to local bodies is related to the fact that in Tamil Nadu, teachers in local body schools have been "provincialized", with their salaries being directly met by the state government. Besides, basic needs and rural infrastructure programs are being mostly implemented through state government departments rather than through local bodies and hence are directly funded from the state exchequer.

## UNRECOVERED COSTS AND SUBSIDIES

In the earlier discussion of Tamil Nadu's nontax revenues, attention was drawn to the fact their share in the state's total revenue receipts has significantly declined over the years (from 22.5 percent in 1965-70 to 9.7 percent in 1980-90). The ratio of nontax revenues to total own revenue receipts is low (13 percent in 1985-90), and as noted earlier, the ratio of nontax recoveries to outlays in 1985-90 was only 3 percent for social and community services and no more than 10.5 percent for economic services.

Costs of services provided by the state can be recovered either directly from beneficiaries and users or via taxation. The choice between these alternatives is based on ideology, political aspects, feasibility and optimality considerations, and other rational or irrational factors. The pattern of expenditure and the recovery rate for each item of expenditure together determine the share of uncovered costs in total outlays. Given the constraints on additional taxation, especially in an already highly taxed state like Tamil Nadu, it is clearly necessary to contain the growth of unrecovered costs and to improve recoveries from services provided by the state government.

This study attempts to quantify as best as possible the directly unrecovered costs (DUC) in the revenue account and to investigate certain key relationships that can be derived from such quantification. The approach in principle is the same as that in Govinda Rao and Mundle (1991), but the methodology followed here is in some respects more refined. Having ascertained the magnitude and distribution of DUC, we proceed to comment on the issues that they raise. The section that follows complements the picture by specifically taking into account returns from public enterprises, actual and normative, so as to ascertain the DUC involved in their operations.

**Detailed Analysis of DUC**

Table 6.19 presents sector-wise data on the revenue account for total state expenditures, expenditures net of central grants, internal recoveries, DUC and cost recovery for 1988-89. The methodology based on which these computations were made is explained in Annex 6.1. The various expenditure sectors have been categorized for analytical purposes under seven groups. Group A includes basic administrative services relating to law and order (police, jails and administration of justice), enforcement of property relations (registration, survey and settlements) and relief of natural calamities. These functions relate broadly to what would be expected of the "minimal" (or "night watchman") state. Group B (basic social services) includes education, medical, public health and family welfare services and water supply and sanitation. These can be broadly viewed as primary "merit goods". Group C (social infrastructure) includes housing and urban development and rural development and employment. Group D (social welfare) includes a large component of pure transfers, the main component of which is for the welfare of SC, ST and Backward Classes, social security (e.g. old age pensions), child and school nutrition and the subsidy involved in the Public Distribution System (PDS). Group E (economic infrastructure) includes irrigation, power, roads and transport. Group F (production services) covers agriculture and allied sectors, forests and industry and minerals. Group G includes a number of miscellaneous expenditure items. The proportion of DUC in total expenditures is a function of the pattern of expenditure and the recovery rates for the items in each category (see Table 6.19).

In the aggregate, recoveries come to about 12 percent of net state expenditure, or in other words, DUC comprises 88 percent of total net expenditures. The cost recovery rate varies from 2/3 percent in Group B (basic social services) to 32.2 percent in Group F (production services). We now discuss each group and major items therein.

*Group A (basic administrative services)*. Recoveries in this category are in the form of fines (under police), jail manufactures, judicial stamps (under administration of justice) and registration fees. The costs of the registration department are more than covered by fees. Recovery is also quite high (62.7 percent) in the judiciary. The overall group recovery ratio is only 17.9 percent, however, due not surprisingly to very low cost recovery by police and zero recoveries for survey and settlement and for relief.

*Group B (basic social services)*. Items in this category account for 37 percent of total net state expenditure but contribute only about seven percent to total recoveries. The cost recovery rate for the group as a whole is as low as 2.3 percent. It is 1.5 percent in education, which claims over 26 percent of aggregate net state expenditure while contributing only about three percent to total recoveries.

The structure of expenditures, recoveries and DUC in the three levels of general education (elementary, secondary and higher-level) is shown in Table 6.20. The recovery rate is marginal (0.3 percent) in elementary education and only around 2.4 percent in secondary and higher education. In Tamil Nadu schooling is free, in terms of basic tuition fees, up to the higher secondary (12th standard) level.[9] Table 6.20 also provides information on unrecovered costs per student per annum at each tier in 1988-89, based on enrollment figures. This figure was Rs. 449 per student at the elementary education stage; Rs. 800 at the secondary level; and Rs. 3,764 for university and higher education, that is, more than eight times the DUC per student at the primary level. As noted earlier, per-capita secondary education expenditures are below the normative level in Tamil Nadu. With increasing future enrollment at the secondary level (100 percent enrollment has been achieved at the elementary state) and rising per-capita costs, unrecovered costs will burgeon at this level if recovery levels and not improved. As far as higher education is concerned, actual per-capita expenditures are already on the high side relative to normative levels; hence there is need and scope to increase cost recovery.

*Group C (social infrastructure)*. Outlays on housing and urban development mainly reflect support to local bodies and the Slum Clearance Board for slum improvement and clearance and for urban infrastructure development, transfers to the urban development fund and subsidies for rural housing. The main outlays under rural development and rural employment are for the IRDP (Rs. 24 crores) and for the NREP/RLEGP (Rs. 125 crores). These amount to pure transfers, with no recoveries intended.

*Group D (social welfare)*. Outlays on the welfare of SC, ST and Backward classes do not involve any cost recovery. Under social security and nutrition the major items are old-age pensions (Rs. 19 crores) and the noon-meals scheme (Rs. 162 crores). The latter provides a meal every day of the year for more than 8.5 million pre-school and school children between the ages of 2 and 15. This

9. Higher education is also free, based on means criteria, for girl students and for students belonging to SC, ST, most backward classes and denotified communities.

single program accounts for about 35 percent all social welfare expenditures and six percent of total DUC. The food subsidy, apart from the noon-meals scheme, is related to the PDS. It varies from year to year depending on the procurement cost of paddy (the main foodgrain consumed), the issue price fixed by the central government for allotments from the central pool, the cost of open market purchases (if any), storage and distribution costs and the issue price for consumers under the PDS. These parameters also vary according to the variety of rice (ordinary, fine and superfine). The food subsidy can fluctuate widely from year to year depending on the amounts purchased and sold, the extent to which the issue price to consumers is adjusted to reflect costs, and the outlay on the noon-meals scheme, for which foodgrains are the main cost item. In 1990-91 (Budget Estimates), the outlay on the noon-meals scheme was Rs. 195 crores, and the food subsidy had risen to about Rs. 250 crores. Since 1989-90, several new social security schemes also have been initiated, along with the liberalization of old-age and other pensions such as pensions for widows and the physically handicapped (see Guhan, 1991).

*Group E (economic infrastructure).* Irrigation, power, roads and transport are included in this group. In the roads and transport sector, full recovery has been shown in Table 6.19 because the Motor Vehicles Tax is a levy on road-users in its incidence and hence can appropriately be considered as a recovery from them. The overall cost recovery rate in this group reaches 18 percent only because of full recovery under roads. In irrigation and power taken together the cost recovery rate is only 0.6 percent.

Public irrigation works in Tamil Nadu are classified as (1) "commercial" works, mainly canal irrigation, in which recoveries are expected to cover operation and maintenance (O & M) expenses and interest and (2) "non-commercial" works, mainly tank and minor works, where only O & M expenses are expected to be recovered (since they are treated as "protective" works). Proforma accounts are maintained for both types of works. Using the data in the proforma accounts, the expenses (actual on O & M and imputed on interest and depreciation), recoveries, and DUC on commercial and non-commercial works can be calculated and related to the net acreage irrigated under each category in 1980-85 and in 1985-90 (see Table 6.21). DUC in commercial works nearly doubled from Rs. 358 to Rs. 700 per hectare between the two quinquennia. This is not so much because of the increase in O & M expenses but because of substantial increases in interest and depreciation on account of additions to capital outlays for high-cost, marginal projects with dubious hydrological viability, that have not resulted in commensurate increases in receipts or in the area covered. In the case of non-commercial works, DUC per hectare has increased from Rs. 180 in 1980-85 to Rs. 225 in 1985-90. The subsidies in surface irrigation are patently regressive, since beneficiaries from relatively more assured canal irrigation reap unit subsidies more than three times as high as beneficiaries from largely rain-fed tank sources.

DUC in power consists of a subsidy of Rs. 293 crores in 1988-89 to the Tamil Nadu Electricity Board (TNEB) to meet the losses incurred on supply of power to farmers using electric pumpsets and the interest due, but not paid, on loans from the state government (about Rs. 150 crores). The large loss on agricultural power consumption in TNEB's finances (which are reviewed in detail in the following section) is due to the relatively high share of the agricultural load in overall electricity consumption in Tamil Nadu (about 27 percent) and the heavy subsidy in the per unit agricultural tariff. Tamil Nadu is a leading state in India in agricultural pumpsets, with more than 1.2 million pumpsets in operation in 1988-89. TNEB has estimated the cost of supplying one unit of electricity at the pumpset to be 102.17 paise, while the average sales realization is only 11.2 paise, resulting in DUC of 90.97 paise per unit. Given consumption of 3,524 million units in 1988-89, DUC for TNEB was Rs. 321 crores on account of agricultural consumption, or Rs. 2,650 for an average pumpset (see TNEB, 1990). At 1988-89 tariff levels, the cost of operating an electric pumpset was only about one-fifth of that of using a diesel pump. Besides, pumpset owners often "lease" out water, for which they usually levy a charge equal to one-third of gross output. Translated into per unit realization, this can be estimated at about 66 paise, or six times the tariff paid to TNEB. Another indicator of the value of pumpset irrigation is the waiting list of 400,000 applicants (Sankar and Hema, 1990).

The regressive nature of the agricultural power subsidy also needs to be highlighted. On average, a pumpset in Tamil Nadu is estimated to irrigate 0.62 hectare, which means that the irrigation subsidy via the agricultural power tariff was Rs. 4,274 per hectare for ground-water irrigation using pumpsets, compared with Rs. 700 for users of canal and Rs. 225 for users of tank irrigation (in 1988-89). This is particularly anomalous since, according to TNEB statistics, about 91 percent of pumpset owners are "large farmers" (above 2.5 irrigated acres) who extensively deploy well irrigation to grow remunerative cash corps. Moreover, cheap electricity has a high social cost: it provides a disincentive to economy in the use of water and has led to overexploitation of groundwater resources in many parts of Tamil Nadu.

Successive tariff revisions have tended to increase rather than reduce the power subsidy. The agricultural power tariff was reduced from 16 paise per unit to 13.84 paise for small farmers and 15.84 paise for large farmers in 1979 and to 12 paise and 15 paise respectively in 1982. In 1984 small farmers came to be supplied power entirely free of cost, while the tariff was fixed at Rs. 75 per horsepower for large farmers (which worked out to an average yield of 11.49 paise per unit of electricity). The levy per horsepower was reduced to Rs. 50 in 1989 and was altogether removed a year later, with the result that all agricultural pumpset users in Tamil Nadu are now being provided with free electricity. The loss to TNEB on this account is on the order of Rs. 400 crores per annum. As we shall see later, the agricultural subsidy has a serious impact on the financial viability of TNEB.

*Group F (production services).* In agriculture and allied sectors (animal husbandry, fisheries, cooperation) DUC pertains to costs of various promotional schemes and includes some direct subsidies, the most important of which are input subsidies, grants to cooperative banks for the waiver of interest and/or loan dues (Rs. 30 crores in 1988-89) and other subsidies in the cooperative sector. Since forest resources more than meet outlays on forests, recovery is 100 percent under this item. In industry and minerals, which includes village and small industries and handlooms, DUC relates to outlays on several promotional schemes and certain direct subsidies such as handloom and khadi rebates (Rs. 44 crores in 1988-89) and capital subsidies for setting up industries in backward areas (Rs. 3 crores). Interest subsidies implicit in interest-free sales tax loans form another component.

## Direct Subsidies

The analysis of DUC presented above can be supplemented by figures on the sector-wise breakdown of "subsidies" in the Economic Classification of the state budget. The identification of subsidies in the Economic Classification is neither uniform nor comprehensive, however, especially since it does not fully take into account indirect subsidies implicit in under-recovery of costs. Table 6.22 shows that direct subsidies have risen from an annual average of Rs. 9.56 crores in 1973-80 to Rs. 165.43 crores in 1980-88, with wide year-to-year fluctuations. The breakdown in Table 6.23, showing direct subsidies in 1980-88 for major sectors, also is of interest. Food and nutrition, accounting for nearly 35 percent of total direct subsidies, comprise by far the largest category. The electric power subsidy through TNEB is a distant second at 16 percent of the total. Agriculture and related areas account for 14 percent of total direct subsidies, rural development for another nine percent.

### DUC by Broad Expenditure Purposes

The data on DUC in Table 6.19 have been recast in Table 6.24 to show the composition of total DUC as between what could be broadly considered as public goods (Group A), merit goods (Group B), mainly pure transfers (Group D and rural development and employment in Group C), economic and social infrastructure (Group E and housing and urban development from Group C), production services (Group F) and others (Group G). Public goods, merit goods and pure transfers together account for about 68 percent of DUC, of which 41 percent is accounted for by merit goods. It may not be feasible to significantly increase the cost recovery rate for these categories, although there is a strong case for doing so in university and higher education and, to some extent, in secondary education. Economic and social infrastructure and production services together account for about 30 percent of DUC. The scope for enhanced cost recovery is much greater in this category, particularly in irrigation. Over the longer run it is clear that the pattern of government expenditure -- the extent to which it continues to be oriented toward merit goods and welfare transfers -- will influence the quantum of aggregate DUC and overall cost recovery rate.

### DUC According to Broad Target Groups

The targeting of DUC is also of interest (see Table 6.25). About seven percent of total DUC is claimed by public goods of universal benefit (police, jails, administration of justice). As much as 54 percent is accounted for by expenditures on merit goods (education, health, water supply) and welfare (mostly nutrition and PDS), which are either not targeted at all (except to a small extent in social security expenditures) or do not differentiate between the poor and nonpoor within large beneficiary groups (education, medical care, child and school nutrition). If anything, the poor may benefit less in relative terms because of restricted access to these facilities (for instance higher education or non-school going children who do not benefit from noon meals). Thirteen percent of DUC is related to beneficiaries who are in some sense vulnerable or disadvantaged, such as the rural and urban poor, SC, ST and backward classes, and handloom and khadi weavers. About 26 percent of DUC is claimed by landowning agriculturists, namely DUC related to land administration, agricultural input subsidies, loan and interest write-offs and, most of all, the massive underrecovery of irrigation costs. Their share is twice that of DUC attributable to groups that can be considered economically or socially disadvantaged.

## PUBLIC ENTERPRISES

The financial performance of the Tamil Nadu Electricity Board (TNEB) is examined first, followed by a discussion of state public sector enterprises (PSEs) more generally. There are also statutory boards in Tamil Nadu engaged in pollution control, housing, water supply and drainage (in Madras city and outside), metropolitan development, khadi and village industries and slum clearance. These are not covered for lack of suitable data.

### The Tamil Nadu Electricity Board

Established in 1957 under the Electricity Supply Act (1948), TNEB took over the functions of the electricity department of the state government. At the end of 1988-89, TNEB's capital and current assets were of the order of Rs. 5,427 crores, of which gross capital assets (including work-in-progress and capital stores) amounted to Rs. 3,191 crores. Investments in TNEB have been largely financed by loans, ways and means advances, grants and subventions and subsidies from the government; TNEB has been the largest single recipient of government loans. The latter (including ways and means advances) totalled Rs. 1,975 crores at the end of 1988-89. Under the provisions of the Electricity Supply Act, government loans to TNEB (as distinct from ways and means advances) are "permanent", that is, the principal does not have to be repaid, even though interest is payable.

Table 6.26 reviews the financial performance of TNEB. In 1960-70 its operating surplus was adequate to meet all interest payments and depreciation provisions, with a surplus left over. In 1970-80 the operating surplus became insufficient to meet interest and depreciation, so there was a net deficit. The total subsidy extended by the state government during this decade was Rs. 181 crores. Moreover, at the end of 1979-80, accumulated interest arrears to the government amounted to about Rs. 50 crores. Since 1980-81 there has been a sharp deterioration in TNEB's finances. Gross income (excluding government subsidies) has not been adequate even to cover operating expenses. Government subsidies in 1980-85 amounted to Rs. 867 crores, and interest arrears had accumulated to Rs. 278 crores at the end of that period. The situation further worsened in 1985-90. TNEB's operating deficit rose to Rs. 214 crores in 1989-90, and the final deficit after interest and depreciation came to Rs. 386 crores. Government subsidies in 1985-90 totalled Rs. 1,607 crores, Rs. 523 crores in 1989-90 alone. Accumulated interest arrears reached Rs. 592 crores.

The Electricity Supply Act requires State Electricity Boards to achieve a return of three percent on net fixed assets, after meeting all expenses chargeable to revenue, i.e. operating and maintenance expenses, interest payments and depreciation. Table 6.27 shows that as compared to the normative return of Rs. 201 crores prescribed by statute, the actual position was a total loss of Rs. 1,415 crores during 1985-90. The loss computed on a normative basis in this period was, therefore, Rs. 1,616 crores, or an annual average of Rs. 323 crores, with the figure reaching Rs. 527 crores in 1989-90.

TNEB's massive losses are related to costs, inefficiency and tariff policy. The share of thermal generation in TNEB's own capacity, which was 31 percent in 1975-76, had risen to 46 percent in 1981-82 and has remained at about that level since then. In the 1980s TNEB has had to depend on purchases of power (mainly from central projects in Neyveli, Kalpakkam and Ramagundam) to cover about one-third of its total energy availability. There have been continual increases in the costs of inputs to thermal generation -- coal, oil, railway and ocean freight -- which have especially affected TNEB since Tamil Nadu is distant from coal sources. Similarly, there have been continual increases in the price of purchased electric power. Expenses on wages and salaries also have increased. Interest charges are another important cost item. In the absence of internal funds, TNEB has had to resort heavily to borrowings to finance its capital investments, the costs of which also have been steadily rising. Overall, the average basic cost per unit (generated and purchased) has risen from 23 paise in 1980-81 to 55 paise in 1988-89, or by nearly 140 percent.

Efficiency parameters of TNEB, such as the availability factor, plant load factor and coal and oil consumption, compare favorably with all-India averages, although the employee ratio is higher than the all-India average by 27 percent, which could be explained to some extent by the extensive rural network in Tamil Nadu. Transmission and distribution losses (18.5 percent in 1988-89) are below the all-India average, but they have stayed at about that level for a number of years and are still above the normative level of 15 percent (see Table 6.28).

In a context in which exogenous cost increases have to be borne and the scope for efficiency improvements is limited, tariff increases become inevitable to avert large and increasing losses. TNEB, or rather the Tamil Nadu government (which has to approve tariff revisions), has lagged in revising tariffs to keep pace with escalating costs. According to TNEB's estimates, the cost of supply of one unit for High Tension (HT) consumers in 1988-89 was 78.93 paise and for Low Tension (LT) consumers 102.17 paise. The effective rates charged were 100 to 109 paise for HT, 95 to 115 for LT industrial, 115 to 135 paise for LT commercial, 55 paise for LT domestic and 11.49 paise for LT agricultural consumers. Industrial and commercial consumers were thus being charged tariffs well above costs; domestic consumers were being heavily subsidized; large farmers among agricultural consumers were being provided with electricity at barely 10 percent of cost; and electricity was being given free to small farmers.

The extent of cross-subsidization has increased over time. Between 1980-81 and 1988-89, average realizations per unit from industrial consumers went up from 31 to 78 paise (by 152 percent); the increase in the case of commercial consumers was from 67 to 98 paise (46 percent); that for domestic consumers was from 46 to 67 paise (also 46 percent); and average realization from agricultural consumers decreased from 15 to 10 paise (Sankar and Hema, 1990). Despite this significant and widening cross-subsidization, TNEB has suffered heavy overall losses, which shows that the extent to which agriculture is being subsidized has gone much beyond the point at which it can be covered by a reasonable burden on industry and commerce. As noted earlier, this trend continued with the further reduction of the agricultural tariff in 1989 and culminated with its total elimination in 1990. TNEB's financial viability and autonomy can be restored only if there is a radical reversal in the government's policy of wholesale subsidization of agricultural consumers.

### Other Public Sector Enterprises

The state government's annual review of state public enterprises in Tamil Nadu listed 62 PSEs in 1988-89, grouped in 10 categories. Table 6.29 presents group-wise data on paid-up share capital, long-term borrowings and internal resources for 1988-89. Out of the total equity base, the share of the state government (Rs. 369 crores) accounted for 86.5 percent. In addition, capital grants from the government to PSEs came to Rs. 28 crores. The government also accounted for 12.6 percent of long-term borrowings or Rs. 131 crores.

Thus the total exposure of the government (excluding loan guarantees) was Rs. 528 crores by way of equity, loans and capital grants. Government share capital was concentrated in the development finance (42 percent of total) and manufacturing groups (22 percent), while government loans were concentrated in the development finance (34 percent), passenger transport (30 percent) and manufacturing groups (20 percent). The ratio of long-term borrowings from all sources to total equity was 2.4 for all the PSEs taken together. Internal resources (reserves and depreciation) came to about 35 percent of share capital and long term loans.

Table 6.30 shows group-wise financial data in 1986-89. The gross operating surplus (prior to depreciation, interest and tax) was Rs. 150 crores in 1986-89 (annual average), and the net operating surplus (after depreciation) was Rs. 27 crores. Interest payments amounted to Rs. 93 crores and taxes to Rs. 2 crores. The net loss (after depreciation, interest and taxes) came to Rs. 68 crores. In terms of return to the gross block (of capital employed), gross operating surplus was 15.9 percent and net operating surplus (after depreciation) was 2.8 percent. Interest payments came to 9.8 percent of gross block and taxes to 0.2 percent. The resulting net loss (after depreciation, interest and taxes) was -7.2 percent. In 1988-89 only two PSEs (Tamil Nadu Minerals and Tamil Nadu Warehousing) paid dividends, which totalled only Rs. 45 lakhs.

The overall loss of Rs. 88 crores in 1988-89 was the result of an aggregate loss of Rs. 95 crores in 33 loss-making PSEs and total profits of Rs. 8 crores in 29 profitable PSEs. Table 6.31 shows the position in different sectors. PSEs in the "trading" group accounted for 45.3 percent of the overall loss. The balance was mainly due to manufacturing (16.0 percent), development finance (13.8 percent), passenger transport (12.9 percent), other transport (8.3 percent) and agriculture (2.8 percent). The main aspects of financial performance in each group are now discussed.

*Passenger transport corporations.* The Tamil Nadu government has a strong presence in public transport, both urban and long distance, accounting for 70 percent of the bus fleet strength in the state. There are 15 passenger transport corporations, the largest of which is the PTC (Pallavan Transport Corporation) operating in Madras city. Eleven out of 15 of these corporations made a total loss of Rs. 12.34 crores in 1988-89, while the remaining four made aggregate profits of Rs. 0.67 crores. The PTC with a loss of Rs. 3.11 crores was the poorest performer. Efficiency norms in state road transport undertakings in Tamil Nadu are basically satisfactory according to data available in the Report of the Ninth Finance Commission (1989, Annexure III.7, p. 68). The overall loss is mainly due to high debt-equity ratios; the large weight of urban transport operations; inadequacy of fare revisions to keep pace with increasing operating and maintenance expenses particularly on fuel; operation of uneconomic routes; and concessional fares to students and certain other categories of passengers.

*Other transport corporations.* This category includes the goods transport corporation and the Poompuhar Shipping Corporation, which is wholly involved in transporting coal for TNEB and in chartering vessels for the purpose. The losses of the Shipping Corporation represent in part underrecovery of true costs from TNEB. The goods transport corporation, which was always unviable in the face of stiff competition from the private sector, has since been wound up.

*Mining.* This includes Tamil Nadu Minerals (engaged in the mining, processing and export of granite, of which Tamil Nadu has extensive resources) and the Tamil Nadu Magnesite Corporation. Both enterprises have been making profits. Since 1989-90 special steps have been taken to improve the financial performance of Tamil Nadu Minerals.

*Manufacturing.* The most important PSE in this group is Tamil Nadu Newsprint (TNPL). In 1988-89 TNPL made a loss of Rs. 9.7 crores due to a number of factors like over-capitalization, under-utilization of capacity and low output prices. Since 1989-90 there has been some improvement. Other significant loss-making PSEs were TANSI and Tamil Nadu Ceramics (both of which inherited obsolete machinery and a host of other problems from old departmental units) and Southern Structurals (a taken-over sick concern). In 1988-89, TANSI and TACEL each made a loss of Rs. 2.3 crores. In recent years attempts have been made to restructure these two PSEs by closing down some uneconomic units. Five other PSEs in this group, engaged in sugar, salt, electronics, zari and engineering, made marginal profits or losses.

*Trading.* This sector is dominated by the Tamil Nadu Civil Supplies Corporation (TNCSC), which is engaged in the procurement and distribution of foodgrains and other essential commodities under the PDS. The trading loss made by TNCSC, mostly due to interest charges, was Rs. 42.7 crores in 1988-89, accounting for about 45 percent of the aggregate losses of loss-making PSEs. The other trading concern is TASMAC, engaged in the wholesale distribution of liquor. It made a marginal loss in 1988-89 but has shown promise of improved performance since then.

*Development finance.* Major industrial finance and industrial promotion corporations are in this category, including TIDCO (which has promoted a number of joint sector companies and also has as its subsidiaries three public sector units producing steel, cement and industrial explosives), SIDCO (small industries development), SIPCOT (infrastructure development), TIIC (the main state industrial finance corporation) and four other corporations engaged in transport finance, handloom finance, textiles and a defunct theater finance corporation. Large losses in 1988-89 were incurred by TIIC (Rs. 6.95 crores) and SIPCOT (Rs. 4.57 crores). In both cases, revised accounting methods have worsened the financial picture. TIDCO made a loss of Rs. 1.58 crores in 1988-89. The five other PSEs in the group made marginal profits or losses. As compared to the overall loss of Rs. 12.71 crores for this group in 1988-89, a profit of Rs. 1.66 crores was recorded in 1987-88 and a marginal loss of Rs. 0.3 crores in 1986-87, suggesting that the accounting changes in TIIC and SIPCOT distorted the results in 1988-89.

*Other development corporations.* This group includes a diverse set of nine small promotional and welfare-oriented PSEs engaged in tourism, handicrafts, poultry, meat (since wound up), fisheries, district development in Dharampuri, backward classes economic development, leather and womens' development. Taken together, they made a marginal profit in 1988-89.

*Agriculture and allied activities.* The six PSEs in this group include the agro-industries corporation, sugarcane farm corporation (since wound up) and four plantation corporations dealing with commercial forests, tea, rubber and medicinal plants. Together they incurred a loss of Rs. 2.3 crores in 1988-89, with the agro-industries, sugarcane farm and tea corporations being the major loss makers. The rubber corporation made a profit.

*Construction and miscellaneous.* These two categories include nine PSEs engaged in construction, warehousing and diverse miscellaneous activities. Three of them (Chit, Police Housing and Tubewells) have now been wound up. Taken together they contributed a marginal profit in 1988-89.

The financial performance of Tamil Nadu PSEs is clearly unsatisfactory in terms of actual results and much more so with reference to the Ninth Finance Commission's reasonable norms of one percent return on investment for road transport undertakings in 1990-91, going up to 6.5 percent in 1994-95, and returns of three and five percent respectively in financial and commercial enterprises, with promotional companies expected at least to cover all expenses. While detailed enterprise-wise analysis is necessary to identify the various factors responsible for poor performance, this brief overview has drawn attention to major generic problems, including (1) policy-induced subsidies reflected in under-recovery of economic costs (e.g. civil supplies, road transport and shipping), exacerbated by continual increases in administered prices of inputs (e.g. fuel); (2) inheritance or takeover of sick units (e.g. TANSI, TACEL, SSL, textiles); (3) promotional considerations involving implicit subsidies (e.g. SIPCOT, SIDCO); and (4) overextension into fields in which there is no prima facie rationale or comparative advantage for the public sector (steel, cement, sugar, salt, ceramics, industrial explosives, leather, plantations, construction).

## DEBT AND FINANCING OF CAPITAL FORMATION

This concluding section examines the debt position of Tamil Nadu and the sources of financing for capital formation.

### Sources of Debt

Table 6.32 shows the composition of outstanding borrowings in Tamil Nadu at the end of 1988-89. The central government has been the main source of borrowings, accounting for 65 percent of outstanding debt, while open market loans account for 21 percent, institutional sources (such as LIC, NABARD, HUDCO, NCDC) for three percent and the state's Provident Funds and reserve funds 11 percent. The comparison in Table 6.32 indicates that Tamil Nadu's debt portfolio has historically relied significantly more on open market loans and relatively less on GOI and internal funds.

### Growth of Debt

Table 6.33 shows the growth in borrowings -- gross and net -- in different periods. With reference to the level in 1960-70, gross borrowings were nearly seven times as high and net borrowings nearly nine times as high in 1980-90. Growth in borrowings was much faster in 1980-90 over 1970-80, compared to the growth in 1970-80 over the previous decade. Borrowings have increased much more slowly than current revenue receipts, however, which in 1980-90 were more than 14 times their 1960-70 level.

There has been an appreciable shift from the Government of India (GOI) to "other" sources of borrowings (mostly internal funds), while market loans have more or less maintained their share (See Table

6.34). GOI and "other" sources accounted respectively for about 70 percent and 12 percent of gross as well as net borrowings in 1970-80. The GOI share dropped to 56 percent in gross and 49 percent in net borrowings in 1980-90, while the share of other sources increased to 26 percent of gross and 33 percent of net borrowings. Repayment ratios for all three sources of funds declined between 1970-80 and 1980-90 -- from 41 to 28 percent for market loans, from 47 percent to 38 percent for GOI loans and, most sharply, from 53 to 10 percent for other loans. In the case of market and GOI loans, the decline in the repayment ratio represents in part a softening of maturities and in part a reflection of the profile of past borrowings. The larger yield and lower outgo in 1980-90 under other loans, which are mostly accounted for by state provident funds, are the result of larger accretions due to salary increases in the 1980s and the impounding of a part of the arrears payments related to the Pay Commission increases in 1989. Overall, the repayment ratio for state government debt has gone down significantly from about 47 percent in 1970-80 to about 29 percent in 1980-90. While this is welcome, there is no assurance that the repayment rate will remain at this level. It should also be noted that in the case of GOI loans, the major source of borrowings, about 40 percent of fresh loans are used to repay past borrowings.

**Level of Indebtedness**

Tamil Nadu stands out among the major states as the one with the lowest ratio of outstanding debt to SDP, 20.5 percent as compared with the all-states average of 29.2 percent (see Table 6.35). A variety of reasons could explain this, among them availability of current account surpluses resulting in lesser reliance on borrowings and lack of major capital projects (especially in irrigation) to absorb lending and the relative absence of frequent or major natural calamities necessitating nonplan loans from the center.

**Assets and Liabilities**

At the end of 1988-89, as compared to the outstanding debt from all sources of Rs. 3933 crores (Table 6.32), assets including outstanding loans advanced by the state government, capital expenditures and cash balance and investments amounted to Rs. 5579 crores, well in excess of liabilities. Cumulative capital expenditure of Rs. 2210 crores at the end of 1988-89 was financed only to the extent of Rs. 564 crores (or 26 percent) through borrowings, implying that revenue surpluses were able to finance as much as 74 percent of capital outlays. The excess of assets over liabilities could, however, give a misleadingly comfortable impression. The "assets" of the government, whether loans to TNEB or irrigation investments or share capital investments in PSEs, do not generate cash for amortization. As we have seen, loans to TNEB are not repayable, and TNEB has not been able to meet even interest dues to government. In irrigation, receipts do not cover even operation and maintenance costs, while dividend income from PSEs is negligible. Under these circumstances, debt servicing needs to be viewed as a charge on revenue receipts. The ratio of debt servicing to total revenue receipts was 14 percent in 1980-90, providing an indication of the revenue surplus required for viable debt management at current repayment levels.

## Financing of Capital Formation

Levels of capital formation and financing from current savings and capital resources in 1960-70, 1970-80, 1980-85 and 1985-90 are shown in Table 6.36. Outlays on capital formation were of the order of 30-33 percent of total gross outlays in 1960-70; the ratio of current savings to current revenues was about nine percent; and the contribution of current savings to capital formation was about 16 percent. There was a marked improvement in these ratios in 1970-80 and 1980-85, when the ratio of current savings to current revenues went up to 18-19 percent and current savings were able to contribute 32-35 percent of capital formation. Against this background, the steep decline in 1985-90 both in the ratio of capital formation to total gross outlays (25.4 percent) and in the contribution of current savings to capital formation (14.1 percent) is striking.

The signs are unmistakable that increases in current outlays reflected in establishment costs, subsidies, and welfare schemes are crowding out capital formation, and that capital formation is being financed to a much smaller extent than in the past from current savings. The situation is likely to worsen considerably in the near future because of the decision of the state government to ban arrack in mid-1991, which will cost Rs. 400 crores annually in terms of forgone revenue.

*Annex 6.1*

## Reclassification of the Tamil Nadu Revenue Account in 1988-89 to Estimate Directly Unrecovered Costs

The objective of this exercise is to estimate direct cost recoveries for each sector of expenditure, with the sectors themselves being classified in a form that might be useful from the viewpoint of public policy. This involves adjustments to both receipt and expenditure figures to distinguish, in terms of economic logic, between taxes (net of collection costs) and direct recoveries; allocations of certain overhead expenditures (such as those on general administrative services) and of receipts and expenditures shown in bulk in the standard budgetary classification (interest receipts and payments, block grants from GOI, pensions and gratuities, and so on); elimination of expenditures shown in the revenue account that do not reflect final outflows (contribution to sinking fund, interest on irrigation etc.); and estimation of certain costs not shown in the budget (like depreciation). The adjustments made and the assumptions on which they are based are explained below. Annex Table 6.1 shows the reconciliation between the revenue accounts as reclassified here and the figures in the Budget documents.

### Adjustments in Receipt Items

(1) *Share of central taxes:* No adjustments.

(2) *Government of India grants:* Specific purpose grants have been shown as recoveries against the concerned sectors. Block grants, which are mainly for the state plan, have been netted out against individual sectors in proportion to sector-wise plan revenue outlay in 1988-89.

(3) *State taxes:* (a) Assignments to local bodies of entertainment tax, terminal tax, and taxes on vehicles have been netted out. (b) Revenue from judicial stamps (net of the amount turned over to local bodies) has been shown as nontax revenue against administration of justice. (c) Revenue from registration fees has been shown as nontax revenue against "registration". The excess of such revenue over expenditures under "registration" is treated as a tax. (d) Revenue from taxes on vehicles (net of collection costs) has been shown as nontax recovery against roads and transport, with the excess over expenditure treated as a tax. (e) The estimated cost of collection of land revenue has been netted out as collection

charges under land revenue.[10] (f) Expenditures on collection of agricultural income tax, non-judicial stamps (net of the amount deducted for local bodies), state excise duties, sales taxes and other taxes and duties have been netted out.

(4) *Nontax revenue:* (a) Revenue from judicial stamps, registration fees, and taxes on vehicles to the extent transferred from state taxes have been shown as recoveries against the relevant sectors. (b) Recoveries related to "general overheads", such as stationery and printing, public works, pensions, miscellaneous general services, other general services, state legislature, Council of Ministers, general administration (less estimated cost of collection of land revenue) and elections have been netted out of expenditures on these items. Net expenditures so arrived at have been subsequently allocated to expenditure heads along with interest and pension payments related to them. (c) Interest receipts from irrigation have been eliminated from nontax revenue as well as on the expenditure side, since this is an internal transfer. (d) Interest receipts have been shown against individual sectors in proportion to loans outstanding and on the basis of the average interest yield on loans outstanding in the budget as a whole.

## Adjustments in Expenditure Items

(1) *Collection of Taxes:* Expenditures on survey and settlement have been shown under a separate head under basic administrative services. Other expenditures for collection of taxes have been treated as indicated under state taxes and nontax revenues.

(2) *Debt service:* (a) Appropriation for reduction of debt has been eliminated since it is a contribution to the sinking fund and not a final expenditure. (b) Interest payments on irrigation have been eliminated as stated above. (c) Other interest payments have been allocated to individual sectors.[11]

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10. Collection costs for land revenue have been estimated as being equivalent to 75% of the expenditure on village revenue establishment, 50% on *taluk* establishment, 33-1/3% on subdivisional establishment, and 25% on district establishment.

11. This has been done on the basis of loans outstanding and capital outlays for each sector financed by outstanding borrowings of the government and based on the average interest cost on such borrowings.

(3) *Other general services, social services and economic services:* (a) Pensions have been allocated to individual sectors.[12] (d) Depreciation at two percent of capital outlay (on the same basis as in Govinda Rao and Mundle, 1991) has been added as an imputed cost sector-wise.

(4) *Assignments and compensation to local bodies:* (a) Assignments of taxes have been netted out from the relevant state taxes. (b) Contribution to the urban development fund has been shown under "urban development".

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12. Pensions to teachers of aided educational institutions, which are separately identified in the Budget documents, have been classified under education. For lack of a better procedure, the balance of expenditure under pensions has been allocated in proportion to expenditures on wages and salaries in each sector.

*Table 6.1*

## Structure of Aggregate Receipts in Tamil Nadu, 1960-90

*(Rs crores)*

| | 1960-70 | 1970-80 | 1980-85 | 1985-90 | 1980-90 |
|---|---|---|---|---|---|
| **Current Revenues** | 1562.61 | 5071.29 | 7963.95 | 14589.69 | 22553.64 |
| Tax Revenues | 1051.79 | 4270.92 | 6741.90 | 12905.25 | 19647.15 |
| Share of | | | | | |
| Central taxes | 248.21 | 1189.27 | 1817.92 | 3421.42 | 5239.34 |
| State taxes | 803.58 | 3081.65 | 4923.98 | 9483.83 | 14407.81 |
| Non-tax revenues | 510.82 | 800.37 | 1222.05 | 1684.44 | 2906.49 |
| **Capital Receipts** | 30.76 | 55.62 | 36.37 | 405.48 | 441.85 |
| **Net Borrowings** | 454.60 | 768.14 | 1361.33 | 2581.25 | 3942.58 |
| Market loans (net) | 78.84 | 142.99 | 92.66 | 612.00 | 704.66 |
| GOI Loans (net) | 216.25 | 537.70 | 702.97 | 1228.24 | 1931.21 |
| Other Loans (net) | 159.51 | 87.45 | 565.70 | 741.01 | 1306.71 |
| **Drawals from** | | | | | |
| **Cash Balances** | 5.37 | 24.08 | -11.12 | 164.04 | 152.92 |
| **Total Receipts** | 2053.34 | 5919.13 | 9350.53 | 17740.46 | 27090.99 |
| Percentage of NSDP | 13.5 | 16.6 | 19.9 | NA | NA |

NA = Not available.
*Source:* Economic Classification of the Tamil Nadu Budget.

*Table 6.2*

**Structure of Final Outlays in Tamil Nadu, 1960-90**

*(Rs crores)*

| | *1960-70* | *1970-80* | *1980-85* | *1985-90* | *1980-90* |
|---|---|---|---|---|---|
| **Current Expenditures** | 1398.64 | 4083.25 | 6061.63 | 13304.53 | 19366.16 |
| Compensation of Employees | 464.21 | 1660.73 | 2531.92 | 5989.68 | 8521.60 |
| Purchase of goods and services (net) | 293.73 | 577.35 | 1191.17 | 1913.62 | 3104.79 |
| Interest | 135.61 | 341.36 | 448.97 | 1076.22 | 1525.19 |
| Grants and other current transfers | 471.64 | 1395.06 | 1396.36 | 2343.13 | 3739.49 |
| Subsidies | 33.45 | 108.75 | 493.21 | 1981.88 | 2475.09 |
| **Capital Expenditures** | 426.95 | 1216.88 | 2125.56 | 3082.11 | 5207.67 |
| Net capital formation | 391.08 | 1028.06 | 1807.99 | 2629.45 | 4437.44 |
| Renewals and replacements | 27.73 | 176.47 | 316.90 | 451.23 | 768.13 |
| Other capital transfers | 8.14 | 12.35 | 0.67 | 1.43 | 2.10 |
| **Loans & Advances** (net) | 227.75 | 619.00 | 1163.34 | 1353.82 | 2517.16 |
| For capital formation (gross) | 284.36 | 711.58 | 1092.17 | 1654.81 | 2746.98 |
| For current consumption (gross) | 47.23 | 315.79 | 861.13 | 615.27 | 1476.40 |
| Repayments | -103.84 | -408.37 | -789.96 | -916.26 | -1706.22 |
| **Final Outlay** (net) | 2053.34 | 5919.13 | 9350.53 | 17740.46 | 27090.99 |
| Percentage of NSDP | 13.5 | 16.6 | 19.9 | NA | NA |

NA = Not available.

*Source:* Economic Classification of Tamil Nadu Budget.

*Table 6.3*

**Structure of Revenue Receipts in Tamil Nadu, 1965-90**

*(Rs crores and percent of total)*

| | *1965-70* | *1970-80* | *1980-90* | *1985-90 (percent)* | |
|---|---|---|---|---|---|
| | | | | *Tamil Nadu* | *All States* |
| **Central Revenue Transfers** | 312.88 (27.0) | 1687.48 (29.2) | 7894.33 (31.9) | 32.2 | 40.7 |
| Shares in central taxes | 169.39 (14.6) | 1193.19 (20.6) | 5250.18 (21.2) | 21.1 | 21.7 |
| Central grants | 143.49 (12.4) | 494.29 (8.6) | 2644.15 (10.7) | 11.1 | 19.0 |
| **State's own revenues** | 846.69 (73.0) | 4092.14 (70.8) | 16837.76 (68.1) | 67.8 | 59.3 |
| Own tax revenues | 585.91 (50.5) | 3242.78 (56.1) | 14437.83 (58.4) | 59.5 | 44.1 |
| Own non-tax revenues | 260.78 (22.5) | 849.36 (14.7) | 2399.93 (9.7) | 8.3 | 15.2 |
| **Total Revenue Receipts** | 1159.57 (100.0) | 5779.62 (100.0) | 24732.09 (100.0) | 100.0 | 100.0 |

*Note:* Figures in brackets are percentages to column total.
*Source:* Tamil Nadu Budget documents and RBI Annual Surveys of State Finances.

*Table 6.4*

**Tax Revenue to NSDP ratios in major States 1980-85 and 1984-87**

*(percent)*

| *States* | *1980-85* | *1984-87* |
|---|---|---|
| Andhra Pradesh | 8.7 | 10.8 |
| Assam | 3.5 | 4.6 |
| Bihar | 4.4 | 4.4 |
| Gujarat | 8.3 | 9.2 |
| Haryana | 8.5 | 9.2 |
| Karnataka | 9.9 | 11.0 |
| Kerala | 10.2 | 11.8 |
| Madhya Pradesh | 7.0 | 7.6 |
| Maharashtra | 9.0 | 9.8 |
| Orissa | 4.5 | 5.2 |
| Punjab | 8.1 | 8.1 |
| Rajasthan | 6.3 | 7.2 |
| **Tamil Nadu** | **11.5** | **12.1** |
| Uttar Pradesh | 5.2 | 5.5 |
| W. Bengal | 6.1 | 6.7 |
| All Major States | 7.5 | 8.2 |

*Source:* RBI Annual Surveys of State finances for tax revenues and CSO: *Estimates of State Domestic Product* (1989) for NSDP (current price) comparable estimates.

*Table 6.5*

**Own Tax Revenues in Tamil Nadu, 1960-90**

*(Rs crores)*

| | *1960-70* | *1970-80* | *Index[a] (1960-70 = 100)* | *1980-85* | *1985-90* | *1980-90[b]* | *Index[a] (1960-70 = 100)* |
|---|---|---|---|---|---|---|---|
| Land Revenue[c] | 90.53 (10.7) | 121.92 (3.9) | 135 | 72.22 | 122.01 | 194.23 (1.3) | 215 |
| Agricultural Income tax | 14.86 (1.8) | 37.45 (1.2) | 252 | 28.95 | 53.23 | 82.18 (0.6) | 553 |
| Urban Land tax | 1.26 (0.1) | 17.12 (0.5) | 1359 | 14.66 | 7.59 | 22.25 (0.2) | 1766 |
| Sales tax | 406.96 (48.0) | 1913.39 (60.5) | 470 | 3179.90 | 6406.38 | 9586.28 (66.1) | 2356 |
| State Excise duties | 5.54 (0.6) | 164.92 (5.2) | | 695.49 | 1078.58 | 1774.07 (12.2) | |
| Stamps (net) | 82.00 (9.7) | 212.42 (6.7) | 259 | 262.02 | 626.02 | 888.04 (6.1) | 1083 |
| Registration fees | 18.07 (2.1) | 40.66 (1.3) | 225 | 48.55 | 103.88 | 152.43 (1.1) | 844 |

| | 1960-70 | 1970-80 | Index[a] (1960-70=100) | 1980-85 | 1985-90 | 1980-90[b] | Index[a] (1960-70=100) |
|---|---|---|---|---|---|---|---|
| Motor vehicle taxes | 131.83 (15.6) | 405.42 (12.8) | 308 | 415.41 | 757.76 | 1173.17 (8.1) | 890 |
| Entertainment tax | 48.70 (5.7) | 168.62 (5.3) | 346 | 181.88 | 312.11 | 493.99 (3.4) | 1014 |
| Other taxes[d] | 47.54 (5.7) | 78.82 (2.6) | 166 | 61.20 | 80.83 | 142.03 (0.9) | 299 |
| Total tax revenue | 847.29 (100.0) | 3160.74 (100.0) | 373 | 4960.28 | 9548.39 | 14508.67 (100.0) | 1712 |

*Note:* Figures in brackets are percentages to column totals.

[a]Not given for excise because of discontinuities in prohibition policy.
[b]Based on Revised Estimate for 1989-90.
[c]Net of irrigation component of land revenue and including assignments to local bodies.
[d]Electricity duties, betting tax, luxury tax, sugarcase cess.

*Source:* Tamil Nadu Budget documents.

*Table 6.6*

**Revenue and Rate Structure for General Sales Tax in Tamil Nadu, 1989-89**

| *Group* | *Percent in total revenue* | *Tax rates (percent of revenue from product category)* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *1* | *2* | *3* | *4* | *5* | *6* | *8* | *9* | *12* | *14* | *15* | *18* | *20* |
| Fuel Items | 21.42 | | | 1.0 | 17.6 | | | 4.4 | 1.7 | | 56.7 | | 15.7 | 2.9 |
| Building Materials | 15.21 | | | 34.9 | 2.4 | | 6.8 | 17.2 | 36.2 | | 2.5 | | | |
| Industrial raw materials, intermediaries, chemicals | 11.69 | 0.1 | 2.9 | 35.8 | 8.4 | 0.6 | 3.4 | 10.0 | 38.8 | | | | | |
| Machinery, equipment parts and accessories | 12.86 | | | | 4.2 | 0.3 | 3.1 | 25.8 | 32.1 | 20.4 | | 14.1 | | |
| Consumer items (including drugs) | 8.53 | | 0.6 | 4.1 | 10.1 | 0.2 | 14.7 | 40.5 | 20.2 | 7.4 | | 2.2 | | |
| Agricultural and marine products | 7.52 | | 2.3 | 27.0 | | 4.1 | | 11.8 | | 54.8 | | | | |
| Durable consumer goods (including office equipment) | 7.37 | | 5.7 | 5.4 | | 0.7 | | 5.9 | 53.4 | | | 28.9 | | |
| Liquor and intoxicants | 7.23 | | | | | | | | | | | | | |
| Food, food products, beverages | 6.25 | | 5.4 | | 56.4 | | 27.3 | 10.9 | | | | | | |
| Chemicals, fertilizers and pesticides | 1.92 | | | | | | | | | | | | | |

*Note:* Figures in the rates columns are percentages of revenue subject to the concerned rate in total group revenue.
*Source:* Tamil Nadu sales tax administration.

*Table 6.7*

**Structure of Non-Tax Revenues**
**Tamil Nadu and all States, 1980-85 and 1985-90**

*(percent)*

| *Items* | *1980-85* | | *1985-90* | |
|---|---|---|---|---|
| | *Tamil Nadu* | *All States* | *Tamil Nadu* | *All States* |
| Interest receipts | 35.95 | 26.92 | 29.35 | 28.91 |
| Profits and dividends | 0.70 | 0.56 | 0.80 | 0.49 |
| Receipts from general services | 12.37 | 14.37 | 15.67 | 11.95 |
| Receipts from social and community services | 14.73 | 9.04 | 15.64 | 7.61 |
| Receipts from economic services | 36.25 | 49.11 | 38.54 | 51.04 |
| Of which: receipts from forests | 9.99 | 18.28 | 11.38 | 14.99 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 |
| *Percentage of receipts to total outlays in:* | | | | |
| Social and Community Services | 4.12 | 4.00 | 2.87 | 2.89 |
| Economic Services | 12.80 | 29.48 | 10.48 | 25.52 |

*Source:* Derived from RBI, Annual Surveys of State Finances.

*Table 6.8*

**Central Revenue Transfers to Tamil Nadu 1980-85 and 1985-90**

*(Rs crores and percent of total)*

| | *1980-85* | *1985-90* |
|---|---|---|
| **Share in Central Taxes** | 1824.26 | 3425.92 |
| | (67.5) | (66.0) |
| Income tax | 447.07 | 1005.04 |
| Union excise duties | 1370.79 | 2416.36 |
| Estate duties | 6.40 | 4.52 |
| **Plan grants** | 750.62 | 1492.38 |
| | (27.8) | (28.7) |
| State plan | 293.44 | 576.21 |
| Central plan | 159.15 | 348.40 |
| Centrally sponsored | 298.03 | 567.77 |
| **Non-plan grants** | 127.89 | 273.25 |
| | (4.7) | (5.3) |
| Under Article 275 | 9.66 | 55.79 |
| For natural calamities | 39.84 | 45.57 |
| Others | 78.39 | 171.89 |
| **Total** | 2702.77 | 5191.55 |
| | (100.0) | (100.0) |

*Note:* Figures in brackets are percentages to column total.
*Source:* Tamil Nadu Budget documents.

Table 6.9

## Share of Tamil Nadu in Shareable Central Taxes: 1957-95

(percent)

| Finance Commission | Income tax | Union Excise Total Divisible pool | Union Excise Divisible pool for non-deficit states |
|---|---|---|---|
| Second (1957-62) | 8.40 | 7.56 | 7.56 |
| Third (1962-66) | 8.13 | 6.08 | 6.08 |
| Fourth (1966-69) | 8.34 | 7.18 | 7.18 |
| Fifth (1969-74) | 8.18 | 6.50 | 6.50 |
| Sixth (1974-79) | 7.94 | 7.43 | 7.43 |
| Seventh (1979-84) | 8.05 | 7.64 | 7.64 |
| Eighth (1984-89) | 7.57 | 6.51 | 7.32[a] |
| Ninth (1989-90) | 7.61 | 6.92 | 7.79[a] |
| Ninth (1990-95) | 7.93 | 6.38 | 7.64[b] |

*Note:* [a]40 percent
[b]37.575 per cent

*Source:* Finance Commission reports.

Table 6.10

## Current and Capital Outlays in Tamil Nadu: 1960-90

(Rs crores)

| Type of Outlays | 1960-70 | 1970-80 | 1980-85 | 1985-90 | 1980-90 |
|---|---|---|---|---|---|
| Consumption outlays[a] | 1446 (67.0) | 4399 (69.5) | 6922 (68.3) | 13920 (74.6) | 20842 (72.4) |
| Capital formation outlays[b] | 712 (33.0) | 1928 (30.5) | 3218 (31.7) | 4737 (25.4) | 7955 (27.6) |
| Total gross outlays | 2158 (100.0) | 6327 (100.0) | 10140 (100.0) | 18657 (100.0) | 28797 (100.0) |

*Note:* Figures in brackets are percentages to column total.
[a]Current expenditures plus Loans for consumption.
[b]Capital expenditures plus Loans for capital formation.
*Source:* Economic Classification of the Tamil Nadu Budget.

Table 6.11

**Sectoral Composition of Current and Capital Outlays in Tamil Nadu: 1975-90[a]**

(percent)

| | 1975-80 | | | 1980-85 | | | 1985-90 | | |
|---|---|---|---|---|---|---|---|---|---|
| Sector | Current | Capital | Total | Current | Capital | Total | Current | Capital | Total |
| **General Services** | 29.9 | 7.3 | 21.0 | 26.0 | 8.0 | 18.8 | 28.7 | 7.3 | 22.6 |
| **Social & Community Services** | 52.0 | 22.9 | 40.7 | 47.6 | 21.3 | 37.0 | 47.1 | 22.8 | 40.2 |
| Education | 31.2 | 1.1 | 19.7 | 26.0 | 2.3 | 16.5 | 26.6 | 1.2 | 19.3 |
| Medical, Health, Family Welfare, Water Supply, Sanitation | 12.7 | 9.6 | 11.4 | 11.0 | 10.4 | 10.7 | 8.6 | 4.9 | 7.6 |
| Housing & Urban Development | 0.2 | 6.1 | 2.5 | 0.5 | 5.0 | 2.3 | 0.9 | 13.4 | 4.5 |
| Social Welfare | 5.6 | 3.7 | 4.9 | 7.8 | 2.2 | 5.5 | 10.0 | 2.2 | 7.8 |
| Others | 2.3 | 1.8 | 2.2 | 2.3 | 1.4 | 2.0 | 1.0 | 1.1 | 1.0 |
| **Economic Services** | 15.5 | 69.1 | 36.4 | 24.5 | 70.1 | 42.9 | 22.7 | 69.2 | 36.0 |
| Agriculture & allied | 10.3 | 20.3 | 14.2 | 16.1 | 22.2 | 18.6 | 11.9 | 21.2 | 14.5 |
| Industy & Minerals | 2.1 | 5.3 | 3.3 | 2.7 | 5.1 | 3.7 | 2.7 | 5.0 | 3.4 |
| Water and Power development | 0.1 | 16.8 | 6.6 | 1.7 | 22.9 | 10.2 | 3.6 | 30.8 | 11.4 |
| Transport and Communication | 1.2 | 13.5 | 6.0 | 0.9 | 12.3 | 5.5 | 0.6 | 10.1 | 3.3 |
| Others | 1.9 | 13.2 | 6.3 | 3.0 | 7.7 | 4.9 | 3.9 | 2.1 | 3.4 |
| **Other purposes** | 2.6 | 0.7 | 1.9 | 1.9 | 0.6 | 1.3 | 1.5 | 0.7 | 1.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

[a]In total outlays net of loan repayment.

*Source:* Derived from the Economic Classification of the Tamil Nadu Budget.

*Table 6.12*

**Key Expenditure Ratios for Tamil Nadu and All States, 1980-85 and 1985-90**

*(percent)*

| *Ratios* | *1980-85* | | *1985-90*[a] | |
|---|---|---|---|---|
| | *Tamil Nadu* | *All States* | *Tamil Nadu* | *All States* |
| Plan expenditure to total expenditure | 28.71 | 35.89 | 27.59 | 35.59 |
| Plan revenue expenditure to total plan expenditure | 64.23 | 42.90 | 73.02 | 50.16 |
| Development revenue expenditure to total revenue expenditure | 74.20 | 70.87 | 72.62 | 68.52 |
| Revenue expenditure to total expenditure | 75.38 | 75.44 | 84.27 | 80.38 |
| Capital expenditure to total expenditure | 6.68 | 14.25 | 4.32 | 11.98 |
| Of which: | | | | |
| Irrigation expenditure to total expenditure | 1.5 | 6.2 | 1.2 | 5.2 |
| Industry and minerals to total expenditure | 1.1 | 0.8 | 0.4 | 0.8 |
| Transport and Communication to total expenditure | 1.0 | 2.2 | 0.8 | 1.7 |
| Loans to total expenditure | 17.94 | 10.31 | 11.41 | 7.64 |

[a]Revised Estimates for 1988-89 and Budget Estimates for 1989-90.
*Source:* Derived from RBI Annual Surveys of State Finances.

*Table 6.13*

**Sectoral Composition of Plan Outlays in Tamil Nadu: 1951-90**

*(percent)*

| *Sector* | *First Plan (1951-56)* | *Second Plan (1956-61)* | *Third Plan (1961-66)* | *Annual Plan (1966-69)* | *Fourth Plan (1969-74)* | *Fifth Plan (1974-80)* | *Sixth Plan (1980-85)* | *Seventh Plan (1985-90)* |
|---|---|---|---|---|---|---|---|---|
| Agriculture and allied | 12.0 | 17.3 | 23.1 | 26.1 | 20.0 | 15.0 | 21.2 | 12.2 |
| Social and community services | 20.0 | 20.2 | 23.1 | 19.7 | 25.6 | 25.2 | 33.5 | 36.0 |
| Irrigation | 25.0 | 9.3 | 9.0 | 4.8 | 4.4 | 6.4 | 4.0 | 5.7 |
| Power | 37.7 | 42.2 | 34.4 | 39.1 | 38.2 | 35.0 | 26.3 | 35.0 |
| Industry and minerals | 1.9 | 7.5 | 6.8 | 6.2 | 5.9 | 6.3 | 6.6 | 5.0 |
| Transport and communication | 3.4 | 2.9 | 3.4 | 3.9 | 5.5 | 11.3 | 7.5 | 4.8 |
| Others | -- | 0.6 | 0.2 | 0.2 | 0.4 | 0.8 | 0.9 | 1.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

*Source:* Tamil Nadu Economic Appraisal.

*Table 6.14*

**Pattern of Plan Outlays in Tamil Nadu and all States in Sixth and Seventh Plan Periods**

*(percent)*

| *Sector* | *Sixth Plan (1980-85)* | | *Seventh Plan (1985-90)* | |
|---|---|---|---|---|
| | *Tamil Nadu* | *All States* | *Tamil Nadu* | *All States* |
| Agriculture and allied | 21.2 | 15.6 | 12.2 | 16.7 |
| Social and Community Services | 33.5 | 18.2 | 36.0 | 21.3 |
| Irrigation | 4.0 | 23.4 | 5.7 | 19.8 |
| Power | 26.3 | 29.4 | 35.0 | 28.2 |
| Industry and Minerals | 6.6 | 4.5 | 5.0 | 4.7 |
| Transport and Communication | 7.5 | 7.7 | 4.8 | 7.3 |
| Others | 0.9 | 1.2 | 1.3 | 2.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

*Source:* Tamil Nadu Economic Appraisal, Sixth and Seventh Plan documents.

*Table 6.15*

**Actual and 'Normative' Levels of Non-Plan Revenue Expenditure, Tamil Nadu and Major States, 1986-87**

| Item | Per capita actual expenditure (Rs.) | | Per capita normative expenditure in Tamil Nadu (Rs.) | Per capita actual to normative expenditure in Tamil Nadu | Per capita actual expenditure in Tamil Nadu to actual expenditure in major States |
|---|---|---|---|---|---|
| | Tamil Nadu | Major States | | | |
| Police | 21.17 | 24.40 | 25.46 | 0.83 | 0.87 |
| General administrative services | 57.32 | 53.89 | 58.99 | 0.97 | 1.06 |
| Primary education | 50.82 | 44.89 | 61.08 | 0.83 | 1.13 |
| Secondary education | 29.43 | 30.98 | 40.19 | 0.73 | 0.95 |
| Higher education | 20.81 | 14.38 | 12.53 | 1.66 | 1.45 |
| Medical, family welfare and public health | 30.23 | 35.08 | 33.88 | 0.89 | 0.86 |
| Social services | 138.57 | 124.42 | 155.92 | 0.88 | 1.11 |
| Agriculture and allied and community development | 24.78 | 18.39 | 21.21 | 1.17 | 1.35 |

*Source*: *Report of the Ninth Finance Commission* (1989, Table B 5.2).

*Table 6.16*

**Proportion of Compensation to Employees in Current and Total (Net) Outlays in Tamil Nadu, 1960-90**

| | Compensation to employees[a] | |
|---|---|---|
| | *In current outlays (percent)* | *In total (net) outlays (percent)* |
| 1960-70 | 33.2 | 22.6 |
| 1970-80 | 40.7 | 28.1 |
| 1980-85 | 68.0 | 27.1 |
| 1985-90 | 75.9 | 33.8 |
| 1990-91[b] | 78.4 | 37.6 |

[a]Including pensions.
[b]Budget Estimates.
*Source:* Economic Classification of the Tamil Nadu Budget.

*Table 6.17*

**Employees in Relation to Population and Area in Major States on 1 January 1989[a]**

| *State* | *Employees per 1000 population* | *Employees per 100000 sq. km.* |
|---|---|---|
| Andhra Pradesh | 13.70 | 26.67 |
| Assam | 18.00 | 45.91 |
| Bihar | 13.38 | 53.76 |
| Gujarat | 7.49 | 13.02 |
| Haryana | 20.60 | 60.51 |
| Karnataka | 16.31 | 31.55 |
| Kerala | 19.26 | 125.70 |
| Madhya Pradesh | 14.98 | 17.64 |
| Maharashtra | 13.33 | 27.17 |
| Orissa | 17.68 | 29.88 |
| Punjab | 21.15 | 71.02 |
| Rajasthan | 15.32 | 15.35 |
| **Tamil Nadu** | **18.05** | **67.23** |
| Uttar Pradesh | 14.44 | 54.45 |
| West Bengal | 15.52 | 95.15 |
| **All Major States** | **15.06** | **35.34** |

[a]Including employees of government, local bodies and aided institutions.
*Source:* Derived from *Report of Ninth Finance Commission* (1989, Annexure III.17, Table 2).

*Table 6.18*

**Sector-wise Distribution of Employees in Tamil Nadu, 1990-91**

| *Sector* | *No. of employees (lakhs)* | *Percent to total* |
|---|---|---|
| **General Services** | **2.12** | 25.2 |
| **Social and Community Services** | 5.10 | 60.6 |
| Education | 2.96 | 35.2 |
| Medical, health, water supply and sanitation, housing and urban development | 0.87 | 10.3 |
| Social welfare | 1.14 | 13.5 |
| Others | 0.13 | 1.6 |
| **Economic Services** | 1.19 | 14.1 |
| Agriculture and allied | 0.81 | 9.6 |
| Industry and minerals | 0.05 | 0.6 |
| Water and power development | 0.07 | 0.8 |
| Transport and communication | 0.11 | 1.3 |
| Others | 0.15 | 1.8 |
| **Other Purposes** | 0.01 | 0.1 |
| **Total** | 8.42 | 100.1 |

*Source:* Compiled from *Statement of Posts and Scales of Pay 1990-91* (Tamil Nadu Budget documents).

*Table 6.19*

## Unrecovered Costs and Cost Recovery Rates in Tamil Nadu 1988-89[a]

*(Rs. crores)*

| *Sector* | *Total Expenditure* | *Net State Expenditure* | *Recovery* | *Unrecovered costs*[b] | *Cost recovery rate (percent)*[c] |
|---|---|---|---|---|---|
| A. **Basic Administrative Services** | 264.28 (7.36) | 261.37 (8.28) | 46.79 (12.36) | 214.58 (7.71) | 17.90 |
| Police | 173.05 (4.81) | 172.16 (5.45) | 13.06 (3.45) | 159.10 (5.72) | 7.59 |
| Jails | 16.62 (0.46) | 16.62 (0.53) | 4.53 (1.20) | 12.09 (0.43) | 27.26 |
| Administration of Justice | 28.96 (0.81) | 28.96 (0.92) | 18.17 (4.80) | 10.79 (0.39) | 62.74 |
| Registration | 11.03 (0.31) | 11.03 (0.35) | 11.03 (2.91) | -- | 100.00 |
| Survey and settlement | 25.38 (0.71) | 25.38 (0.80) | -- -- | 25.38 (0.91) | -- |
| Relief of natural calamities | 9.24 (0.26) | 7.22 (0.23) | -- | 7.22 (0.26) | -- |
| B. **Basic Social Services** | 1319.42 (36.70) | 1169.25 (37.02) | 27.16 (7.17) | 1142.09 (41.09) | 2.32 |
| Education | 902.90 (25.09) | 833.42 (26.39) | 12.83 (3.39) | 820.59 (29.52) | 1.54 |
| Medical, Public Health and Family Welfare | 294.76 (8.20) | 247.93 (7.85) | 11.52 (3.04) | 236.41 (8.51) | 4.65 |
| Water Supply and Sanitation | 122.57 (3.41) | 87.90 (2.78) | 2.81 (0.74) | 85.0 (3.06) | 93.20 |
| C. **Social Infrastructure** | 361.30 (10.05) | 221.20 (7.00) | 19.04 (5.04) | 202.16 (7.27) | 8.61 |
| Housing & Urban Development | 113.22 (3.15) | 107.82 (3.41) | 14.10 (3.73) | 93.72 (3.37) | 13.08 |
| Rural Development and Employment | 248.08 (6.90) | 113.38 (3.59) | 4.94 (1.31) | 108.44 (3.90) | 4.36 |
| D. **Social Welfare** | 513.29 (14.27) | 463.25 (14.66) | 52.65 (13.91) | 410.60 (14.77) | 11.37 |

| *Sector* | *Total Expenditure* | *Net State Expenditure* | *Recovery* | *Unre-covered costs*[b] | *Cost reco-very rate (percent)*[c] |
|---|---|---|---|---|---|
| Welfare of SC, ST & BC | 93.92 (2.61) | 71.70 (2.27) | -- | 71.70 (2.58) | -- |
| Labour and Employment | 29.39 (0.82) | 28.87 (0.91) | 2.34 (0.62) | 26.53 (0.95) | 8.11 |
| Social Security and Welfare and Nutrition | 278.06 (7.73) | 250.76 (7.94) | 50.31 (13.29) | 200.45 (7.21) | 20.06 |
| Civil Supplies | 111.92 (3.11) | 111.92 (3.54) | -- | 111.92 (4.03) | -- |
| E. **Economic Infrastructure** | 650.45 (18.09) | 642.00 (20.33) | 116.24 (30.71) | 525.76 (18.92) | 18.11 |
| Irrigation | 75.61 (2.10) | 69.02 (2.19) | 3.18 (0.84) | 65.84 (2.37) | 4.61 |
| Power | 459.92 (12.79) | 459.92 (14.56) | -- | 459.92 (16.55) | -- |
| Roads and Transport | 114.92 (3.20) | 113.06 (3.58) | 113.06 (29.87) | -- | 100.00 |
| F. **Production Services** | 404.27 (11.25) | 320.81 (10.16) | 103.30 (27.30) | 217.51 (7.82) | 32.20 |
| Agriculture and allied | 266.41 (7.41) | 224.45 (7.11) | 61.47 (16.24) | 162.98 (5.86) | 23.07 |
| Forests | 26.81 (0.75) | 23.03 (0.73) | 23.03 (6.09) | -- | 100.00 |
| Industry and minerals | 111.05 (3.09) | 73.33 (2.32) | 18.80 (4.97) | 54.53 (1.96) | 25.64 |
| G. **Others** | 82.05 (2.28) | 80.05 (2.55) | 13.27 (3.51) | 66.78 (2.42) | 16.58 |
| **Total** | 3595.06 (100.0) | 3157.93 (100.0) | 378.45 (100.0) | 2779.48 (100.0) | 11.98 |

[a]Figures in parentheses are percentages of column totals.
[b]Net state expenditure less recovery.
[c]Recovery divided by net state expenditure.
*Source:* Reclassified revenue account for Tamil Nadu, as explained in Annex 6.1.

*Table 6.20*

## Recoveries in General Education in Tamil Nadu, 1988-89[a]

*(Rs. crores)*

| *Levels of General Education* | *Expenditure* | *Recovery* | *DUC* | *Percentage of recovery* | *DUC per student* |
|---|---|---|---|---|---|
| Elementary Education | 373.71 (51.3) | 1.30 (13.0) | 372.41 (51.9) | 0.34 | 449 |
| Secondary Education | 277.04 (38.1) | 6.91 (69.0) | 270.13 (37.6) | 2.49 | 800 |
| University and Higher Education | 77.08 (10.6) | 1.81 (18.0) | 75.27 (10.5) | 2.35 | 3764 |
| Total | 727.83 (100.0) | 10.2 (100.0) | 717.81 (100.0) | 1.38 | |

[a]Figures in brackets are percentages to column totals.
*Source:* Tamil Nadu Revenue Account (1988-89) and Tamil Nadu Economic Appraisal (for enrollment data).

*Table 6.21*

## Unrecovered Costs in Surface Irrigation in Tamil Nadu, 1980-85 and 1985-90

*(Rs. crores)*

| | *Commercial* | | *Non-commercial* | |
|---|---|---|---|---|
| | *1980-85* | *1985-90* | *1980-85* | *1985-90* |
| **Expenses** | 169.92 | 284.80 | 64.90 | 80.21 |
| O & M | 26.85 | 31.30 | 20.91 | 30.15 |
| Interest | 115.29 | 204.42 | 35.47 | 40.37 |
| Depreciation | 27.68 | 49.08 | 8.52 | 9.69 |
| **Receipts** | 15.41 | 13.76 | 4.68 | 4.48 |
| Water rates | 5.66 | 4.01 | 0.83 | 0.63 |
| Irrigation component in land revenue (estimated) | 9.75 | 9.75 | 3.85 | 3.85 |
| Unrecovered costs (Annual average) | 30.90 | 54.21 | 12.04 | 15.15 |
| Unrecovered costs per Net hectare (Rs.) | 358.0 | 700.0 | 180.0 | 225.0 |

*Source:* Information furnished to NFC by the government of Tamil Nadu.

*Table 6.22*

**Direct Subsidies in the Economic Classification of the Tamil Nadu Budget, 1973-88**

| *Year* | *Direct Subsidies (Rs. crores)* | *Percent to total current expenditure* |
|---|---|---|
| 1973-74 | 11.28 | 3.27 |
| 1974-75 | 1.26 | 0.34 |
| 1975-76 | 5.02 | 1.24 |
| 1976-77 | 5.80 | 1.25 |
| 1977-78 | 11.30 | 2.29 |
| 1978-79 | 13.30 | 2.39 |
| 1979-80 | 18.99 | 3.13 |
| **1973-80** | **66.95** | **2.07** |
| 1980-81 | 24.43 | 2.74 |
| 1981-82 | 114.34 | 11.32 |
| 1982-83 | 44.75 | 3.84 |
| 1983-84 | 103.18 | 7.61 |
| 1984-85 | 206.58 | 12.60 |
| 1985-86 | 146.21 | 7.94 |
| 1986-87 | 182.60 | 8.76 |
| 1987-88 | 501.34 | 19.09 |
| **1980-88** | **1323.43** | **10.49** |

*Source:* Economic Classification of the Tamil Nadu Budget.

*Table 6.23*

**Composition of Direct Subsidies in the Economic Classification of the Tamil Nadu Budget, 1980-88**

| | *Direct Subsidies (Rs. crores)* | *Percent to Total* |
|---|---|---|
| *Social Services and Social Welfare* | 79.16 | 5.98 |
| Education | 4.17 | 0.32 |
| Welfare of SC, ST & BC | 74.99 | 5.66 |
| *Food and Nutrition* | 472.84 | 35.73 |
| Public distribution system | 214.10 | 16.18 |
| Procurement bonus | 101.16 | 7.64 |
| Noon meals scheme | 157.58 | 11.91 |
| *Agriculture etc.* | 183.34 | 13.85 |
| Agriculture & allied, inputs, etc | 36.79 | 2.78 |
| Loan write-off | 114.11 | 8.62 |
| Interest waiver | 23.63 | 1.79 |
| Cooperation | 8.81 | 0.66 |
| *Rural Development* | 114.91 | 8.68 |
| IRDP | 58.52 | 4.42 |
| Minimum needs programme | 22.68 | 1.71 |
| Rural Housing | 33.71 | 2.55 |
| *Industry* | 61.77 | 4.67 |
| Sugar Mills | 43.63 | 3.30 |
| Backward areas | 13.50 | 1.02 |
| Sericulture | 2.85 | 0.21 |
| Miscellaneous | 1.79 | 0.14 |
| *Handloom and Khadi* | | |
| Controlled cloth rebate | 29.08 | 2.20 |
| Handloom rebate | 128.81 | 9.73 |
| Khadi rebate | 9.34 | 0.71 |
| Other subsidies for weavers | 13.15 | 0.99 |
| *Electricity Board* | 210.80 | 15.93 |
| *Others* | 20.23 | 1.53 |
| Police | 18.74 | 1.42 |
| Miscellaneous | 1.49 | 0.11 |
| *Total* | 1323.43 | 100.0 |

*Source:* Economic Classification of the Tamil Nadu Budget.

*Table 6.24*

**Purposewise Composition of DUC in Tamil Nadu, 1988-89**

| *Expenditure purposes*[a] | *DUC in 1988-89 (Rs. crores)* | *Percent of Total* |
|---|---|---|
| Public goods | 214.58 | 7.72 |
| Merit goods | 1142.09 | 41.09 |
| Pure transfers | 519.04 | 18.67 |
| of which: | | |
| Rural development and employment | 108.44 | 3.90 |
| Social Welfare | 410.60 | 14.77 |
| Economic and Social Infrastructure | 619.48 | 22.29 |
| Production Services | 217.51 | 7.83 |
| Other | 66.78 | 2.40 |
| Total | 2779.48 | 100.0 |

[a]See text for explanation.
*Source:* Derived from Table 6.19.

*Table 6.25*

**Broad Beneficiary-wise Breakdown of DUC in Tamil Nadu 1988-89**

| *Broad Beneficiary Categories* | *DUC in 1988-89 (Rs. crores)* | *Percent to total* |
|---|---|---|
| Universal population | 189.20 | 6.97 |
| Universal in population as a whole or in beneficiary groups | 1454.46 | 53.62 |
| Economically or socially disadvantaged groups | 354.92 | 13.08 |
| Land-owning agriculturists | 714.12 | 26.33 |
| Total | 2712.70[a] | 100.00 |

[a]"Other DUC" in Table 6.19 of Rs. 66.78 crores has been ignored.
*Source:* Based on Table 6.19.

*Table 6.26*

## Financial Results of TNEB, 1960-90

*(Rs. crores)*

| *Period* | *Gross Revenue*[a] | *O & M Expenses* | *Operating surplus or deficit* | *Surplus after interest payments and deprecia-tion provision*[b] | *Subsidy from government* |
|---|---|---|---|---|---|
| **1960-70 Annual Average** | 33.19 | 17.02 | 16.17 | 14.10 | -- |
| **1970-80 Annual Average** | 147.16 | 115.51 | 31.65 | -11.36 | 18.11 |
| **1980-85 Annual Average** | 131.48 | 423.00 | -61.52 | -169.57 | 173.50 |
| **1985-86** | 611.04 | 641.41 | -30.37 | -126.18 | 210.74 |
| **1986-87** | 712.24 | 715.63 | -3.39 | -95.51 | 145.47 |
| **1987-88** | 792.52 | 848.30 | -55.78 | -167.04 | 287.10 |
| **1988-89** | 876.53 | 1047.96 | -171.43 | -328.94 | 437.49 |
| **1989-90**[c] | 1033.37 | 1247.59 | -214.22 | -386.50 | 525.80 |
| **1985-90 Annual Average** | 805.14 | 900.18 | -95.04 | -220.83 | 321.32 |

[a]Excluding government subsidies.
[b]Excluding interest due and unpaid to Government.
[c]Provisional.
*Source:* Annual Accounts of TNEB.

*Table 6.27*

**Normative Losses in TNEB, 1985-90**

*(Rs. crores)*

| | *Net fixed assets*[a] | *Normative return*[b] | *Real surplus*[c] | *Normative loss* |
|---|---|---|---|---|
| 1985-86 | 990.92 | 29.73 | -182.86 | 212.59 |
| 1986-87 | 1071.77 | 32.15 | -145.47 | 177.62 |
| 1987-88 | 1265.50 | 37.97 | -223.42 | 261.39 |
| 1988-89 | 1404.37 | 42.13 | -396.16 | 438.29 |
| 1989-90 | 1974.31 | 59.13 | -467.57 | 526.80 |
| 1985-90 | | 201.21 | -1415.48 | -1616.69 |

[a]At end of the year.
[b]On basis prescribed in Electricity (Supply) Act.
[c]After depreciation and interest, including interest payable on government loans and without taking into account government subsidy.
*Source:* Based on TNEB Annual Accounts.

*Table 6.28*

**Efficiency Norms in Selected SEBs, 1987-88**

| *SEB* | *Thermal Plants* | | | | *Employee per Million Kwh sold* |
|---|---|---|---|---|---|
| | *Availability Factor* | *PLF* | *Coal Kg/Kwh* | *Oil Me/Kwh* | |
| Andhra Pradesh | 88.6 | 76.2 | 0.78 | 1.9 | 5.1 |
| Gujarat | 75.3 | 60.0 | 0.60 | 16.8 | 3.1 |
| Karnataka | 78.6 | 64.5 | 0.64 | 5.3 | 5.5 |
| Madhya Pradesh | 73.9 | 53.3 | 0.83 | 10.6 | 6.5 |
| Maharashtra | 74.9 | 57.0 | 0.75 | 9.0 | 4.1 |
| Punjab | 83.4 | 71.5 | 0.69 | 7.5 | 6.7 |
| Tamil Nadu | 79.7 | 68.7 | 0.68 | 7.0 | 7.9 |
| Uttar Pradesh | 64.1 | 47.1 | 0.80 | 8.2 | 7.3 |
| All India | 74.1 | 56.5 | 0.73 | 11.2 | 6.2 |

*Source: Annual Report on the working of SEBs, 1989.*

*Table 6.29*

**Capital Resources of PSEs in Tamil Nadu, 1988-89**

*(Rs. crores)*

| *Group* | *Share capital* | | | *Long-term borrowings* | | | *Internal resources*[a] |
|---|---|---|---|---|---|---|---|
| | *Government (including share advance)* | *Others* | *Total* | *Government* | *Others* | *Total* | |
| I Passenger Transport | 32.10 (8.7) | -- | 32.10 | 39.88 (30.4) | 126.37 | 166.25 | 336.41 |
| II Goods Transport and shipping | 11.07 (3.0) | 0.06 | 11.13 | 6.17 (4.7) | 0.59 | 6.76 | 42.46 |
| III Mining | 13.27 (3.6) | -- | 13.27 | 0.16 (0.1) | 9.39 | 9.55 | 24.34 |
| IV Manufacturing | 81.77 (22.1) | 36.34 | 118.11 | 25.57 (19.5) | 149.49 | 175.06 | 36.98 |
| V Trading | 22.74 (6.2) | -- | 22.74 | 0.01 (--) | -- | 0.01 | 11.90 |
| VI Development finance | 163.54 (44.3) | 18.44 | 181.98 | 44.80 (34.2) | 604.58 | 649.38 | 27.17 |

| Group | Share capital | | | Long-term borrowings | | | |
|---|---|---|---|---|---|---|---|
| | *Government (including share advance)* | *Others* | *Total* | *Government* | *Others* | *Total* | *Internal resources*[a] |
| VII Development (other) | 12.34 (3.3) | 0.06 | 12.40 | 7.66 (5.8) | 0.60 | 8.26 | 11.96 |
| VIII Agriculture and allied | 8.34 (2.3) | -- | 8.34 | 4.88 (3.8) | 11.05 | 15.93 | 11.70 |
| IX Construction | 19.82 (5.4) | -- | 19.82 | 1.95 (1.5) | 1.51 | 3.46 | 1.03 |
| X Miscellaneous | 4.28 (1.1) | 2.71 | 6.99 | -- | 4.17 | 4.17 | 12.03 |
| All PSEs | 369.27 (100.0) | 57.61 | 426.88 | 131.08 (100.0) | 907.75 | 1038.83 | 515.98 |

[a]Excluding deferred liabilities.

*Source: Review of State Public Sector Enterprises in Tamil Nadu 1988-89.*

*Table 6.30*

## Financial Performance Indicators for Tamil Nadu PSEs, 1986-89

*(percent)*

| *Group* | *Group surplus[a] to GB* | *Operating surplus[b] to GB* | *Interest to GB* | *Tax to GB* | *Net Profit[c] to GB* |
|---|---|---|---|---|---|
| I Passenger Transport | 21.56 | 2.06 | 5.73 | 0.01 | -3.68 |
| II Goods Transport and shipping | 10.85 | 1.25 | 5.12 | -- | -3.87 |
| III Mining | 26.36 | 13.30 | 5.46 | 0.61 | 7.23 |
| V Trading | 12.32 | 5.46 | 120.93 | 0.13 | -115.60 |
| VI Development finance | -17.42 | -22.09 | -- | 10.12 | -32.21 |
| VII Development (Other) | 7.86 | 1.44 | 3.92 | 0.02 | -2.50 |
| VIII Agriculture and allied | 10.22 | 5.21 | 5.59 | 0.11 | -0.49 |
| IX Construction | 11.31 | 0.94 | 19.47 | 0.03 | -18.56 |
| X Miscellaneous | 12.51 | 10.47 | 2.36 | 0.25 | 7.86 |
| *All PSEs* | *15.88* | *2.81* | *9.81* | *0.17* | *-7.17* |
| Memo | | | | | |
| All PSEs (Rs. crores) (annual average) | 150.49 | 26.59 | 92.99 | 1.63 | -68.03 |
| All PSEs 1988-89 (Rs. crores) | 155.21 | 16.24 | 102.82 | 0.95 | -87.53 |

[a] Prior to depreciation, interest and tax; GB is Gross Block.
[b] After depreciation alone.
[c] After depreciation, interest and tax.
*Source:* Derived from *Review of State Public Sector Enterprises in Tamil Nadu.*

*Table 6.31*

**Profits and Losses of Tamil Nadu PSEs, 1988-89**

*(Rs. crores)*

| *Group* | *Number of PSEs* | *Number of loss-making PSEs* | *Total loss* | *Number of profit-making PSEs* | *Total profit* | *Aggregate profit or loss* |
|---|---|---|---|---|---|---|
| I Passenger Transport | 15 | 11 | -12.34 (12.9) | 4 | 0.67 | -11.67 |
| II Goods Tpt. & Shipping | 2 | 2 | -7.91 (8.3) | - | | -7.91 |
| III Mining | 2 | - | - | 2 | 3.92 | 3.92 |
| IV Manufacturing | 9 | 6 | -15.27 (16.0) | 3 | 0.24 | -15.03 |
| V Trading | 2 | 2 | -43.19 (45.3) | - | - | -43.19 |
| VI Development Finance | 8 | 4 | -13.11 (13.8) | 4 | 0.40 | -12.71 |
| VII Development (other) | 9 | 2 | -0.19 (0.2) | 7 | 0.78 | 0.59 |
| VIII Agricutlure and allied | 6 | 4 | -2.75 (2.9) | 2 | 0.45 | -2.30 |
| IX Construction | 4 | 2 | -0.54 (0.6) | 2 | 0.53 | -0.01 |
| X Miscellaneous | 5 | - | - | 5 | 0.77 | 0.77 |
| Total | 62 | 33 | -95.30 (100.0) | 29 | 7.76 | -87.54 |

*Source:* Derived from *Review of State Public Sector Enterprises in Tamil Nadu in 1988-89.*

*Table 6.32*

## Outstanding Debt as on 31st March 1989

*(Rs. crores)*

| | *Tamil Nadu* | | *All States* | |
|---|---|---|---|---|
| | *Amount* | *Percent to total* | *Amount* | *Percent to total* |
| 1. GOI | 2563.31[a] | 65.2 | 55828 | 70.1 |
| 2. Open Market Loans | 825.66 | 21.0 | 10589 | 13.1 |
| 3. Other Loans (Mainly from institutions) | 125.79 | 3.2 | 2320 | 2.9 |
| 3. State Provident Funds | 418.21 | 10.6 | 10865 | 13.7 |
| Total | 3932.97 | 100.0 | 79602 | 100.0 |

[a]Includes Rs. 0.83 crores by way of ways and means advances.
*Sources:* Appendix XII to the Tamil Nadu Budget Memorandum 1990-91 and RBI Currency and Finance Report for 1988-89 (Revised Estimates).

*Table 6.33*

## Growth in Gross and Net Borrowings in Tamil Nadu 1960-90

*(Rs. crores)*

| | *1960-70* | *1970-80* | *1980-90* |
|---|---|---|---|
| Gross Borrowings | 838<br>(100) | 1439<br>(192) | 5575<br>(665) |
| Net Borrowings | 455<br>(100) | 769<br>(169) | 3942<br>(866) |
| Current Revenues | 1563<br>(100) | 5071<br>(324) | 22554<br>(1443) |

*Note:* Figures in brackets are indices with 1960-70 = 100.
*Source:* Economic Classification of the Tamil Nadu Budget.

*Table 6.34*

**Gross and Net Borrowings and Repayments 1970-80 and 1980-90**

*(Rs. crores)*

| | *Market* | *GOI* | *Other* | *Total* |
|---|---|---|---|---|
| **1970-80** | | | | |
| Gross Borrowings | 243 | 1010 | 186 | 1439 |
| | (16.9) | (70.2) | (12.9) | (100.0) |
| Repayments | 100 | 472 | 99 | 671 |
| Net Borrowings | 143 | 538 | 87 | 768 |
| | (18.6) | (70.1) | (11.3) | (100.0) |
| Repayment Ratio (percent) | 41.2 | 46.7 | 53.2 | 46.6 |
| **1980-90** | | | | |
| Gross Borrowings | 985 | 3135 | 1455 | 5575 |
| | (17.7) | (56.2) | (26.1) | (100.0) |
| Repayment | 280 | 1204 | 148 | 1632 |
| Net Borrowings | 705 | 1931 | 1307 | 3943 |
| | (17.9) | (49.0) | (33.1) | (100.0) |
| Repayment Ratio (percent) | 28.4 | 38.4 | 10.2 | 29.3 |

*Note:* Figures in brackets are precentages to row totals.
*Source:* Derived from Economic Classification of the Tamil Nadu Budget.

*Table 6.35*

## Outstanding Debt/NSDP Ratios for Major States in 1986-87

*(percent)*

| | *State* | *Outstanding debt to NSDP in 1986-87* |
|---|---|---|
| 1. | Andhra Pradesh | 28.7 |
| 2. | Assam | 44.8 |
| 3. | Bihar | 36.1 |
| 4. | Gujarat | 24.2 |
| 5. | Haryana | 27.7 |
| 6. | Karnataka | 26.1 |
| 7. | Kerala | 37.2 |
| 8. | Madhya Pradesh | 31.3 |
| 9. | Maharashtra | 22.0 |
| 10. | Orissa | 43.5 |
| 11. | Punjab | 30.0 |
| 12. | Rajasthan | 40.1 |
| **13.** | **Tamil Nadu** | **20.5** |
| 14. | Uttar Pradesh | 30.1 |
| 15. | West Bengal | 27.4 |
| | All Major States | 29.2 |

*Source:* RBI Currency and Finance Report 1987-88 for outstanding debt and CSO comparable estimates of NSDP.

*Table 6.36*

## Financing of Capital Formation in Tamil Nadu 1960-90

*(Rs. crores)*

| | *1960-70* | *1970-80* | *1980-85* | *1985-90* | *1980-90* |
|---|---|---|---|---|---|
| Outlays on capital formation[a] | 711.31 | 1928.46 | 3217.73 | 4736.92 | 7954.65 |
| Financed by: | | | | | |
| Current surplus[b] | 116.74 | 672.25 | 1041.19 | 669.89 | 1711.08 |
| Capital resources[c] | 594.57 | 1256.21 | 2176.54 | 4067.03 | 6243.57 |
| **Memorandum items** | | | | | |
| Current surplus to current revenues (percent) | 8.9 | 18.1 | 19.5 | 6.6 | 11.1 |
| Current surplus to capital formation outlays (percent) | 16.4 | 34.9 | 32.4 | 14.1 | 21.5 |
| Outlays on capital formation to total gross outlay (percent) | 33.0 | 30.5 | 31.7 | 25.4 | 27.6 |

[a]Capital expenditures and loans for capital formation.
[b]Current revenues minus current expenditures and loans for consumption.
[c]Net borrowings, loan repayments, capital receipts and drawals from cash balance.
*Source:* Based on the economic classification of the Tamil Nadu budget.

*Annex Table 6.1*

## Reconciliation Statement

*(Rs. crores)*

| *Sources/Uses* | *Budget figure* | *Figure in Revised Classification* |
|---|---|---|
| **Sources of Funds** | | |
| 1. Share in central taxes | 722.92 | 722.92 |
| 2. Grants from GOI | 437.13 | 437.13 |
| 3. State taxes | 1994.23 | 1760.10 |
| **Adjustments** | | |
| (i) Deduct assignments to local bodies | -41.70 | |
| (ii) Deduct recoveries shown under judicial stamps | -13.31 | |
| (iii) Deduct recoveries shown under registration | -11.03 | |
| (iv) Deduct recoveries shown under roads and transport | -113.06 | |
| (v) Deduct estimated cost of collection of land revenue | -36.51 | |
| (vi) Deduct cost of collection of other taxes | -30.48 | |
| (vii) Add excess over full recovery under forests | 11.96 | |
| 4. Nontax revenues | 334.58 | 384.20 |
| **Adjustments** | | |
| (i) Add recovery from judical stamps | 13.31 | |
| (ii) Add recovery from registration fee | 11.03 | |
| (iii) Add recovery from motor vehicle tax | 113.06 | |
| (iv) Deduct cost of collection of MVT | -3.56 | |
| (v) Deduct interest on irrigation | -45.75 | |
| (vi) Deduct recoveries in general overheads allotted to sectors | -26.51 | |
| (vii) Deduct excess recovery in forests | -11.96 | |
| 5. Total sources (1+2+3+4) | 3488.86 | 3304.35 |

| Sources/Uses | Budget figure | Figure in Revised Classification |
|---|---|---|
| **Uses** | | |
| 1. Revenue expenditure | 3763.04 | 3578.53 |
| **Adjustments** | | |
| (i) Deduct assignments to local bodies | -41.70 | |
| (ii) Deduct estimated cost of collection of land revenue | -36.51 | |
| (iii) Deduct cost of collection of MVT | -3.56 | |
| (iv) Deduct cost of collection of other taxes | -30.48 | |
| (v) Deduct interest on irrigation | -45.75 | |
| (vi) Deduct recoveries netted out under general overheads | -26.51 | |
| **Revenue Deficit** | | |
| 1. Revenue Receipts | 3488.86 | 3304.35 |
| 2. Revenue Expenditure | 3763.04 | 3578.53 |
| 3. Revenue Deficit | 274.18 | 274.18 |
| **Further adjustments to Revenue Expenses in Revised Classification** | | |
| 1. Base figure | 3578.53 | |
| 2. Deduct sinking fund contribution | -27.67 | |
| 3. Add imputed depreciation cost | 44.20 | |
| 4. Gross outlay shown in Table 6.19 | 3595.06 | |