10 - May 02

REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA

FOR THE YEAR ENDED 31 MARCH 2001

COMMERCIAL

GOVERNMENT OF TAMIL NADU

http://cagindia.org/st[illegible]tamilnadu/2000-01

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PREFACE

Government commercial enterprises, the accounts of which are subject to audit by the Comptroller and Auditor General of India, fall under the following categories.

(i) Government companies

(ii) Statutory corporations and

(iii) Departmentally managed commercial undertakings

2. This report deals with the results of audit of Government companies and Statutory corporations including Tamil Nadu Electricity Board and Tamil Nadu Warehousing Corporation and has been prepared for submission to the Government of Tamil Nadu under Section 19-A of the Comptroller and Auditor General's (CAG) (Duties, Powers and Conditions of Service) Act, 1971, as amended from time to time. The results of audit relating to departmentally managed commercial undertakings are included in the Report of the Comptroller and Auditor General of India (Civil) - Government of Tamil Nadu.

3. Audit of the accounts of Government companies is conducted by Comptroller and Auditor General of India under the provisions of Section 619 of the Companies Act, 1956.

4. In respect of Tamil Nadu Electricity Board, which is Statutory Corporation, the Comptroller and Auditor General of India is the sole auditor. In respect of Tamil Nadu Warehousing Corporation, he has the right to conduct the audit of their accounts in addition to the audit conducted by the Chartered Accountants appointed by the State Government in consultation with CAG. The Audit Reports on the annual accounts of these two corporations are forwarded separately to the State Government.

5. The cases mentioned in this Report are those, which came to notice in the course of audit during the year 2000-01 as well as those, which came to notice in earlier years but were not dealt with in the previous reports. Matters relating to the period subsequent to 2000-01 have also been included, wherever necessary.

OVERVIEW

1 Overview of Government companies and Statutory corporations

As on 31 March 2001, the State of Tamil Nadu had 82 Public Sector Undertakings (PSUs) comprising of 80 Government companies and two Statutory corporations as against 84 PSUs during last year. The number of non-working Government companies as on 31 March 2001 was 12 against the same number of companies during the last year. In addition there were three companies under the purview of Section 619-B of the Companies Act, 1956 as on 31 March 2001.

The total investment in working PSUs decreased from Rs.9778.52 crore as on 31 March 2000 to Rs.9654.57 crore as on 31 March 2001. The total investment in non-working PSUs also decreased from Rs.56.90 crore to Rs.48.91 crore during this period.

The budgetary support in the form of capital, loans, grants and subsidy disbursed to the working PSUs increased from Rs.1349.85 crore in 1999-2000 to Rs.2005.43 crore in 2000-01, however, no budgetary support was extended to non-working companies during 2000-01. The Government guaranteed loans aggregating Rs.3621.19 crore during the year 2000-01. The total amount of outstanding loans guaranteed by the State Government decreased from Rs.4266.30 crore as on 31 March 2000 to Rs.3764.59 crore as on 31 March 2001.

Out of 68 working Government companies, 35 have finalised their accounts for the year 2000-01. The accounts of the remaining companies and both Statutory corporations were in arrears for periods ranging from one to three years as on 31 March 2001. The accounts of seven non-working Government companies were in arrears for periods ranging from one to 11 years as on 31 March 2001.

According to the latest finalised accounts, 31 working PSUs (29 Government companies and 2 Statutory corporations) earned aggregate profit of Rs.460.59 crore, out of which only six working Government companies and one Statutory Corporation declared dividend of Rs.3.72 crore and Rs.0.76 crore respectively. 37 working PSUs incurred aggregate loss of Rs.365.36 crore as per the latest finalised accounts. Of these loss incurring working Government companies, 25 companies had accumulated losses aggregating Rs.2046.33 crore, which exceeded their aggregate paid-up capital of Rs.748.17 crore by more than two times.

Even after completion of 16 to 37 years of existence, the turnover as per the latest finalised accounts of four Government companies had been less than Rs.5 crore during the last five years. Out of these four, one Company had been incurring losses for five consecutive years as per its latest finalised accounts, leading to negative net worth. In view of poor performance and continuous losses, the Government may either improve the performance of these companies or consider their closure.

(Paragraphs 1.1, 1.2, 1.3 and 1.7)

2 Reviews relating to Government companies

2A Tamil Nadu Cements Corporation Limited

Tamil Nadu Cements Corporation Limited (Company) was incorporated in February 1976 with the main objective to manufacture, purchase and sale of cement. The Company, which earned profit up to 1997-98 started incurring losses since 1998-99 resulting in complete erosion of capital. The losses were mainly contributed by Alangulam cement plant due to non-modernisation of plant resulting in high cost of production, under utilisation of capacity and excess consumption of power, etc. The losses were also contributed by Company's Asbestos Sheet Unit at Alangulam due to high cost of production and entry of competitors. The Pipe Units at Mayanur and Vridhachalam are also suffering due to lack of orders from their main customers, who had switched over to award the contracts on turnkey basis. Hence, the viability of these units in their present form is doubtful. Some of the important points included in the review are given below:

Production loss in kilns and cement mills in both the cement plants (Alangulam and Ariyalur) due to controllable factors was to the extent of Rs.347.93 crore during the last five years ending 31 March 2001.

(Paragraphs 2A.7.3.1 and 2A.7.3.2)

The Company did not produce the budgeted quantity of Pozzalanic Portland Cement (PPC) resulting in loss of contribution to the extent of Rs.11.89 crore during the five years ending 31 March 2001. Further, inadequate use of slag in production of cement by Alangulam cement plant resulted in foregoing of savings to the extent of Rs.8.10 crore.

(Paragraph 2A.7.4)

Excess consumption of power and coal resulted in an extra expenditure of Rs.15.50 crore in the two cement plants. Further, despite receipt of Government approval for use of imported coal, the Company could not import the coal due to which it was deprived an annual savings of Rs.16.40 crore.

(Paragraph 2A.7.5)

Asbestos Sheet Unit, Alangulam and Asbestos Pipe Unit at Mayanur suffered production loss of Rs.9.43 crore and Rs.21.36 crore respectively due to controllable factors. Further, there was production loss of Rs.6.12 crore due to non-achievement of output norm in Mayanur Unit. The unit (Mayanur) was not functioning since February 2000 due to lack of orders and the Company incurred an unproductive expenditure of Rs.3.99 crore during 2000-01.

(Paragraphs 2A.8 and 2A.9)

2B Implementation of rehabilitation scheme in Southern Structurals Limited

Review of implementation of the rehabilitation scheme in Southern Structurals **Limited revealed that despite massive infusion** of funds by the Government as **per scheme, there were no signs of recovery**. This was mainly due to lack of **monitoring of the scheme to ensure its success**, embarking on the project not **envisaged in the scheme, diversion of funds** meant for the implementation of **the scheme, paucity of working capital and** non-completion of orders. Unless **concerted efforts are made to revive the** Company by professional expert, **revamping market set up, introducing** systematic measures for execution of **contracts and control over cost, continuance** of the Company in the present **form would only be a drain on the State** exchequer.

Some of the important points included in the review are given below:

As per rehabilitation scheme, the Company was expected to earn profit from **1998-99 but it incurred loss of Rs.15.67** crore against expected profit of **Rs.14.49 crore during 1998-99 to 2000-01.**

(Paragraph 2B.5 and Annexure-20)

The Company diverted Rs.1.48 crore meant for capital expenditure to working **capital requirement (Rs.0.66 crore) and** to a new project with new technology **without approval of BIFR (Rs.0.82 crore).**

{Paragraphs 2B.7.1 (1) and (3)}

Consequent to delay in execution of orders for the supply of 173 numbers of **railway wagons, the Company was** deprived of interest free advance of **Rs.2.70 crore, which led to reduction in the** availability of working capital and **loss of interest of Rs.0.91 crore. Further,** due to paucity of funds, the orders **valued at Rs.1.20 crore could not be executed.**

{Paragraph 2B.7.1 (2)}

Inordinate delay in the execution of orders for manufacture of rail wagons **resulted in loss of Rs.3.58 crore by way** of excise duty (Rs.0.15 crore), non-**claiming of MODVAT (Rs.1.17 crore),** cost escalation (Rs.1.70 crore) and **loss of income (Rs.0.56 crore).**

(Paragraphs 2B.9.1 and 2B.9.2)

3 Reviews relating to Statutory Corporation

3A Procurement, performance and maintenance of transformers

Review of Procurement, performance, maintenance and repairs of transformers in the Tamil Nadu Electricity Board (TNEB) revealed various deficiencies, which **inter alia** included overloading of transformers due to lower procurement of distribution transformers. At the same time, high rate of failure, idle investment due to delay in commissioning of transformers and abnormal delay in repair also led to overloading of transformers. Instances of irregular placement of orders were also noticed.

Some of the important points included in the review are given below:

Against the guidelines of Power Finance Corporation (PFC) that transformers should not be loaded beyond 80 **per cent** of their capacity, the excess load during 1998-99 and 1999-2000 was 88.78 and 91.84 **per cent** respectively.

(Paragraphs 3A.4 and 3A.5)

Placement of two extension orders in violation of tender regulations resulted in extra expenditure of Rs.2.66 crore. Delay in commissioning of power transformers led to loss of interest of Rs.9.48 crore on idle investment.

(Paragraphs 3A.5.5 and 3A.5.6)

Despite introduction of maintenance planning system, the overall failure rate of distribution transformers increased from 8.99 **per cent** in 1995-96 to 10.6 **per cent** in 1999-2000 against the expected failure rate of 5 **per cent**. Further abnormal delays in repairing failed power transformers led to avoidable new purchases, which resulted in loss of interest of Rs.2.72 crore.

(Paragraphs 3A.6.2 and 3A.6.3.1)

Despite having idle capacity in its Transformer Repair Yard and assurance to Committee on Public Undertakings that not more than 1500 would be repaired in a year from private agencies, the Board got repaired 14253 transformers (in excess of 1500 **per annum**) during the five years ended with 1999-2000 at an extra cost of Rs.3.28 crore.

(Paragraph 3A.6.4)

3B. Pykara Ultimate Stage Hydro Electric Project

The project of Pykara Ultimate Stage Hydro Electric Project initially conceived in 1981-82 was yet to be completed. The project cost had undergone three revisions and there was more than 500 **per cent** increase in the project cost. Laying of transmission line and tail race tunnel without forest clearance had resulted not only in idle investment but also rendered the commissioning of the project difficult unless it is approved by Forest

Department. In view of this critical position there is need to complete the project urgently by removing all the bottlenecks so as to utilise the idle investment made this far fruitfully as well as to provide power to the public.

Some of the important points included in the review are given below:

The project cost of Rs.70.16 crore as per DPR (1985-86) had undergone three revisions and as per latest revision (April 2000), the project cost was Rs.382.81 crore i.e., more than 500 per cent increase in the project cost.

(Paragraph 3B.4)

Delay in implementation of the project had resulted not only in cost overrun of Rs.312.65 crore but also resulted in potential loss of generation of Rs.275 crore.

(Paragraph 3B.5.2)

Failure of the Board to include interest clause on mobilisation and machinery advances despite agreeing to by the contractor resulted in interest loss of Rs.5.17 crore. Further, payment of escalation without deducting interest free advance to the contractor resulted in excess payment of Rs.2.13 crore.

{Paragraph 3B.6.1 (b)(i)}

Placement of purchase order for machinery even after stoppage of civil works resulted in idle investment of Rs.46.14 crore and loss of interest of Rs.12.77 crore.

{Paragraph 3B.6.2(i)}

4 *Miscellaneous topics of interest*

Besides the reviews, test check of the records of Government companies and Statutory corporations in general revealed number of irregularities, some of which are given below:

Failure to recover cost of gunny bags from Roller Flour Mills by **Tamil Nadu Civil Supplies Corporation Limited** resulted in an unintended benefit of Rs.8.77 crore to the flour mills.

(Paragraph 4A.1.1)

Disbursement of term loan by **Tamil Nadu Industrial Investment Corporation Limited** by relaxing the terms and conditions of sanction and not ensuring the fulfilment of assurance by the loanee resulted in non-recovery of Rs 5.92 crore.

(Paragraph 4A.2.1)

Disbursement of loan by **State Industries Promotion Corporation of Tamil Nadu Limited** on imported second hand machinery which failed to achieve the desired level of productivity resulted in non-realisation of dues of Rs 4.67 crore.

(Paragraph 4A.3.1)

Improper selection of location for setting up of Export Promotion Industrial Park by **State Industries Promotion Corporation of Tamil Nadu Limited** resulted in idle investment of Rs 15.67 crore.

(Paragraph 4A.3.3)

Tamil Nadu Electricity Board incurred an avoidable extra expenditure of Rs 3.26 crore due to its failure to avail concessional sales tax on purchase of furnace oil.

(Paragraph 4B.1.2)

CHAPTER-1

1 Overview of Government companies and Statutory corporations

1.1 Introduction

As on 31 March 2001, there were 80 Government companies (68 working companies and 12 non-working companies) and two Statutory corporations (both working) as against 82 Government companies (70 working companies and 12 non-working companies) and two working Statutory corporations as on 31 March 2000 under the control of the State Government. The accounts of the Government companies (as defined in Section 617 of Companies Act, 1956) are audited by Statutory Auditors, who are appointed by the Comptroller and Auditor General of India (CAG) as per provision of Section 619 (2) of the Companies Act, 1956. These accounts are also subject to supplementary audit conducted by the CAG as per provisions of Section 619 of the Companies Act, 1956. The audit arrangements of Statutory corporations are as shown below:

Name of the Corporation	Authority for audit by the CAG	Audit arrangement
Tamil Nadu Electricity Board	Section 69 (2) of the Electricity Supply Act, 1948	Sole audit by CAG
Tamil Nadu Warehousing Corporation	Section 31 (8) of the State Warehousing Corporations Act, 1962	Chartered Accountants and supplementary audit by CAG

1.2 Working Public Sector Undertakings (PSUs)

1.2.1 Investment in working PSUs

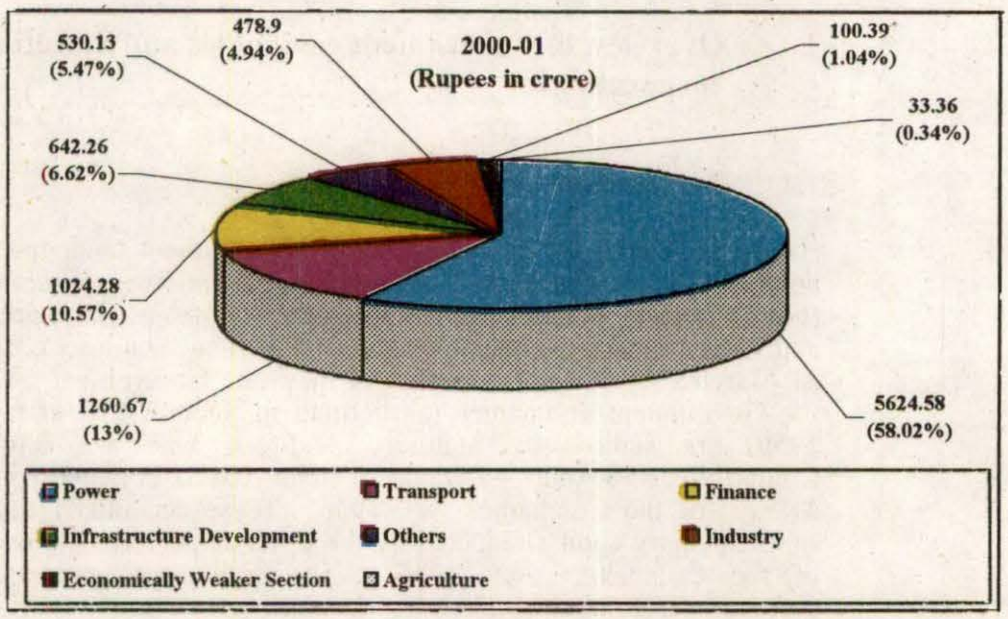
As on 31 March 2001, the total investment in 70 working PSUs (68 Government companies and two Statutory corporations) was Rs.9694.57 crore (equity: Rs.1729.36 crore; long-term loans♣: Rs.7962.01 crore and share application money: Rs.3.20 crore) as against 72 working PSUs (70 Government companies and two Statutory corporations) with a total investment of Rs.9778.52 crore (equity: Rs.1432.95 crore; long-term loans: Rs.8298.00 crore and share application money: Rs.47.57 crore) as on 31 March 2000. The analysis of investment in working PSUs is given in the following paragraphs.

The investment (equity and long term loans) in various sectors and percentage thereof at the end of 31 March 2001 and 31 March 2000 are indicated below in the pie charts.

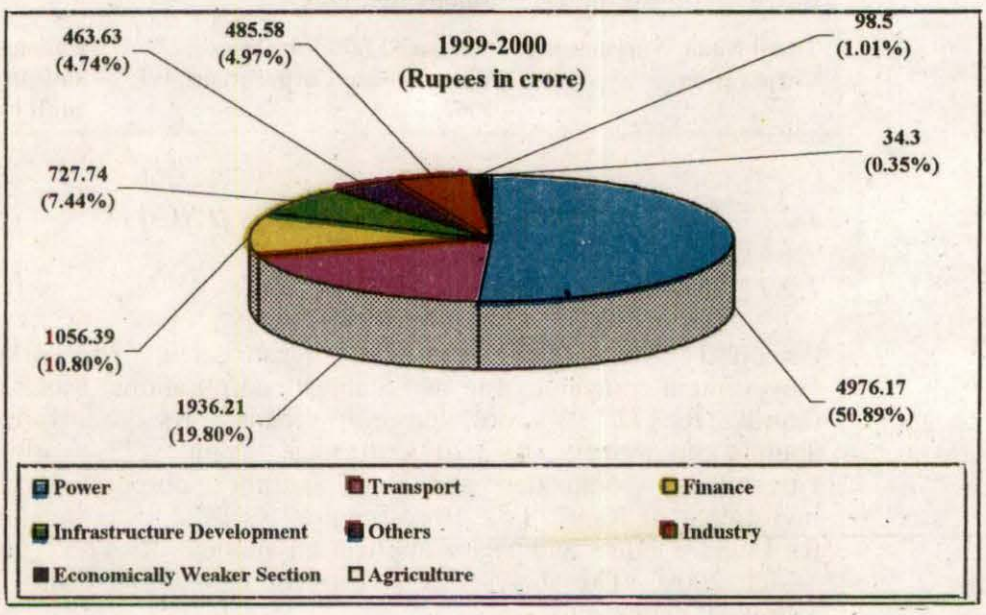
♣ **Long term loans mentioned in Paragraphs 1.2.1, 1.2.1.1 and 1.2.1.2 are excluding interest accrued and due on such loans.**

SECTOR-WISE INVESTMENT IN WORKING COMPANIES AND STATUTORY CORPORATIONS

Total Investment: Rs.9694.57 crore



Total Investment: Rs.9778.52 crore



1.2.1.1 Working Government companies

Total investment in 68 working Government companies as on 31 March 2001 was Rs.4062.38 crore (equity: Rs.1621.75 crore; long term loans: Rs.2437.43 crore; share application money: Rs.3.20 crore) as against total investment of Rs.4794.74 crore (equity: Rs.1425.34 crore; long term loans: Rs.3321.83 crore and share application money: Rs.47.57 crore) as on 31 March 2000.

The summarised statement of Government investment in working Government companies in the form of equity and loans is detailed in **Annexure-1.**

As on 31 March 2001, the total investment in working Government companies comprised 40 **per cent** of equity capital and 60 **per cent** of loans as compared to 30.72 **per cent** and 69.28 **per cent**, respectively as on 31 March 2000.

Due to significant decrease of long term loan of transport sector, the debt equity ratio decreased from 2.56:1 as on 31 March 2000 to 1.50:1 as on 31 March 2001.

1.2.1.2 Working Statutory corporations

The total investment in two working Statutory corporations at the end of March 2001 and March 2000 was as follows:

(Rupees in crore)

	1999-2000		2000-01 (Provisional)	
	Capital	Loan	Capital	Loan
Tamil Nadu Electricity Board	NIL	4976.17	100.00	5524.58
Tamil Nadu Warehousing Corporation	7.61	---	7.61	---

The summarised statement of Government investment in working Statutory corporations in the form of equity and loans is detailed in **Annexure-1**.

1.2.2 Budgetary outgo, grants/subsidies, guarantees, waiver of dues and conversion of loans into equity

The details regarding budgetary outgo, grant/subsidies, guarantees issued, waiver of dues and conversion of loans into equity by State Government to working Government companies and working Statutory corporations are given in **Annexure-1 and 3**.

The budgetary outgo (in the form of equity capital and loans) and subsidies from the State Government to 26 working Government companies and one working Statutory corporation for the three years up to March 2001 are given below:

(Amount – Rupees in crore)

	1998-99				1999-2000				2000-01			
	Companies		Corporations		Companies		Corporations		Companies		Corporations	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Equity capital outgo from budget	28	235.53	1	257.37	27	120.65	1	100.00	7	7.81	---	---
Loans given from budget	2	1.22	---	---	1	1.00	---	---	3	10.57	---	---
Grants	---	---	1	23.87	---	---	1	17.59	---	---	---	---
(i) Subsidy towards Projects/ Programmes/ Schemes	2	60.54	---	---	6	748.93	---	---	8	1599.27	1	16.55
(ii) Other subsidy	25	591.36	1	250.00	17	111.68	1	250.00	14	121.23	1	250.00
(iii) Total subsidy	27	651.90	1	250.00	23	860.61	1	250.00	22	1720.50	1	266.55
Total outgo	36*	888.65	1	531.24	30*	982.26	1	367.59	26*	1738.88	1	266.55

During the year 2000-01, the Government had guaranteed the loans aggregating Rs.3621.19 crore obtained by 21 working Government companies (Rs.1991.19 crore) and one working Statutory corporation (Rs.1630 crore). At the end of the year, guarantees amounting to Rs.3764.59 crore against 31 working Government companies (Rs.2423.59 crore) and one working Statutory Corporation (Rs.1341.00 crore) were outstanding. The Government converted its loan amounting to Rs.247.84 crore into equity capital in 18 transport companies and Tamil Nadu Electricity Board during the year. The guarantee commission paid/payable to Government by Government companies and Statutory corporations during 2000-01 was Rs.3.51 crore and Rs.15.38 crore respectively.

1.2.3 Finalisation of accounts by working PSUs

The accounts of the companies for every financial year are required to be finalised within six months from the end of relevant financial year under Section 166, 210, 230, 619 and 619-B of the Companies Act, 1956 read with Section 19 of the Comptroller and Auditor General's (Duties, Power and Conditions of Service) Act, 1971. They are also to be laid before the Legislature within nine months from the end of financial year. Similarly, in case of Statutory corporations their accounts are finalised, audited and presented to the Legislature as per the provisions of their respective Acts.

However, as could be noticed from **Annexure-2** out of 68 working Government companies only 35 working companies and neither of the two working Statutory corporations have finalised their accounts for the year 2000-01 within the stipulated period. During the period from October 2000 to September 2001, 26 working Government companies finalised 29 accounts for

* **These are actual numbers of companies/corporations, which have received budgetary support in the form of equity, loan and subsidies from the State Government during the respective years.**

previous years. Similarly, during this period two working Statutory corporations finalised two accounts for previous years.

The accounts of 33 working Government companies and two Statutory corporations were in arrears for periods ranging from one year to three years as on 30 September 2001 as detailed below:

Sl. No	Year from which accounts are in arrears	Number of years for which accounts are in arrears	Number of working companies/corporations		Reference to Sl.No. of Annexure 2	
			Government companies	Statutory corporations	Government companies	Statutory corporations
1.	1998-99	3	1	---	33	---
2.	1999-2000	2	3	---	18, 36,37	---
3.	2000-01	1	29	2	♣	1 and 2

The administrative departments have to oversee and ensure that the accounts are finalised and adopted by the PSUs within prescribed period. Though the concerned administrative departments and officials of the Government were appraised quarterly by the Audit regarding arrears in finalisation of accounts, no effective measures have been taken by the Government and as a result, the investment made in these PSUs could not be assessed in audit.

1.2.4 Financial position and working results of working PSUs

The summarised financial results of working PSUs (Government companies and Statutory corporations) as per latest finalised accounts are given in **Annexure-2**. Besides, statement showing financial position and working results of individual working Statutory corporations for the latest three years for which accounts are finalised are given in **Annexure-4** and **5** respectively.

According to latest finalised accounts of 68 working Government companies and two working Statutory corporations, 37 companies had incurred an aggregate loss of Rs.365.36 crore, 29 companies and two corporations earned an aggregate profit of Rs.100.79 crore and Rs.359.80 crore. One Company (Serial Number 14 of **Annexure-2**) was under implementation and in case of one Company (Serial Number 38 of **Annexure-2**) entire amount of loss is to be compensated by State Government.

1.2.4.1 Working Government companies

1.2.4.1.1 Profit earning working companies and dividend

Out of 35 working Government companies, which finalised their accounts for 2000-01 by 30 September 2001, 16 Companies earned an aggregate profit of Rs.75.70 crore and only six companies (Serial Numbers 20, 24, 26, 27, 41 and 68 of **Annexure-2**) declared dividend aggregating to Rs.3.72 crore. The dividend as percentage of share capital in the above six profit making companies worked out to 7.68. The remaining 10 profit making companies did not declare any dividend. The total return by way of above dividend of Rs3.72 crore, worked out to 0.25 **per cent** in 2000-01 on total equity

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♣ **Serial numbers 1 to 3, 5, 8 to 10, 15, 16, 19, 22, 25, 28 to 32, 34, 35, 38, 42 to 44, 50, 51, 58, 63, 66 and 67** investment of Rs.1498.08 crore by the State Government in all Government companies as against 0.76 **per cent** in the previous year. The State Government has not formulated dividend policy for payment of minimum dividend.

Similarly, out of 26 working Government companies, which finalised their accounts for previous years by September 2001, 10 companies earned an aggregate profit of Rs.4.94 crore and only nine companies earned profit for two or more successive years.

1.2.4.1.2 Loss incurring working Government companies

Of the 37 loss incurring working Government companies, 25 companies had accumulated losses aggregating Rs.2046.33 crore, which exceeded their aggregate paid-up capital of Rs.748.17 crore.

Despite poor performance and complete erosion of paid-up capital, the State Government continued to provide financial support to these companies in the form of contribution towards equity, further grant of loans, conversion of loans into equity, subsidy, **etc**. According to available information, the total financial support so provided by the State Government by way of conversion of loan into equity to 15 State Transport Undertakings (Rs.142.79 crore) and subsidy (Rs.88.05 crore) during 2000-01 to 10 companies, out of these 37 companies amounted to Rs.230.84 crore.

1.2.4.2 Working Statutory corporations

1.2.4.2.1 Profit earning Statutory corporations and dividend

Both the Statutory corporations had finalised their accounts for 1999-2000. Tamil Nadu Electricity Board and Tamil Nadu Warehousing Corporation earned a profit of Rs.356.25 crore and Rs.3.55 crore respectively. Of them, Tamil Nadu Warehousing Corporation alone declared a dividend of Rs.0.76 crore for the year 1999-2000.

1.2.4.2.2 Operational performance of working Statutory corporations

The operational performance of the working Statutory corporations is given in **Annexure-6**.

As seen from **Annexure-6**, though hydel power generation increased by 22.6 **per cent** in 2000-01 compared to 1999-2000, thermal generation increased by just 3.2 **per cent** during the same period despite an increase of 5.7 **per cent** in plant load factor.

1.2.5 Return on capital employed

As per the latest finalised accounts (up to September 2001), the capital employed♦ worked out to Rs.7434.14 crore in 68 working companies and total return♠ thereon amounted to Rs.258.13 crore, which is 3.47 **per cent** as compared to total return of Rs.244.96 crore (4.4 **per cent**) in the previous year (accounts finalised up to September 2000). Similarly, the capital employed and total return thereon in case of working Statutory corporations as per the latest finalised accounts (up to September 2001) worked out to Rs.9439.53 crore and Rs.853.51 crore (9.04 **per cent**) respectively against the total return of Rs.757.72 crore (8.1 **per cent**) in previous year (accounts finalised up to September 2000). The details of capital employed and total return on capital employed in case of working Government companies and Statutory corporations are given in **Annexure-2**.

1.3 Non-working PSUs

1.3.1 Investment in non-working PSUs

As on 31 March 2001, the total investment in 12 non-working PSUs (all Government companies) was Rs.48.91 crore (equity: Rs.19.27 crore; long-term loans: Rs.29.64 crore) as against total investment of Rs.56.90 crore (equity: Rs.19.27 crore; long term loans Rs.37.63 crore) in same number of non-working PSUs as on 31 March 2000.

The classification of the non working PSUs was as under:

(Amount – Rupees in crore)

Sl. No.	Status of non-working PSUs	Number of companies	Number of Statutory corporations	Investment			
				Companies		Statutory corporations	
				Equity	Long-term loans	Equity	Long-term loans
(i)	Under liquidation	2[A]	---	3.95	13.13	---	---
(ii)	Under closure	9[B]	---	11.32	6.01	---	---
(iii)	Under merger	1[C]	---	4.00	10.50	---	---
(iv)	Others	---	---	---	---	---	---
	Total	12	---	19.27	29.64	---	---

♦ Capital employed represents net fixed assets (including capital works-in-progress) PLUS working capital except in finance companies and corporations, where it represents a mean of aggregate of opening and closing balances of paid-up capital, free reserves, bonds, deposits and borrowings (including refinance).

♠ For calculating total return on capital employed, interest on borrowed funds is added to net profit/subtracted from the loss as disclosed in the profit and loss account.

A Serial Numbers 6 and 10 of Annexure-2

B Serial Numbers 1 to 5 and 7 to 9 and 11 of Annexure-2

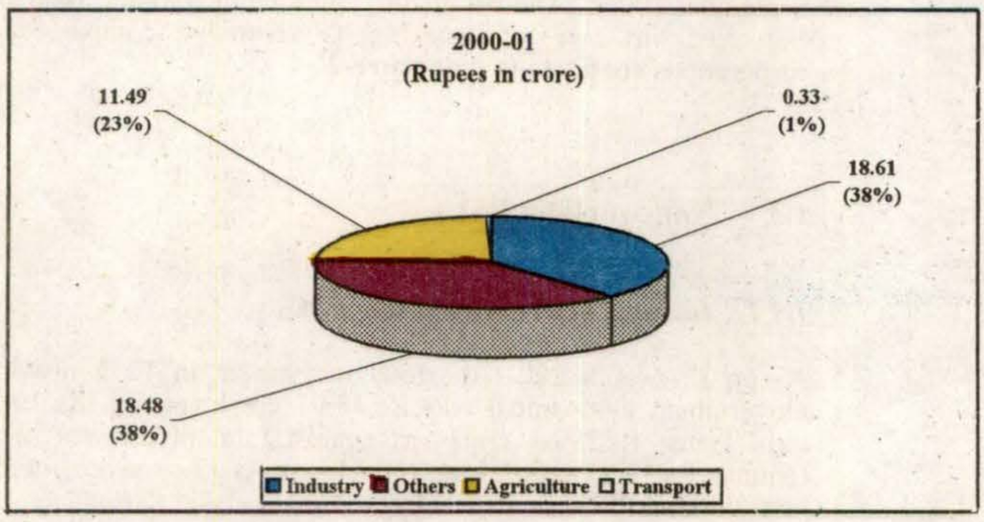
C Serial Number 12 of Annexure-2

Of the above non-working PSUs, 11 Government companies were under liquidation or closure under Section 560 of the Companies Act, 1956 for three to 12 years and substantial investment of Rs.34.41 crore was involved in these companies. Effective steps need to be taken for their expeditious liquidation or revival.

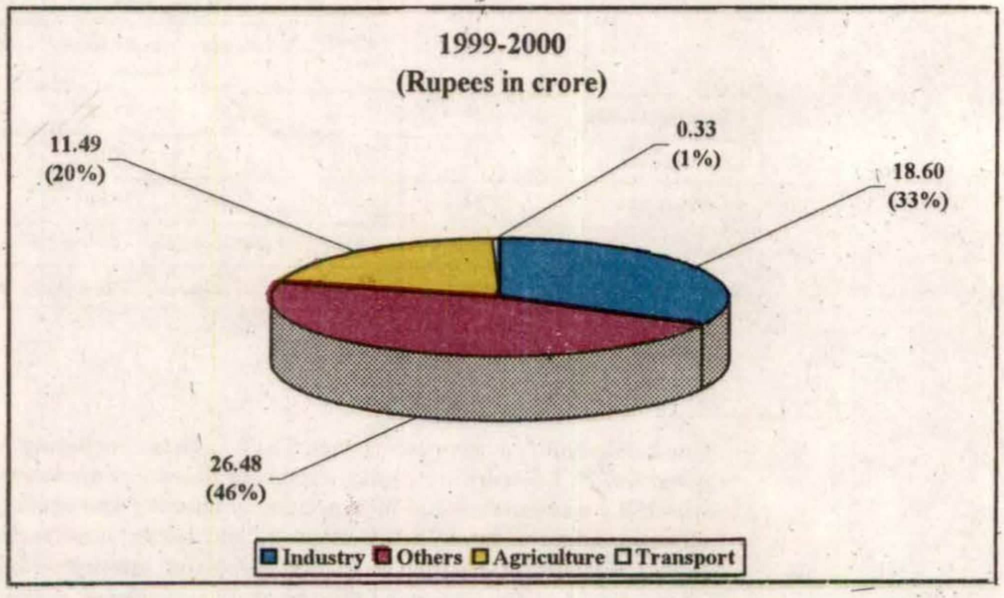
The investment (equity and long term loans) in various sectors and percentage thereof at the end of 31 March 2001 and 2000 are indicated below in the pie charts.

SECTOR-WISE INVESTMENT IN NON-WORKING COMPANIES

Total Investment: Rs.48.91 crore



Total Investment: Rs.56.90 crore



1.3.2 Budgetary outgo, grant/subsidy, guarantees, waiver of dues and conversion of loans into equity

The State Government had not extended any budgetary support to these non-working companies during the year ended 31 March 2001.

1.3.3 Total establishment expenditure of non-working PSUs

The year-wise details of total establishment expenditure of non-working PSUs and the sources of financing them during the last three years up to 2000-01 are given below:

(Amount – Rupees in crore)

Year	No of PSUs	Total establishment expenditure	Financed by				
			Disposal of investment/ assets	Loans from private parties	Government by way of		Others
					Loans	Grants	
Government companies							
1998-99	10♦	2.75	2.58	---	5.25	---	---
1999-2000	10♦	1.50	1.31	---	0.16	---	---
2000-01	10♦	0.61	0.61	---	---	---	---

1.3.4 Finalisation of accounts by non-working PSUs

The accounts of seven non-working companies were in arrears for periods ranging from one year to 11 years as on 30 September 2001 as could be noticed from **Annexure-2**.

1.3.5 Financial position and working results of non-working PSUs

The summarised financial results of non-working Government companies as per latest finalised accounts are given in **Annexure-2**.

The details of paid-up capital, net worth, cash loss/cash profit and accumulated loss/accumulated profit of non-working PSUs as per their latest finalised accounts are given below:

(Amount – Rupees in crore)

Year	Paid-up capital	Net worth	Cash loss (-) / Cash profit(+)	Accumulated loss (-) / accumulated profit (+)
1989-90	0.33	(-)0.10	(+)0.002	(-)1.33
1992-93	2.07	1.66	---	(-)0.40
1996-97	---	0.60	(+)0.36	(+)0.60
1998-99	0.37	(-)2.07	(-)0.06	(-)2.44
1999-2000	7.54	(-)79.28	(-)13.29	(-)86.82

♦ **Information in respect of two companies were not available.**

Year	Paid-up capital	Net worth	Cash loss (-) / Cash profit(+)	Accumulated loss (-) / accumulated profit (+)
2000-01	8.96	(-)7.12	(-)4.32	(-)16.09
Total	**19.27**	**(-)86.31**	**(-)17.31**	**(-)106.48**

(Note: Net worth, cash loss/profit and accumulated profit/loss calculated as per last certified accounts. Seven non-working PSUs have not finalised their accounts for one to 11 years as indicated in Annexure-2)

1.4 Status of placement of Separate Audit Reports of Statutory corporations in Legislature

The following table indicates the status of placement of various Separate Audit Reports (SAR) on the accounts of Statutory corporations issued by the CAG of India in the Legislature by the Government.

Sl. No.	Name of Statutory Corporation	Years up to which SARs placed in Legislature	Years for which SARs not placed in Legislature		
			Year of SAR	Date of issue to the Government	Reasons for delay in placement in Legislature
1.	Tamil Nadu Electricity Board	1999-2000	2000-01	---	Accounts not finalised
2.	Tamil Nadu Warehousing Corporation	1999-2000	2000-01	---	Accounts not finalised

1.5 Disinvestment, privatisation and restructuring of Public Sector Undertakings

The Government decided (May 1997) to amalgamate the then existing 21 State Transport Undertakings (STUs) into seven STUs for operational convenience and economical viability. As a sequel to the above decision during the year 2000-01, two STUs have been merged with the sister STUs (Serial Number 44 and 46 of **Annexure-1**).

1.6 Results of audit by Comptroller and Auditor General of India

During the period from October 2000 to September 2001, the audit of accounts of 59 Government companies (working 54 and non-working five) and two working Statutory corporations were selected for review. As a result of the observations made by CAG, two companies and one Corporation revised their accounts.

Sl.No.	Name of the Company	Year of Accounts
1.	Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited	2000-01
2.	Arasu Rubber Corporation Limited	2000-01
3.	Tamil Nadu Electricity Board	1999-2000

In addition, the net impact of the important audit observations as a result of the review of the remaining PSUs were as follows:

Sl. No.	Details	Number of accounts			Rupees in lakh		
		Government companies		Stautory corpora-tions	Government companies		Statutory corpora-tions
		Working	Non-working		Working	Non-working	
(i)	Increase in profit	---	---	---	---	---	---
(ii)	Decrease in profit	---	---	1	---	---	3464.71
(iii)	Increase in loss	1	---	---	4.82	---	---
(iv)	Decrease in loss	---	---	---	---	---	---
(v)	Errors of classification	1	---	---	281.89	---	---
(vi)	Non-disclosure of material facts	---	---	---	---	---	---

Some of the major errors and omissions noticed in the course of review of annual accounts of some of the above companies and corporations are mentioned below:

1.6.1 Errors and omissions noticed in case of Government companies

Sl. No	Name of Company	Year of accounts	Errors/Omissions	Amount (Rupees in crores)
1.	Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited	2000-01	Overstatement of assets and liabilities due to accounting of Government grant received after 31 March 2001	2.82
2.	Tamil Nadu Ex-servicemen's Corporation Limited	1999-2000	Overstatement of profit due to non-provision for liability towards service tax	0.33
3.	Tamil Nadu Cements Corporations Limited	1999-2000	Non-provision of gratuity liability as per the requirements of Accounting Standard-15	---
4.	Tamil Nadu Cements Corporation Limited	1999-2000	Understatement of loss due to non-provision for liability towards service tax	1.63

1.6.2 Errors and omissions noticed in case of Statutory Corporation

Errors and omissions noticed in case of Tamil Nadu Electricity Board on the accounts for the year 1999-2000.

Sl.No.	Error/Omission	Amount (Rupees in crore)
1.	Excess provision of unbilled revenue	38.99
2.	Short computation of arrears to be collected from customers	13.85
3.	Inclusion of obsolete and non-moving stores and stocks	7.19
4.	Short provision of interest payable on security deposit from consumers	3.05
5.	Non-provision of depreciation on completed civil works	2.64
6.	Inclusion of pension as loans and advances instead of charging it to revenue account	2.48
7.	Non-inclusion of recovery towards excess concession allowed in earlier years	5.06

1.6.2.1 Audit assessment of the working results of Tamil Nadu Electricity Board

Based on the audit assessment of the working results of the Tamil Nadu Electricity Board for the three years up to 2000-01 and taking into consideration the major irregularities and omissions pointed out in the Separate Audit Reports on the annual accounts and not taking into account the subsidy/subventions receivable from the State Government, the net surplus/deficit, percentage of return on capital employed, capital invested will be as under:

(Amount – Rupees in crore)

Sl. No	Particulars	1998-99	1999-2000	2000-01 (Provisional)
1.	Net surplus/(-) deficit as per books of accounts	334.94	356.25	(-)1095.92
2.	Subsidy from the State Government	1076.22	1776.39	250.00
3.	Net surplus/(-) deficit before subsidy from the State Government (1-2)	(-)741.28	(-)1420.14	(-)1345.92
4.	Net increase/decrease in net surplus/(-) deficit on account of audit comments on the annual accounts	(-)76.50	(-)34.65	N.A.
5.	Net surplus/(-) deficit after taking into account the impact of audit comments but before subsidy from the State Government (3-4)	(-)817.78	(-)1454.79	N.A.
6.	Total return on capital employed	753.16	849.99	(-)547.34
7.	Percentage of total return on capital employed	8.1	9.0	---

During the year 1999-2000, net surplus increased marginally by Rs.21.31 crore though subsidy from Government increased by Rs.700.17 crore. This was mainly due to steep increase in revenue expenditure by Rs.1346.30 crore as compared to the increase in revenue of Rs.790.95 crore only.

1.6.3 Persistent irregularities and system deficiencies in financial matters of PSUs

The following persistent irregularities and system deficiencies in the financial matters of PSUs had been repeatedly pointed out during the course of audit of their accounts but no corrective action has been taken by these PSUs so far.

(i) Statutory Corporation

Tamil Nadu Electricity Board

Fixed assets registers have not been maintained at all in four circles and improperly maintained in 16 other circles as a result, the correctness of amount shown under fixed assets could not be ensured.

Capital expenditure on completed works had been arrived at based on the completion certificates from field engineers and not on the basis of closed work orders.

Negative balances were shown under various schedules in many circles to the extent of Rs.72.20 crore, Rs.87.44 crore and Rs.207.93 crore during the three years ended on 31 March 2001.

1.7 Recommendations for closure of PSUs

Even after completion of 16 to 37 years of their existence, the turnover of four Government companies (all working companies) have been less than Rs.5 crore in each of the preceding five years as per latest finalised accounts. Of these four, one Company had been incurring losses for five consecutive years (as per latest finalised accounts) leading to net negative net worth. In view of poor turnover and continuous losses, the Government may either improve performance of above four Government companies or consider their closure.

1.8 Response to Inspection Reports, Draft Paragraphs and Reviews

Audit observations noticed during audit and not settled on the spot are communicated to the head of PSUs and concerned departments of State Government through Inspection Reports. The heads of PSUs are required to furnish replies to the Inspection Reports through respective heads of departments within a period of six weeks. Inspection Reports issued up to March 2001 pertaining to 79 PSUs disclosed that 2583 paragraphs relating to 708 Inspection Reports remained outstanding at the end of September 2001. Of these 705 Inspection Reports containing 2572 paragraphs had not been replied for more than two years. Department-wise break-up of Inspection Reports and Audit Observations outstanding as on 30 September 2001 is given in **Annexure-7**.

Similarly, draft paragraphs and reviews on the working of PSUs are forwarded to the Principal Secretary/Secretary of the administrative department concerned demi-officially seeking confirmation of facts and figures and their comments thereon within a period of six weeks. It was, however, observed that 14 draft paragraphs and five draft reviews forwarded to the various departments during July 2000 to June 2001 as detailed in **Annexure-8** had not been replied to so far.

It is recommended that (a) the Government should ensure that procedure exists for action against the officials who failed to send replies to Inspection Reports/draft paragraphs/reviews as per the prescribed time schedule, (b) action to recover loss/outstanding advances/overpayment in a time bound schedule and (c) revamping the system of responding to the audit observations.

1.9 Position of discussion of Audit Reports (Commercial) by the Committee on Public Undertakings (COPU)

The following table indicates the details regarding number of reviews and paragraphs pending discussion at the end of 31 March 2001.

Period of Audit Report	Number of reviews and paragraphs appeared in the Audit Report		Number of reviews/paragraphs pending for discussion	
	Reviews	Paragraphs	Reviews	Paragraphs
1995-96	4	24	4	21
1996-97	5	24	5	24
1997-98	5	20	5	20
1998-99	6	23	6	23
1999-2000	4	24	4	24

1.10 619-B Companies

There were three companies coming under Section 619-B of the Companies Act, 1956. **Annexure-9** indicates the details of paid-up capital, investment by way of equity, loans and grants and summarised working results of these companies based on their latest available accounts.

Tamil Nadu Newsprint and Papers Limited earned profit of Rs.76.43 crore in 2000-01 against Rs.18.41 crore in 1999-2000 and declared a dividend of Rs.6.11 crore to the State Government during 2000-01.

Tamil Nadu Telecommunications Limited in which the State Government had no share holding, earned a profit of Rs.7.10 crore in 2000-01 against Rs.2.71 crore in 1999-2000.

CHAPTER 2

SECTION 2A

TAMIL NADU CEMENTS CORPORATION LIMITED

HIGHLIGHTS

Tamil Nadu Cements Corporation Limited (Company) was incorporated in February 1976 with the main objective to manufacture, purchase and sale of cement. The Company, which earned profit of Rs.14.56 crore in 1996-97 started incurring losses since 1998-99 and accumulated loss of Rs.39.94 crore as on 31 March 2001 has completely eroded the paid-up capital of Rs.17.99 crore.

(Paragraphs 2A.1, 2A.2 and 2A.6)

Due to non-implementation of modernisation programme in Alangulam cement plant, the expenditure of Rs.0.38 crore incurred towards consultancy and additional interest burden of Rs.1.70 crore per annum on funds raised became unproductive. Further, there was unproductive investment of Rs.4.23 crore in a land under dispute.

(Paragraph 2A.7)

Production loss in kilns due to controllable factors during the last five years ending 31 March 2001 aggregated to 401493 MTs in Alangulam and 194657 MTs in Ariyalur valued at Rs.108.48 crore.

(Paragraph 2A.7.3.1)

Similarly, there was production loss in cement mills due to controllable factors during the period under review aggregated to 941395 MTs in Alangulam and 198800 MTs in Ariyalur valued at Rs.239.45 crore.

(Paragraph 2A.7.3.2)

The Company did not produce the budgeted quantity of Pozzalanic Portland Cement (PPC) resulting in loss of contribution to the extent of Rs.11.89 crore during the five years ending 31 March 2001. Further, inadequate use of slag in production of cement by Alangulam cement plant resulted in foregoing of savings to the extent of Rs.8.10 crore.

(Paragraph 2A.7.4)

Excess consumption of power and coal resulted in an extra expenditure of Rs.15.50 crore in the two cement plants. Further, despite receipt of Government approval for use of imported coal, the Company could not import the coal due to which it was deprived an annual savings of Rs.16.40 crore.

(Paragraph 2A.7.5.)

Asbestos Sheet Unit at Alangulam and Asbestos Pipe Unit at Mayanur suffered production loss of Rs.9.43 crore and Rs.21.36 crore respectively due to controllable factors. Further, there was production loss of Rs.6.12 crore due to non-achievement of output norm in Mayanur unit. The unit (Mayanur) was not functioning since February 2000 due to lack of orders and the Company incurred an unproductive expenditure of Rs.3.99 crore during 2000-01.

(Paragraphs 2A.8 and 2A.9)

2A.1 Introduction

Tamil Nadu Cements Corporation Limited (TANCEM) was incorporated in February 1976 as a subsidiary of Tamil Nadu Industrial Development Corporation Limited (TIDCO) to manage the existing cement factory at Alangulam (set up in 1970-71). Subsequently, the Company (TANCEM) established one more cement plant at Ariyalur in Trichy district in 1979, an Asbestos Sheet Unit at Alangulam in 1981, and an Asbestos Pipe Unit at Mayanur in 1984. It also took over (1989) the defunct Stoneware Pipe Unit located at Vridhachalam from Tamil Nadu Ceramics Limited. During 1994, it became a separate Government Company, when the equity shares held by TIDCO were transferred in favour of Government.

2A.2 Objectives

The main objectives of the Company **inter alia**, include the following:

- Manufacture, purchase and sale of cement.
- Purchasing, taking on lease or otherwise acquiring the business of any cement manufacturing company in India.
- Sale of concrete, asbestos, gypsum, coal, jute, **etc**.

The Company in pursuance of these objectives apart from maintaining the five manufacturing units as stated earlier, has been mining the quarries of limestone and clay connected with these factories.

2A.3 Organisational set-up

The affairs of the Company are managed by a Board consisting of nine directors headed by the Chairman. The Chairman is also the Managing Director of the Corporation and is assisted by unit heads. The Committee on Public Undertakings (COPU) had recommended that in order to ensure continuity and accountability in the management, the Chairman-cum-Managing Director (CMD) should hold the post for a minimum period of three years. During the period under review, it was noticed in audit that out of the seven officials, who held the post of CMD, none of the CMDs completed the period of three years and two held the post just for six months. The Company was thus deprived of leadership on long term basis.

2A.4 Funding

2A.4.1 Capital structure

The authorised share capital of the Company was Rs.18 crore against which the issued and paid-up capital by the Government of Tamil Nadu was Rs.17.99 crore as on 31 March 2001.

2A.4.2 Borrowings

The borrowings mobilised by the Company by way of loans from financial institutions, public deposits, cash credit, **etc.**, which stood at Rs.26.53 crore during 1996-97 had increased to Rs.81.19 crore in 2000-01. The borrowings included Rs.14 crore availed from Industrial Development Bank of India (March 1998) towards working capital requirements and normal capital expenditure. As the repayment of debts were defaulted, the Company had to pay Rs.44.17 lakh as penal interest.

2A.5 Scope of Audit

The performance of the Company's cement plants and asbestos sheet unit was last reviewed and included in the Report of the Comptroller and Auditor General of India (CAG) for the year ended 31 March 1982 (Commercial) and asbestos pipe unit was reviewed and included in the Report of CAG (Commercial) for the year ended 31 March 1987. The reports were discussed by COPU and its recommendations are contained in 31st and 134th Reports respectively. The recommendations of COPU have also been examined and commented in the review, wherever considered necessary. The present review conducted during January to April 2001 covers the activities of the Company for the five year period from 1996-97 to 2000-2001.

2A.6 Financial position and working results

2A.6.1 Financial position

The Company's financial position at the end of each of the five years upto 31 March 2001 are given in **Annexure-10**.

A review of financial position indicated the following:

(a) The paid-up capital of Rs.17.99 crore had been eroded by the accumulated loss of Rs.39.94 crore at the end of 2000-01.

(b) The reserves and surplus, which touched a peak of Rs.31.45 crore in 1997-98 was completely wiped out (barring a committed reserve of Rs.15 lakh) by the continuous losses incurred during the last three years ending 2000-01 amounting to Rs.72.11 crore. The accumulated losses of the Company was Rs.39.94 crore as on 31 March 2001.

(c) The net worth became negative during 2000-01.

(d) The borrowings had increased by Rs.54.66 crore in the last five years, which was mainly due to:

(i) Continuous losses from 1998-99 onwards to finance working capital needs.

(ii) Non-recovery of sundry debtors (Rs.9.95 crore) for more than three years.

(iii) Discontinuance of 100 **per cent** advance payment by Government Departments for supply of cement with effect from 1998-99.

2A.6.2 Working results

The working results of the Company for the five years up to 31 March 2001 is given in **Annexure-11**. Analysis of the working results indicated the following:

The Company, which earned net profit of Rs.10.20 crore in 1997-98 started incurring losses from 1998-99 and the accumulated loss as on 31 March 2001 stood at Rs.39.94 crore (provisional accounts). This loss was mainly contributed by:

(i) Alangulam cement plant (accumulated loss: Rs.56.55 crore) due to non-modernisation of the plant, under utilisation of plant's capacity and excess consumption of power and coal (discussed in Paragraphs 2A.7.1, 2A.7.2 and 2A.7.5).

(ii) Asbestos Pipe unit, Mayanur (accumulated loss: Rs.11.03 crore) incurred unproductive expenditure of Rs.3.99 crore due to stoppage of production from February 2000 onwards (discussed in Paragraph 2A.9).

(iii) Stoneware pipe unit (accumulated loss:Rs.1.72 crore) whose capacity utilisation was very low due to lack of orders (discussed in Paragraph 2A.10).

(iv) Cessation of trading activity in cement from 1998-99, which was hitherto contributing substantially towards profit of the Company.

2A.7 Performance of cement plants

The Company has got two cement plants one at Alangulam and the other at Ariyalur. The cement plant at Alangulam adopts "wet process" for production whereas Ariyalur plant adopts "dry process". The stages involved in both the processes are:

- Crushing the limestone quarried from mines, feeding crushed limestone into kilns for clinkerisation, grinding clinkers to get cement by adding gypsum and fly ash.

- In the wet process crushed limestone is mixed with water to get slurry, which is then fed into kilns, whereas in the dry process no water is used.

Unproductive expenditure of Rs.0.38 crore and additional interest burden of Rs.1.70 crore per annum due to non-implementation of modernisation programme in Alangulam cement plant.

While most of the wet process plants had gone in for conversion to dry process in view of considerable savings in the fuel and power cost (estimated to be around 52 **per cent** of total cost of production), the Company's proposal (March 1993) to modernise its Alangulam plant at an estimated cost of Rs.139 crore was not approved by the State Government. The Company's subsequent proposal (August 1996) was cleared by the Government in July 1997 at an estimated cost of Rs.201 crore. As the Company could not mobilise the funds either from the Government or from the financial institutions the project could not be implemented. In the meantime, an expenditure of Rs.38.46 lakh incurred towards project consultancy and other charges became unproductive. Further, the public deposit of Rs.13.56 crore raised during 1996-97 for funding the project partly was wiped out due to heavy cash losses suffered by the Company, which resulted in additional interest burden of Rs.1.70 crore **per annum**.

2A.7.1 Limestone mining

Unproductive investment of Rs.4.23 crore in a land under dispute.

Limestone is the basic raw material for manufacture of cement. Hence, availability of good quality limestone is required to be ensured. While the mining reserves under the lease (1221.70 hectares) in Alangulam are estimated to last for forty years, in Ariyalur the same (2465.03 acres) would last for 24 years. The Company deposited (November 1996 to December 1999) Rs.4.23 crore for acquiring mining rights in respect of 1114.16 acres of land in Ariyalur. Portion of this land has been acquired by other cement manufacturers and are under dispute as such these could not be exploited. Consequently, the investment of Rs.4.23 crore became unproductive.

The requirement of crushed limestone to achieve the installed capacity of cement mills at Alangulam and Ariyalur was 6 lakh tonnes and 8.71 lakh tonnes respectively. As against this, actual quantity of limestone raised during the period under review, are detailed below:

Year	Alangulam (MTs)	Ariyalur (MTs)
1996-97	296899	625768
1997-98	189222	724662
1998-99	358516	814566
1999-2000	241968	740482
2000-01 (Provisional)	210668	643420

The shortfall in mining of limestone in Alangulam was due to existence of high over burden content and non-availability of quality limestone deposits. In view of this, the Company engaged (March 1994) National Council for Building Materials (NCBM) for preparation of Computer Aided Mine Plan (CAMP) for carrying out survey, geological mapping and monitoring of exploration work of plant's mines. Though an amount of Rs.16.13 lakh had been spent as early as in 1995, NCBM had not given any report so far (March 2001), defeating the very purpose of engaging the consultant.

2A.7.2 Production of cement

2A.7.2.1 Capacity utilisation

As against the installed capacity of 4 lakh MTs and 5 lakh MTs **per annum** at Alangulam and Ariyalur plants respectively, the details of actual capacity utilisation during the last five years are given below:

Year	Alangulam		Ariyalur	
	Capacity (4 lakh MTs)		Capacity (5 lakh MTs)	
	Production (MTs)	Percentage of utilisation	Production (MTs)	Percentage of utilisation
1996-97	226594	57	462596	93
1997-98	246725	62	538684	108
1998-99	300378	75	487106	97
1999-2000	285558	71	445913	89
2000-01 (Provisional)	302496	76	459545	92

Poor capacity utilisation in Alangulam plant.

From the above, it could be seen that the capacity utilisation of Alangulam plant was poor and the maximum utilisation was 76 **per cent** only. The main reasons for the poor capacity utilisation of Alangulam plant were poor quality of limestone and poor operation of supporting mills as discussed in the succeeding paragraphs.

2A.7.3 Performance of kilns and cement mills

2A.7.3.1 Performance of Kilns

Production loss of 596150 MTs valued at Rs.108.48 crore due to controllable factors.

The performance of the kilns and cement mills at the two plants during the last five years is given in **Annexure-12**. From the Annexure, it could be seen that the production loss in kilns due to controllable factors (mechanical and electrical repairs, brick fixing, Electro Static Precipitator (ESP) failure, stoppage due to non-adoption of pollution control norms, **etc**.,) during the last five years aggregated to 401493 MTs in Alangulam and 194657 MTs in Ariyalur valued at Rs.108.48 crore.

Further analysis of idle hours in kilns due to controllable factors revealed the following:

(1) Alangulam and Ariyalur plants lost 9671 hours due to electrical and mechanical breakdowns and frequent brick fixing, **etc**., in excess of normal maintenance hours during the period from 1996-97 to 2000-01. The total production loss of clinker worked out to 263926 MTs valued at Rs.48.90 crore (Alangulam 201050 MTs valued at Rs.40.60 crore and Ariyalur 62876 MTs valued at Rs.8.30 crore).

(2) In Alangulam plant, the Electrostatic Precipitator of Kiln-I caught fire (October 1997) due to excess firing of coal in the kiln by unskilled labourers. Consequently, Kiln-I could not be operated from October 1997 to January 1998 resulting in loss of 2821 hours corresponding to a production loss of 74051 MTs of clinker valued at Rs.16.99 crore.

(3) Alangulam plant had to stop the production in April and May 1997 for 3250 hours to implement pollution control norms as per emission levels, which resulted in production loss of 85313 MTs valued at Rs.19.57 crore.

(4) The poor utilisation of the kiln at Alangulam plant during the three years ending 1998-99 resulted in stoppage of cement mill for 1777 hours due to shortage of clinker with production loss of 46647 MTs valued at Rs.10.55 crore.

Loss of production valued at Rs.55.91 crore for want of coal.

Despite the COPU's earlier recommendations (31st Report in April 1986) that the Company should not suffer production loss for want of coal, it was noticed that Alangulam and Ariyalur plants had lost 8185 hours (production loss: 214856 MTs of clinker valued at Rs.40.93 crore) and 3650 hours (114063 MTs of clinker valued at Rs.14.98 crore) respectively for want of coal during the period under review.

2A.7.3.2 Performance of cement mills

Loss of production valued at Rs.239.45 crore in cement mills due to controllable factors.

From **Annexure-12**, it could be seen that the production loss in cement mills due to controllable factors like mechanical and electrical repairs, want of clinker, **etc**., during the last five years aggregated to 941395 MTs in Alangulam and 198800 MTs in Ariyalur valued at Rs.239.45 crore.

Audit analysis of hours lost due to controllable factors in the cement mills revealed the following:

(1) Alangulam and Ariyalur plants lost 4499 hours due to electrical and mechanical break downs during the period under review besides losing 6914 hours on maintenance in excess of the normal maintenance hours, which resulted in loss of production of 479105 MTs valued at Rs.100.59 crore (this includes production loss of 242080 MTs valued at Rs.52.68 crore due to maintenance hours utilised in excess of normal maintenance hours).

(2) As against the rated output of 35 MTs and 80 MTs per hour in Alangulam and Ariyalur plants respectively, the actual out put was 26.27 to 28.62 MTs and 68.03 to 81.06 MTs during the five years ended 31 March 2001. Due to this lower out put, the two plant lost 377104 MTs and 152302 MTs of production valued at Rs.92.29 crore during this period.

2A.7.4 Cost of production and profitability

The cost of production, variable cost, contribution, break-even point, **etc**., of the two cement plants during the past five years are given **Annexure-13**.

From **Annexure-13**, it could be seen that the cost of production at Alangulam was always higher compared to Ariyalur and this was mainly due to non-modernisation of the plant as discussed in Paragraph 2A.7.1. Further, the break even production was more than 100 **per cent** of the plant's capacity in the last four years in Alangulam and last two years in Ariyalur indicating unviability of the plants.

Loss of additional contribution of Rs.11.89 crore due to non-production of budgeted quantity of PPC.

(i) It was also observed in audit that the sale of Pozzalanic Portland Cement (PPC) was more advantageous than the sale of Ordinary Portland Cement (OPC) in view of (1) high cost of production of OPC (2) better contribution from PPC and (3) sale of PPC was to stockist's market against advance payment, when compared to sale of OPC to Government Departments on credit. Despite this, the Company did not produce the budgeted quantity of PPC resulting in loss of additional contribution to the extent of Rs.11.89 crore during the five years ended 31 March 2001. Reasons of non-production of PPC were not available.

Shortfall in usage of cheaper slag in place of clinker resulted in foregoing of savings of Rs.8.10 crore.

(ii) The Alangulam plant planned to produce "Super Star" cement (which had a ready market) by substituting clinker with cheaper slag to the extent of 60000 MTs **per annum** as this would bring down the cost of production of cement by Rs.454 per MT. It was, however, noticed in audit that the plant did not use the envisaged quantity of slag, which resulted in foregoing savings to the extent of Rs.8.10 crore during the three years ended 31 March 2000.

2A.7.5 Consumption of fuel in the plants

Power and coal are the two main components of cost in cement production and any cost reduction measure achieved in these components would minimise production cost. The details of norms fixed for consumption of power and coal, actual consumption and excess consumption are indicated in **Annexures-14** and **15**, respectively.

(a) Power

Extra expenditure of Rs.7.10 crore due to excess consumption of power and payment of penalty.

From the **Annexure-14**, it could be seen that the actual power consumption was higher than the norms fixed by the Company in both the plants resulting in an extra expenditure of Rs.5.62 crore (Rs.2.84 crore in Alangulam and Rs.2.78 crore in Ariyalur) during four years up to 1999-2000. Further, Alangulam plant paid a penalty of Rs.1.48 crore during the period under review due to having its supply through 11 KVA in place of 33 KVA transformer as required by the terms and conditions of supply prescribed by the Tamil Nadu Electricity Board (TNEB) for consumers having sanctioned demand exceeding 5000 KVA.

(b) Coal

Extra expenditure of Rs.9.88 crore due to excess consumption of coal.

It may be seen from **Annexure-15** that as against the specific heat consumption of 1500 Kcal/Kg and 950 Kcal/Kg for clinker production in Alangulam and Ariyalur plants respectively, the actual consumption was far in excess during the three years up to 1998-99 in Alangulam and during one year (1996-97) in Ariyalur plant resulting in excess consumption of coal (to produce the extra heat) valued at Rs.9.88 crore.

Foregoing savings of Rs.16.40 crore per annum due to non-import of coal.

As a cost reduction measure, the Company proposed (May 1997) to use imported coal as fuel instead of indigenous coal. Even though the Government gave administrative approval for import of coal in 1998 itself, the Company could not import coal due to non-finalisation of tenders. It was estimated by the Company that usage of imported coal would result in a savings of Rs.16.40 crore **per annum**. It is pertinent to point out that out of 11 cement plants in Tamil Nadu except these two plants all the other nine plants are using imported coal. The Company also did not explore the possibility of procuring cheaper coal indigenously or substitute fuel with a view to reduce the costs.

2A.7.6 Pollution control

Cement industry being a heavily polluting one is being closely monitored by the Tamil Nadu Pollution Control Board (TNPCB). It was observed (June 2000) by TNPCB that Alangulam plant has exceeded the permitted outlet dust emission and suggested corrective action, which is yet to be complied with by the plant (March 2001). In respect of Ariyalur plant, TNPCB directed to implement various pollution control measures like (a) continuous monitoring stations in major polluting chimneys (b) installation of pollution free fly ash system in cement mill (c) revamping of gas condition towers at raw mill and (d) construction of oxidation pond to treat sewerage water but the plant is yet to act on these directives (March 2001).

2A.7.7 Marketing of cement

2A.7.7.1 Sales performance

The details of installed capacity, target and actual sales of both the cement plants for the last five years up to 31 March 2001 are given below:

Installed capacity: 9 lakh MTs per annum

(In MTs)

Year	Targeted sales	Percentage of targeted sales to installed capacity	Actual sales	Percentage of actuals sales to target
1996-97	795000	88.33	688857	86.65
1997-98	808000	89.77	783651	96.99
1998-99	885000	98.33	778241	87.94
1999-2000	877000	97.44	739686	84.34
2000-01 (Provisional)	789000	87.66	757141	95.96

From the above table, it would be seen that sales targets were fixed at lower levels than the installed capacity (9 lakh MTs **per annum**) and the same ranged from 87.66 to 98.33 **per cent** of the installed capacity during the last five years ended 31 March 2001. Even these lower targets could not be achieved by the Company in any of these five years. Further, the Company was forced to supply cement to Government Departments at the lowest tendered rates from 1998-99 due to withdrawal of purchase preference from that year and this brought down the per tonne sales realisation and contribution from 1998-99. The Company, instead of increasing its sales to overcome the effect of purchase preference withdrawal, actually reduced the targeted sales from 885000 MTs **per annum** in 1998-99 to 789000 MTs **per annum** in 2000-01. The actual sales also declined from 778241 MTs in 1998-99 to 757141 MTs in 2000-01 resulting in under absorption of fixed costs and consequent losses.

2A.7.7.2 Sale of additional quantities at lower rates

Loss of Rs.2.92 crore due to supply of additional quantity of cement at the lowest tendered rates.

(i) As per the terms of Government Order (February 1997), the Company was to supply to the District Rural Development Agency (DRDA) only up to 50 **per cent** of the tendered quantity by matching the lowest rates offered and remaining quantity at the rates fixed by the Company for supply to other Government Departments. It was however, noticed that the Company supplied quantities in excess of 50 **per cent** at lowest tendered rates (due to the failure of other producers to supply the quantities ordered on them by DRDA) instead of at rates fixed by the Company for Government supplies resulting in a loss of Rs.2.92 crore during the three years ended with 31 March 2001.

(ii) Similarly, the Company quoted (August 2000) Rs.115 per bag for supply of 500 tonnes of cement to Neyveli Lignite Corporation but supplied 15000 tonnes at this rate. As the tendered rates for the above supply was unreasonably low compared to the lowest supply rate of Rs.125 per bag prevailing during that period, the excess supply of cement over and above the tendered quantity resulted in loss of revenue of Rs.29 lakh.

2A.7.8 Sales

(a) Undue benefit to traders

Revenue loss of Rs.0.81 crore due to sale on lower rates to traders

From 1998-99 onwards, the Company devised a system of supply of cement to bulk consumers directly at rates less than that of stockists (trading orders). However, it was noticed that stockists were also allowed to lift cement at bulk order rates, though they were not eligible as per the original scheme and this resulted in revenue loss of Rs.81.26 lakh to the Company during the three years ended 31 March 2001.

(b) Non-recovery of additional packing cost

Loss of Rs.1.36 crore due to non-collection of additional packing cost from traders.

Though the Company supplied cement only in HDPE bags in Tamil Nadu, its supplies to Kerala traders were made in paper bags at their request involving additional cost of Rs.6.26 to Rs.7.25 per bag. As the Company did not recover the entire additional cost from the purchaser, it had to lose Rs.1.36 crore on supply of cement in paper bags (28.92 lakh bags) during the period from 1996-97 to 2000-01.

(c) Non-adoption of revised rate for supply of cement

The terms and conditions of supply of cement stipulated that prices prevailing at the time of delivery would be charged to consumers. But a test check of records at Alangulam plant for the year 2000-01 revealed that 24662 tonnes of cement were sold at pre-revised rates instead of the revised rates prevailing at the time of delivery resulting in a loss of Rs.25.73 lakh. It is pertinent to mention here that when there was a fall in price, the Company supplied at the revised reduced rates during this period.

2A.8 Asbestos Sheet Unit, Alangulam

The unit was set up (October 1981) at Alangulam near the cement factory of the Company at a capital cost of Rs.2.59 crore.

2A.8.1 Capacity utilisation and production performance

(i) The details of capacity utilisation, production performance and profitability of the unit during the last five years ended with 31 March 2001 are furnished in **Annexure-16**.

From the details furnished in **Annexure-16**, it could be seen that against installed capacity of 36000 MTs **per annum** of the plant, the capacity fixed by the Company was 30000 MTs **per annum**. Considering the fact that the Company was very much aware of the demand supply gap in AC sheet market (April 1997) fixation of low targeted capacity lacked justification. As against the reduced capacity of 30000 MTs, the actual performance was between 74 and 91 **per cent** during last five years ended 31 March 2001.

Loss of 3625 production hours due to controllable factors resulting in production loss of Rs.9.43 crore.

(ii) During the period from 1996-97 to 2000-01, out of 36942 productive hours available, the unit lost 3625 hours due to controllable factors like mechanical and electrical breakdown, process stoppage, power failure, want of fly ash, **etc**., resulting in production loss of 13775 MTs valued at Rs.9.43 crore.

(iii) Though the unit earned profit of Rs.5.12 crore during 1996-97 and 1997-98 it subsequently incurred loss of Rs.1.45 crore in the next three years up to 2000-01 due to increase in cost of production and decrease in sales realisation. The abnormal loss during 1998-99 was due to the strike by the workers, which paralysed the production of the unit for about a month. It was observed that during this period, Company's traders switched over to other brands and further, as many as 13 new units started producing AC sheets and sold their products at very low rates due to new industries concessions such as sales tax exemption enjoyed by these units.

Further, it was observed that:

Production loss of Rs.0.97 crore per annum due to non-availability of templates.

(i) In order to reduce the consumption of costlier cement in the production of AC sheets, the unit started substituting a portion of cement with cheaper fly ash from the year 1993. The usage of fly ash reduced cost of production, but increased the initial setting time of sheets by about four hours necessitating usage of more templates in which the sheets are set. Though the unit estimated that an additional 200 templates costing about Rs.18 lakh would have been sufficient to compensate the production loss due to extra setting time, it did not procure them, which resulted in a minimum annual production loss of 1500 MTs valued at Rs.97.23 lakh. The unit confirmed this loss.

Production loss of Rs.0.98 crore due to non-achievement of output norm.

(v) As per the production norms for AC sheets, the raw material mix of fibre, cement and fly ash in the ratio of 8.5, 42.5 and 25 **per cent** respectively would yield out put of 100 **per cent** after adding water to an extent of 24 **per cent**. However, it was noticed that this output ratio was not achieved in the three years under review resulting in production loss of 1466 MTs valued at Rs.98 lakh. The Company attributed the reasons such as operational variations and stoppage/breakdown of plant for shortfall in production. The reply is not tenable as the output norms have been fixed after taking into consideration all these factors.

2A.9 Asbestos Pipe Unit, Mayanur

The asbestos pipe plant was set up in 1984 as a unit of the Company at Mayanur (near Karur) at a capital cost of Rs.9.45 crore and it commenced production in the same year with an installed capacity of 36000 MTs **per annum**.

2A.9.1 Capacity utilisation and production performance

The details in respect of capacity utilisation, production performance and profitability of the unit for the last five years ended with 31 March 2001 are furnished in **Annexure-17**.

Stoppage of production from February 2000 for want of orders resulted in unproductive expenditure of Rs.3.99 crore.

(i) From the Annexure, it could be seen that the capacity utilisation started declining from 1998-99 onwards and the unit was forced to stop production from February 2000 onwards due to lack of orders from Tamil Nadu Water Supply and Drainage Board (TWAD), which started awarding orders on turnkey basis shifting its product preference to PVC and pre-stressed concrete pipes. Consequently, the unit, which earned profit of Rs.3.56 crore during the two years up to 1997-98 had incurred loss of Rs.14.59 crore during the subsequent three years. Further, due to stoppage of production from February 2000, the unit paid idle wages of Rs.3.33 crore, Rs.43.95 lakh as administrative overheads and Rs.21.66 lakh as minimum power charges during 2000-01.

It was further observed that:

Production loss of Rs.6.12 crore due to non-achievement of output norm.

(ii) As per the technical norms for production of pipes, each tonne of output (pipes) should comprise input of cement, fibre and gain in weight in the ratio of 79.5:12.5:8. However, the norm prescribed for gain in weight (8 **per cent**) was not achieved in any of the years resulting in production loss of 4552 MTs valued at Rs.6.12 crore. The Company attributed the reasons for shortfall in gain due to ban on import of blue fibre, which was earlier used. The reply is not tenable as the norm fixed for gain in weight while using blue fibre was 18 **per cent**, which was scaled down to 8 **per cent** for use of other fibres.

Production loss of Rs.21.36 crore due to controllable causes.

(iii) During the period under review, out of the available 36000 hours for production, the unit could utilise only 15977 hours leading to 20023 idle hours. Out of this, 4336 hours were lost due to avoidable causes like mechanical and electrical breakdowns, power failure, process stoppage, **etc**., with consequent production loss of 15176 MTs valued at Rs.21.36 crore. It is pertinent to mention here that though the unit had three DG sets sufficient to take care of entire production in case of power cut, the unit lost 123 hours due to power cut with production loss of 431 MTs.

Piling up of stock of pipes worth Rs.2.03 crore due to production without order.

(iv) The production of pressure pipes involves use of "mandrels" around which pipes are produced as thin layers. As the unit failed to keep sufficient quantity of mandrels of popular sizes, it was forced to produce 1650.7 MTs (value: Rs.2.03 crore) pipes of sizes not ordered (called combination sizes) and these were lying in stock for more than three years. It is pertinent to mention that the COPU in their 134th Report (April 1993) recommended to take immediate action to liquidate the inventory. The Company informed (January 1994) the Committee that the unit had changed over the system of manufacturing pipes after obtaining order. However, from the above facts it is evident that it had not changed over the system and piled up stock of pipes not ordered worth Rs.2.03 crore as on 31 March 2001.

Excess consumption of power resulting in extra expenditure of Rs.0.70 crore.

(v) The consumption of power for production of pipes was in excess of norms in all the four years up to 1999-2000 resulting in an extra expenditure of Rs.70.44 lakh. It was replied that the excess consumption of power was due to production of smaller dia pipes in 1996-97 and 1997-98 and due to frequent power failures in 1998-99 and 1999-2000. As the norms for consumption of power was fixed for production of pipes of all sizes, the reply of the Company that the excess consumption of power was due to production of smaller dia pipes is not acceptable.

2A.9.2 Payment of Canalising/Selling agents commission

Payment of commission of Rs.0.55 crore to selling agents against the recommendations of COPU.

It was observed that the unit sought the services of canalising agents for procurement of orders and recovery of payments even from Government departments, **viz**., TWAD Board and Kerala Water Authority (KWA) and paid commission of Rs.55.44 lakh during the last five years ended with 31 March 2001. Considering that both TWAD Board and KWA are Government agencies, the appointment of canalising/selling agents to secure orders/realisation of dues and payment of commission for this purpose was not only avoidable but also against the specific recommendations (September 1993) of the COPU not to use the services of such agents for procuring orders/payments from the Government.

2A.10 Stoneware Pipe Unit, Vridhachalam

The Company took over (October 1989) the defunct Stoneware Pipe Unit at Vridhachalam from Tamil Nadu Ceramics Limited. At the time of take over, the capacity of the plant was 4800 MTs **per annum**, which was increased to 7200 MTs in September 1993 by incurring an additional capital expenditure of Rs.80 lakh.

2A.10.1 Capacity utilisation and profitability

The details of capacity utilisation and profitability of the unit during the last five years ended with 31 March 2001 are given in **Annexure-18**.

Objective of investment of Rs.0.80 crore to increase the productive capacity could not be achieved.

From the details in **Annexure-18**, it could be seen that even after reducing the target for production, the Company was never able to achieve the reduced target in any of the years. As mentioned above, the main objective of investment of Rs.80 lakh was to increase the installed capacity to 7200 MTs **per annum** but the production never exceeded the earlier installed capacity of 4800 MTs **per annum** thus, the objective of investment could not be achieved.

The production started declining from 1999-2000 onwards due to dwindling orders from the major customers **viz.,** Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB), Tamil Nadu Slum Clearance Board and Tamil Nadu Housing Board, who had changed over to execution of their projects on turnkey basis. It was observed that due to high overhead cost, the unit could not offer its products at competitive rates and hence lost an opportunity (December 1999) to supply 32000 MTs of stoneware pipes of turnkey projects of municipalities in the State.

2A.10.2 Marketing

The details of targets and actual sales of the unit for the last five years ended with 31 March 2001 are given below:

	1996-97	1997-98	1998-99	1999-2000	2000-01 (Provisional)
Targeted sales (MTs)	**5850**	**5400**	**6100**	**5400**	**4800**
Actual sales (MTs)	**4272**	**5756**	**4396**	**2336**	**770**
Sales to CMWSSB (MTs)	**1505**	**3899**	**3686**	**1593**	**127**
Percentage of CMWSSB sales to total sales	**35.23**	**67.74**	**83.85**	**68.19**	**16.49**

From the above details, it could be seen that the unit's sales performance started declining after 1997-98 and there was marginal sale of 770 MTs in 2000-01.

Piling up of unsold inventory valued at Rs.0.45 crore.

The unit was over-dependent on CMWSSB as its sales to CMWSSB accounted for 35 to 84 **per cent** of total sales during the four years upto 1999-2000. When the orders from CMWSSB started declining the unit's sales suffered heavily leading to curtailed production. Though the Company was aware of the likely decrease in orders from Government departments as early as in February 1994 itself, no effective action was taken to develop sales through traders in addition to sales to Government departments and this resulted in poor sales and consequent gross under-utilisation of installed capacity and piling up of unsold inventory valued at Rs.45.44 lakh as on 31 March 2001.

2A.11 Sundry debtors

The following table gives the position of sundry debtors during the period of review:

(Rupees in lakh)

Sundry Debtors	1996-97	1997-98	1998-99	1999-00	2000-01 (Provisional)
Below one year	3154.20	3518.00	3759.70	2041.85	1962.06
One to two years	236.99	939.51	534.31	1077.67	222.81
Two to three years	260.25	203.12	258.49	152.13	211.81
Over three years	378.82	869.66	606.97	620.21	995.27
Total	4030.26	5530.29	5159.47	3891.86	3391.95
Sales	19746.16	25165.51	18558.76	16162.23	16661.07
Percentage of debtors to sale	20.41	21.97	27.80	24.08	20.36

From the details given above, it could be seen that though the percentage of trade dues to sales started declining during 1999-2000 and 2000-01, the dues over three years had steadily increased from 1998-99 onwards indicating that there was no proper follow-up of old dues. It was also observed that though the Company was supplying cement against 100 **per cent** advance payment till 1997-98, there was huge outstanding of Rs.55.30 crore as on 31 March 1998, which subsequently came down to Rs.33.92 crore as per provisional accounts for the year ended 31 March 2001. This was partly due to the fact that the Company sold cement to traders, on credit basis in contravention of its policy of cash and carry sales.

In the Asbestos Sheet Unit, the Company extended credit to traders without verifying their credit worthiness or obtaining bank guarantee and consequently a sum of Rs.64.29 lakh was outstanding for more than three years from stockists as on 31 March 2001. Though legal action had been initiated in 27 cases for recovery of Rs.20.46 lakh, no effective action had been taken for the recovery of the remaining Rs.43.83 lakh.

In Mayanur unit (since closed) a sum of Rs.3.21 crore remained un-recovered for more than three years. Audit analysis revealed that out of this, Rs.2.22 crore had been already adjusted by TWAD Board and KWA towards penalty for delayed supplies, damaged pipes, **etc**., and hence not recoverable.

The above matters were reported to the Company/Government in June 2001; their replies had not been received (September 2001).

Conclusion

The Company, which earned profit up to 1997-98 steadily deteriorated and started incurring losses resulting in complete erosion of capital. The poor performance of cement plants was due to non-modernisation of plants resulting in high cost of production. The loss of production hours due to controllable factors in kilns and cement mills, excess consumption of power and coal and failure to develop adequate marketing infrastructure had all contributed to the decline in the performance of cement plants. The asbestos sheet unit at Alangulam, which was earning profit till 1997-98 started incurring losses due to high cost of production and entry of competitors offering sheets at lower rates. The pipe units at Mayanur and Vridhachalam are also suffering due to lack of orders from main customers **viz**., TWAD and CMWSSB who had switched over to award the contracts on turnkey basis. The viability of these units in their present form is doubtful. Hence, immediate sale of the Company is recommended.

SECTION 2B

IMPLEMENTATION OF REHABILITATION SCHEME IN SOUTHERN STRUCTURALS LIMITED

HIGHLIGHTS

The Management of the Southern Structurals Limited was taken over by the State Government in the year 1971 and the Company became a Government Company in the year 1979. Due to continuous losses the Company became sick and is now operating under ten year rehabilitation scheme approved by Board for Industrial and Financial Reconstruction (BIFR).

(Paragraph 2B.1)

As per rehabilitation scheme, the Company was expected to earn profit from 1998-99 but it incurred loss of Rs.15.67 crore against expected profit of Rs.14.49 crore during 1998-99 to 2000-01

(Paragraph 2B.5 and Annexure-20)

The Company diverted Rs.1.48 crore meant for capital expenditure to working capital requirement (Rs.0.66 crore) and to a new project with new technology without approval of BIFR (Rs.0.82 crore).

{Paragraphs 2B.7.1 (1) and (3)}

Consequent to delay in execution of orders for the supply of 173 numbers of railway wagons, the Company was deprived of interest free advance of Rs.2.70 crore, which led to reduction in the availability of working capital and loss of interest of Rs.0.91 crore. Further, due to paucity of funds, the orders valued at Rs.1.20 crore could not be executed.

{Paragraph 2B.7.1 (2)}

Inordinate delay in the execution of orders for manufacture of rail wagons resulted in loss of Rs.3.58 crore by way of excise duty (Rs.0.15 crore), non claiming of MODVAT (Rs.1.17 crore), cost escalation (Rs.1.70 crore) and loss of income (Rs.0.56 crore).

(Paragraphs 2B.9.1 and 2B.9.2)

Delay in finalising of sub-contracts and awarding of contract to a sub-contractor without approval of the Tamil Nadu Water Supply and Drainage Board resulted in loss of Rs.0.17 crore and loss of margin of Rs.1.37 crore.

(Paragraph 2B.10.1)

2B.1 Introduction

Southern Structurals Limited (SSL) was set up in October 1956 in the private sector for manufacture of railway wagons and steel structurals. Due to mounting losses and labour problems, its operations were stopped in December 1969. With a view to revive the Company, the State Government declared it as a "relief undertaking" under the Tamil Nadu Relief Undertakings (Special Provisions) Act, 1969 and took over its management in January 1971. The Company became a Government Company in August 1979 with the conversion of periodical loans and outstanding interest into Government share capital. Continuous losses of the Company led to total erosion of net worth in 1989-90 and it was referred to BIFR, which declared it (October 1992) a sick Company. A rehabilitation scheme, sanctioned (January 1998) by the BIFR, covering the period from 1996-97 to 2005-06 is currently under implementation (discussed in Paragraph 2B.8).

2B.2 Objectives and activities

The main objectives of the Company **inter alia**, include the following:

- To carry on the business of structural engineering.
- To carry on the business of manufacturing railway wagons and carriages and rolling stock of all kinds.
- To carry on the business of purchasing, importing, assembling or manufacturing railway carriages and wagons, carts, trucks, lorries, motor vehicles, locomotives, engines, rolling stocks and fittings of all kinds of accessories, components, **etc**.

The Company is mainly concentrating on manufacture of railway wagons, structural works and executing projects on turnkey basis. For these activities, the Company has two divisions **viz.,** works division and project division.

2B.3 Organisational set-up

The Articles of Association envisaged the management of the Company by a Board consisting of not less than three and not more than twelve Directors. As at the end of March 2001, the Board had eight Directors, one of whom was nominated by the BIFR and others by the State Government. As per the rehabilitation scheme, a Chief Executive with professional and industrial background was to be appointed. The State Government had appointed technocrats as Managing Director (MD) in April 1997 and August 2000. However, as stipulated in the rehabilitation scheme no Memorandum of Understanding for guaranteed performance was entered into with the MDs. Besides, as per the scheme, a Senior Finance Professional was to be appointed as Financial Controller, but the post of Financial Advisor and Chief Accounts Officer has been vacant since January 1998 and the finance wing was functioning under a Deputy Manager (Finance) till November 2000 and under a Senior Engineer thereafter.

2B.4 Scope of Audit

The performance of the Company was last reviewed and included in the Report of the Comptroller and Auditor General of India for the year ended 31 March 1994 – No.1 – (Commercial) – Government of Tamil Nadu. The review was discussed by the Committee on Public Undertakings (COPU) in July 1999. Recommendations are awaited. The activities of the Company covering the period from 1996-97 to 2000-01 with emphasis on the implementation of the rehabilitation schemes sanctioned by BIFR were reviewed in audit between January and May 2001. The results of audit are discussed in the succeeding paragraphs.

2B.5 Financial position and working results

The Company has finalised its accounts up to the year 1999-2000 and prepared provisional working results for the year 2000-01. The tables summarising the financial position and working results of the Company for the five years up to 31 March 2001 are given in **Annexures-19** and **20.**

The following observations are made:

(1) The Company sustained loss in all the five years ranging from Rs.0.98 crore to Rs.8.29 crore resulting in further erosion of net worth though as per the rehabilitation scheme, it was expected to earn profit from 1998-99. The inability of the Company to earn profit of Rs.2.82 crore in 1998-99, Rs.4.88 crore in 1999-2000 and Rs.6.79 crore in 2000-01, as envisaged in Rehabilitation Scheme was due to insufficient orders consequent to improper marketing strategy and delay in executing orders as discussed in Paragraphs 2B.8 to 2B.10. Against anticipated profit of Rs.14.49 crore during 1998-99 to 2000-01 as per rehabilitation scheme, the Company suffered loss of Rs.15.67 crore.

(2) After expiry of three years moratorium, though the Company became liable to pay interest amounting to Rs.1.44 crore and Rs.1.96 crore in 1998-99 and 1999-2000 respectively on loans obtained from Government, it did not pay the amount due to financial constraints.

(3) The reduction in loss in 1999-2000, despite reduction in sales was mainly due to accounting of the credit of Rs.5.59 crore based on the settlement

reached with Cochin Port Trust in respect of an order completed in October 1994.

2B.6 Sickness and reference to BIFR

The Company was earning profit up to 1984-85. Lack of upgradation and diversification of products, marketing strategies and shortcomings in manufacturing and financial functions coupled with lack of sufficient orders and compulsion to maintain the huge work force resulted in the Company incurring losses and net worth was eroded in the year 1989-90. Consequently, a **suo motu** reference to BIFR was made by the Company in October 1992. The BIFR declared the Company as sick and appointed (October 1992) State Bank of India (SBI) being one of the lenders of the Company as Operating Agency (OA), to prepare a scheme for rehabilitation of the Company.

2B.7 Rehabilitation scheme

The BIFR conducted seven hearings between May 1994 and June 1997 before sanctioning the rehabilitation scheme in January 1998. Factors, which led to delay in finalising the rehabilitation scheme are discussed below:

The initial rehabilitation scheme prepared by the OA in April 1994 involved restructuring of liabilities and funding of cash losses, which required assistance from Government to the extent of Rs.13.65 crore. This could not be implemented as Government informed (July 1994) BIFR that it could not finance the scheme and desired to privatise the Company. However, the OA's attempt to privatise the Company as per BIFR's directive (August 1994) was not successful, as the only offer received from Tebma Engineering Limited was found (March 1995) unviable by BIFR. Meanwhile (February 1995), Government evinced interest on the Company's proposals for financial restructuring by converting ways and means advances into equity capital, as the Company was hopeful that with the newly received orders for wagons from the Railway Board, it could be revived. Government sanctioned (February 1996) certain reliefs and concessions amounting to Rs.37.96 crore **viz**., conversion of ways and means advances and interest accrued thereon up to 31 March 1995 into equity (Rs.20.47 crore) additional equity (Rs.1.45 crore), rehabilitation loan (Rs.12.90 crore), waiver of Government guarantee commission of Rs.61.33 lakh outstanding as on 31 March 1995 and reimbursement of sales tax (Rs.2.53 crore) for the period 1995-96 to 1997-98 for the rehabilitation of the Company. As per directives of BIFR, the Industrial and Technical Consultancy Organisation of Tamil Nadu Limited (ITCOT) was appointed (August 1996) to conduct a techno-economic feasibility study on Company's operations. A rehabilitation scheme prepared by the OA based on ITCOT's report was approved (January 1998) by the BIFR.

The basic assumptions underlying the scheme were that modernisation of the plant to achieve projected production levels, diversification and reduction/restructuring the Company's liabilities would make it viable on a long term basis. The salient features of the rehabilitation scheme were:

(a) The scheme costing Rs.14.53 crore would be financed by the Government (Rs.14.35 crore) and by internal accruals (Rs.0.18 crore).

(b) The Company would diversify its activities into manufacture of idlers, bogies and crane spares in addition to continuing with its existing product lines and the project division would concentrate on Engineering Procurement and Construction (EPC) contracts.

(c) The rehabilitation period would be for ten years (1996-97 to 2005-06). The Company would earn profit from 1998-99 onwards and its net worth would turn positive by 2001-02 and the accumulated loss would be wiped out by 2005-06.

(d) A consortium of banks would provide need based working capital requirements.

The following points were noticed in the implementation of rehabilitation scheme :

2B.7.1 Implementation of the scheme

Diversion of Rs.1.48 crore meant for capital expenditure to working capital and unapproved project.

(1) As per the scheme, the Company received a loan of Rs.12.90 crore (Rs.5 crore in 1995-96 and Rs.7.90 crore in 1996-97) of which Rs.2.71 crore was to be utilised for procurement of balancing equipment/modernisation and Rs.32 lakh for diversification activities. Prior to the sanction of the scheme, the Company approached (June 1997) the Government for sanction of Rs.2.70 crore for modernisation, **etc.**, based on the preliminary report of ITCOT and went ahead with its implementation though in the final report, ITCOT made several changes. Against the envisaged expenditure of Rs.3.03 crore, the Company spent only Rs.1.55 crore (including Rs.0.41 crore on machinery not included in ITCOT's final report). The balance of Rs.1.48 crore was utilised for development of an unapproved new project costing Rs.81.61 lakh (as discussed in the succeeding paragraphs) and remaining for working capital requirement (Rs.66 lakh). Thus, the amount provided for capital expenditure aimed at eliminating production bottlenecks and to achieve the planned production capacity was not properly utilised.

Interest expenditure of Rs.0.91 crore due to non-availability of interest free advance of Rs.2.70 crore.

(2) As envisaged in the scheme, a consortium of banks would provide need based working capital requirements. The Company had been availing facilities of cash credit (Rs.5.70 crore), letter of credit and bank guarantee (Rs.24.11 crore), which were covered by Government guarantee. However, Government did not renew the guarantee after January 1999, due to Company's failure to pay guarantee commission of Rs.43.69 lakh. The Government also turned down (August 1999) the Company's request for interest free sales tax deferral for a period of five years from 1998-99 as envisaged in the scheme on the ground that it was not an essential part of the package. This had resulted in the Company being deprived of working capital to the extent of Rs.1.85 crore due to payment of sales tax for the period 1998-99 to 2000-01. While the Company was starving for working capital, failure to execute the order for manufacture of 173 numbers of Bogie Covered Wagon Type (BCNA) wagons as per schedule of delivery, has deprived the Company of interest free advance of Rs.2.70 crore (December 1998) on which it incurred interest amounting to Rs.91.26 lakh at 15 **per cent per annum**. This coupled with working capital crunch suffered by the Company due to non-

Non-execution of orders worth Rs.1.20 crore due to paucity of funds.

availability of Government guarantee led to the non-completion of the following orders worth Rs.1.20 crore.

(i) The Company received an order from Hindustan Aeronautics Limited (HAL), Bangalore (March 2000), for supply of two numbers EOT cranes of 5 tonne and 3 tonne capacity at a price of Rs.24.66 lakh and Rs.20.70 lakh respectively to be delivered within six months. However, the order has not been completed so far (May 2001), mainly due to delay in finalising drawings and paucity of funds for procurement of materials.

(ii) The Company received (October 2000) an order from NLC Limited for supply of track plates for Rs.74.25 lakh, to be delivered in January 2001, which was also not completed (May 2001) due to paucity of funds to procure raw materials.

Embarking on a new project with new technology and without approval by BIFR resulted in idle investment of Rs.0.82 crore.

(3) The rehabilitation scheme prohibits the Company from undertaking any new project without prior approval of BIFR. However, without such approval the Company took up (May 1998) a project for manufacture of Moving Cantilever Robot (MCR) for automation of loading and unloading of LPG cylinders in LPG plants. As per MOU entered (July 1998) into with two private firms, who had taken up the design and technology development and identifying markets, the prototype was to be developed by the Company by May 1999. However, it has not been completed so far (April 2001) as many design changes had to be made. The Company had incurred expenditure of Rs.81.61 lakh till December 2000 on this manufacture. Initially, the cost of MCR per unit was assessed (May 1998) at Rs.37.50 lakh with a selling price of Rs.50 lakh and an estimated market of 200 units over five years. However, finally the cost was assessed much higher and the Company informed (March 1999) the Indian Oil Corporation (IOC) that the price would be Rs.250 lakh per unit. IOC replied (March 1999) that the price was very high and that the requirement of the industry would be only around 36 units over two years. Subsequently, the Company informed (September 2000) the oil companies that the selling price per unit would be Rs.200 and Rs.250 lakh for pneumatically and electrically powered models respectively. In response, IOC stated that procurement of product would depend on performance of the equipment, cost benefit analysis and establishing reasonableness of the price. Thus, the Company had invested heavily on a new product, which was not part of the sanctioned scheme, without prior approval of BIFR/Government even though the technology was not established and without confirming the market potential.

(4) As mentioned earlier, the scheme envisaged, diversification of activities by taking up manufacture of idlers, crane spares and bogies for railway wagons. The turnover and profits anticipated from these products from 1997-98 to 2000-01 are indicated below:

(Rupees in lakh)

Anticipated	1997-98	1998-99	1999-2000	2000-01
Turnover	123.02	979.61	1373.87	1506.44
Profit	12.96	82.75	110.37	110.02

Due to non-completion of even a trial order for idlers, the projected turn over/profit of Rs.39.83 crore and Rs.3.16 crore respectively did not materialise.

No difficulty was expected in securing orders for idlers and crane spares, in view of Company's close ties with the end users. However, the Company could obtain only a trial order (February 1999) for 24 idlers valued at Rs.2.46 lakh from Neyveli Lignite Corporation (NLC). The Company could obtain orders amounting to Rs.32.09 lakh only for crane spares during the last five years ended 31 March 2001. The trial order for idlers has not been completed as the materials were rejected by NLC due to manufacturing defects/deviations from drawings. The Company has also not taken up the manufacture of bogies citing that it required installation of foundry with high capital cost. However, as per the scheme, the proposal was to purchase castings, which would be converted into bogies by the Company. Thus, the assumption that these products would contribute substantially to turnover and profits did not materialise.

(5) Concurrent Auditors appointed by the OA under the scheme were required to report the progress on the implementation of the rehabilitation scheme. In their reports for the period 1998-99 they had attributed the poor performance of the Company to shortfall in completing the modernisation programme and venturing into a new product namely LPG cylinder handling system not envisaged in the rehabilitation scheme. Concurrent Auditors were not appointed for subsequent periods. The Government had also constituted (July 1996) a High Power Committee to review the working of the Company and the progress of implementation of the rehabilitation package, which has not met so far. Thus, the implementation of the scheme by the Company was not properly monitored so as to take effective steps to ensure its success, even though the Company had not been able to achieve the desired progress from the beginning itself.

2B.8 Marketing

The rehabilitation scheme envisaged revamping of the existing marketing set up. The table summarising the details of tenders participated and orders secured by the Company in the five years ended 2000-01 is given below:

(Value – Rupees in lakh)

	Particulars	1996-97		1997-98		1998-99		1999-2000		2000-01	
		No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
	WORKS DIVISION										
(a)	Participation in tenders	72	19064	145	13359	164	15708	122	16520	68	7422
(b)	Orders obtained	20	250	28	1566	41	577	18	1056	8	895
(c)	Percentage of (b) to (a)	27.8	1.3	19.3	11.7	25	3.7	14.8	6.4	11.8	12.1
	PROJECT DIVISION										
(a)	Participation in tenders	15	13522	31	34874	32	66211	45	30658	23	12385
(b)	Orders obtained	1	995	3	2041	3	243	5	1278	3	1558
(c)	Percentage of (b) to (a)	6.7	7.4	9.7	5.9	9.4	0.4	11.1	4.2	13	12.6

1. From the above table, it would be seen that percentage of receipt of orders as compared to tenders participated was meagre and ranged from 6.7 to 27.8 in terms of number of orders obtained and 1.3 to 12.6 in value of orders

in both the divisions. The main reasons for the low percentage of success in tenders were high rates quoted as compared to other tenderers, the Company's poor financial status (negative net worth), non-meeting of certain pre-qualification requirements, absence of tie-up with the foreign collaboraters and stiff competition from small scale industries.

2. The Company could not obtain any order for railway wagons in 1998-99, as it had not completed the earlier orders received in December 1994 and January 1995.

3. Absence of a full fledged marketing set up was identified as one of the major causes for the Company becoming sick. A study conducted (July 1999) by the Institute of Cost and Works Accountants of India (ICWAI) also pointed out shortcomings in marketing and suggested certain remedial measures, which **inter alia**, included (i) restructuring of the organisation to suit its commercial activities and customer's focus towards competitive environment. (ii) a standing letter of assurance to be issued by Government for financial support and performance guarantee against the orders procured by the Company. (iii) financial support up to 75 **per cent** of the value of the orders to be based on the Company's assurance to the Government for timely completion of order and (iv) strict adherence to the repayment of advance. However, none of the suggestions was implemented so far (May 2001), resulting in continued poor marketing performance of the Company.

2B.9 Works Division

The details of the targets, as envisaged in the rehabilitation scheme and the achievement of the Company for the period 1996-97 to 2000-01 are given in **Annexure- 21.**

Delay in execution of orders resulted in loss of Rs.3.58 crore.

It may be seen therefrom that though the targets were almost achieved in 1998-99 (93.01 **per cent**), the performance declined drastically in 1999-2000 (67.28 **per cent**). This was mainly due to inability of the Company to procure sufficient orders. As against the projected sales of Rs.30.37 crore in 1999-2000 and Rs.31.21 crore in 2000-01, the Company could obtain orders for only Rs.10.56 crore in 1999-2000 and Rs.8.95 crore in 2000-01. There was also delay in execution of these orders due to shortage of working capital for procurement of raw materials, which led to losses. Some of the instances wherein the Company incurred loss of Rs.3.58 crore are discussed in the succeeding paragraphs.

2B.9.1 Bogie Tank Wagon for Liquified Petroleum Gas Type (BTPGLN) wagons

(i) The Railways did not allow reimbursement of increase in excise duty from 15 to 16 **per cent** with effect from 1 March 1999 amounting to Rs.14.67 lakh in respect of 59 wagons supplied beyond the original delivery period of August 1995.

(ii) The escalation for materials and labour which was admissible up to August 1995 as per the order was extended (March 2001) up to March 1997. Hence, increases in cost beyond that date on account of consumables and labour amounting to Rs.1.47 crore had to be absorbed by the Company.

(iii) The wagons manufactured for oil companies became excisable from November 1995. However, the Company availed MODVAT benefits only from August 1997 resulting in loss to the extent of Rs.1.17 crore.

2B.9.2 BCNA wagons

In the order for manufacture and supply of 173 numbers of BCNA wagons, the Company was entitled to claim escalation in cost for wagons supplied within the delivery period of March 1999. As the Company delayed the supply of wagons, the Railways revised the eligibility period for escalation in respect of 52 wagons from April 1999 to November 1999, which resulted in the Company losing Rs.23.40 lakh being the revenue realisable on account of escalation at Rs.0.45 lakh per wagon.

The Railways placed (July 1999) an order for supply of 110 Nos. BCNA wagons at a price of Rs.5.55 lakh per wagon, to be completed by March 2000. Due to the Company's failure to keep up the delivery schedule as provided for in the contract, the Railways reduced the price to Rs.4.84 lakh per wagon for the balance 46 wagons to be delivered by March 2000. Thus, due to delay in completing the order, the Company lost income of Rs.32.66 lakh.

2B.10 Project division

The financial targets for 1996-97 to 1999-2000 as envisaged in the rehabilitation scheme and the actuals are given below:

Year	Projection as per Rehabilitation scheme	Actual	Percentage of actual to projection
	(Rupees in lakh)		
1996-97	225.12	365.62	162.41
1997-98	1004.92	1577.09	156.93
1998-99	1385.10	1435.34	103.63
1999-2000	1828.85	847.12	46.32

From the above, it would be seen that though the Company could achieve the targets up to 1998-99, the Company's sales performance declined to 46.32 **per cent** of the target in 1999-2000. The Company was not able to get any EPC contract as envisaged in the rehabilitation scheme.

Out of the 14 projects, which were executed through sub-contractors on back to back♠ basis, only 10 projects were completed. Of these 10, the execution of three projects ended in a loss of Rs.6.70 crore and seven projects earned a profit of Rs.2.89 crore leaving a net loss of Rs.3.81 crore. Of the remaining four projects, two projects were cancelled due to slow progress of work, which are discussed in the succeeding paragraphs and two projects were in progress (value Rs.7.19 crore) in which the clients had repeatedly complained over the poor progress.

♠ **Under back to back contracts the Company enters into agreement with sub-contractors on the same terms and conditions of its contracts with clients, except for variation in rates for various items.**

2B.10.1 Execution of combined water supply scheme

Delay in finalising sub-contractors led to loss of Rs.0.17 crore and loss of margin of Rs.0.78 crore.

(i) The Tamil Nadu Water Supply and Drainage (TWAD) Board placed (October 1999) an order on the Company for execution of a combined water supply scheme in Sattankulam and other places in Thoothukudi District for Rs.8.12 crore, to be completed by March 2001. In turn, the Company awarded the work to three sub-contractors for a value of Rs.7.34 crore only in February 2000. The Company also failed to ensure progress of work as per agreed schedule. Consequently, the TWAD Board terminated (December 2000) the contract at the Company's risk and cost and forfeited security deposit of Rs.16.54 lakh. Thus, delay of the Company in finalising the sub-contracts and its failure to ensure proper progress resulted in loss of Rs.16.54 lakh, besides the loss of margin of Rs.78 lakh.

Entrusting the work to a sub-contractor without prior approval of TWAD Board resulted in loss of margin of Rs.0.59 crore.

(ii) The Company received an order from the TWAD Board (June 2000) for execution of a combined water supply scheme in Tiruchendur and other places in Thoothukudi District for Rs.8.39 crore. The Company awarded (August 2000) the work for a value of Rs.7.80 crore to three sub-contractors, one of whom was not approved by TWAD Board. TWAD Board objected to this stating that the sub-contractor had been entrusted with similar works in other locations, and doubted his ability to complete all the works as per schedule. As the Company could not finalise alternate arrangements, TWAD Board, which had repeatedly expressed concern for not starting the works, finally cancelled (January 2001) the order. Thus, entrusting the work to a sub-contractor without obtaining prior approval of the TWAD Board, resulted in cancellation of the contract and loss of margin of Rs.59 lakh.

The above matters were reported to the Company/Government in June 2001; their replies had not been received (September 2001).

Conclusion

Continuous losses of the Company led to total erosion of net worth and it was referred to BIFR, which sanctioned a rehabilitation scheme to be implemented in ten years (1996-97 to 2005-06). Despite massive infusion of funds there are no signs of recovery at present. The Company was expected to earn profit from 1998-99 onwards, but still it is in the grip of heavy losses. This was mainly due to lack of monitoring of the scheme to ensure its success, embarking on the project not envisaged in the scheme, diversion of funds which resulted in paucity of working capital and consequent non-completion of orders. Working capital crunch and escalations led to delay in completion as well as cancellation of orders by the clients. Continuance of the Company in the present form would only be a drain on the State Exchequer. Hence, immediate sale of the Company is recommended.

CHAPTER-3

SECTION 3A

TAMIL NADU ELECTRICITY BOARD

PROCUREMENT, PERFORMANCE, MAINTENANCE AND REPAIRS OF TRANSFORMERS

HIGHLIGHTS

Due to shortfall in the procurement of distribution transformers connected load was far in excess of distribution transformers capacity, which increased from 69.82 *per cent* in 1995-96 to 91.84 *per cent* during 1999-2000. Further, against the guidelines of Power Finance Corporation (PFC) that transformers should not be loaded beyond 80 per cent of their capacity, the excess load during 1998-99 and 1999-2000 was 88.78 and 91.84 *per cent* respectively.

(Paragraphs 3A.4 and 3A.5)

The Board suffered loss of Rs.1.16 crore due to deficiencies in terms and conditions of purchase order *viz.*, omission of interest clause in the purchase order, non-levy of interest on advance payment and omission of clause for levy of liquidated damages.

(Paragraph 3A.5.3)

Failure to take into account the interest charges in respect of Amorphous Metal Core Distribution Transformers purchased at higher cost than the conventional transformers on the ground of better performance resulted in extra expenditure of Rs.4.13 crore.

(Paragraph 3A.5.4)

Placement of two extension orders in violation of tender regulations resulted in extra expenditure of Rs.2.66 crore. Delay in commissioning of power transformers led to loss of interest of Rs.9.48 crore on idle investment.

(Paragraphs 3A.5.5 and 3A.5.6)

Despite introduction of maintenance planning system, the overall failure rate of distribution transformers increased from 8.99 *per cent* in 1995-96 to 10.6 *per cent* in 1999-2000 against the expected failure rate of 5 *per cent*. Further, abnormal delays in repairing failed power transformers led to avoidable new purchases which resulted in loss of interest of Rs.2.72 crore.

(Paragraphs 3A.6.2 and 3A.6.3.1)

Despite having idle capacity in its Transformer Repair Yard and assurance to Committee on Public Undertakings that not more than 1500 transformers would be repaired in a year from private agencies, the Board got repaired 14253 transformers (in excess of 1500 *per annum*) during the five years ended with 1999-2000 at an extra cost of Rs.3.28 crore.

(Paragraph 3A.6.4)

Delay in condemning and non-disposal of failed transformers/spares resulted in locking of funds amounting to Rs.5.75 crore on idle assets.

(Paragraph 3A.7)

3A.1 Introduction

Transformer is a static equipment used for stepping up and stepping down voltage in transmission and distribution of electricity. Power is usually generated at a very low voltage (11 KV to 15.75 KV)) and is then stepped up (110 KV, 230KV and 400 KV) through power transformers for economic bulk transmission to the load centres. At the receiving sub-stations (SS), the voltage is brought down (110 KV, 66 KV or 33 KV) by using step down transformers (22 KV or 11 KV) for supplying power to the various consumers. The transformers used at the generating station and in the high voltage sub-stations (known as transmission system) are called power transformers, while transformers used in distribution system are called distribution transformers. Power is distributed to the consumers through transmission and distribution lines

3A.2 Organisational set-up

Chief Engineer (Transmission) procures and distributes power transformers, whereas in the case of distribution transformers these are procured by Chief Engineer (Material Management). Maintenance of power transformers installed in Grid sub-stations is done by the Superintending Engineer (Operation) and repair of these transformers is carried out at the Transformer Repair Bay (TRB), Ambattur. The maintenance and repair of other power and distribution transformers are done by the Special Maintenance Wings under the Superintending Engineers of Distribution Circles.

3A.3 Scope of Audit

The functioning of the Special Repair Yards and Material Management in Tamil Nadu Electricity Board were last reviewed and included in the Report of the Comptroller and Auditor General of India (Commercial) for the year ended 31 March 1988. The main recommendations of the Committee on Public Undertakings (COPU) contained in their 22[nd] Report presented to the Legislature in October, 1991 were : (i) the Board should increase the number of distribution transformers and their capacity so that the load is not exceeded and their failure rate should be brought to the lowest possible level and (ii) the Board should institute remedial measures without further delay to utilise the transformer repair yards to the maximum capacity and try to reduce the repair by private agencies, which would definitely result in economy. Government informed (July 1992) COPU that necessary instructions were issued for implementation of its recommendations. However, the Board has not complied with these recommendations as discussed in Paragraphs 3A.4 and 3A.6.4.

The present review conducted between January and May 2001 covers the procurement, performance, maintenance, repair and condemnation of transformers during the last five years up to March 2001, through scrutiny of records at Headquarters of the Board and test check of records of 21 out of 42 circles (37 Distribution Circles and five General Construction Circles).

3A.4 Adequacy of transformation capacity

The table below indicates the number of power and distribution transformers installed, their capacity and growth **vis-à-vis** connected load for the five years ended 1999-2000.

Sl. No.		1995-96	1996-97	1997-98	1998-99	1999-2000
1.	**Power transformers**					
	(a) Number	**1246**	**1356**	**1456**	**1518**	**1622**
	(b) Capacity (in MVA)	**15578**	**19124**	**20896**	**21668**	**22670**
	(c) Capacity (in MW)	**14020**	**17212**	**18806**	**19501**	**20403**
2.	**Distribution transformers**					
	(a) Number	**106663**	**111005**	**114830**	**119302**	**127429**
	(b) Capacity (in MVA)	**12114**	**12562**	**13065**	**13359**	**14608**
	(c) Capacity (in MW)	**10903**	**11306**	**11759**	**12023**	**13147**
3.	**Connected load (in MW)**	**18516**	**19638**	**21198**	**22697**	**25221**
4.	**Connected load in excess of distribution transformers capacity {3-2(c)}**	**7613**	**8332**	**9439**	**10674**	**12074**
5.	**Excess load (in per cent) (4/2(c) X 100)**	**69.82**	**73.7**	**80.27**	**88.78**	**91.84**

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Sl. No.		1995-96	1996-97	1997-98	1998-99	1999-2000
6.	**Power transformation capacity per MW of connected load (1(c) / 3)**	0.757	0.876	0.887	0.859	0.809
7.	**Distribution transformation capacity per MW of connected load (2(c) / 3)**	0.589	0.576	0.555	0.530	0.521

Connected load was far in excess of distribution transformer capacity, which increased from 69.82 per cent to 91.84 per cent.

It may be seen from the above table that the increase in distribution transformer capacity was not commensurate with the transformation capacity and connected load during the last five years up to 31 March 2000. The connected load in all the five years up to 1999-2000 was far in excess of distribution transformer capacity and it increased from 69.82 **per cent** in 1995-96 to 91.84 **per cent** in 1999-2000. It is pertinent to mention here that as per guidelines issued by Power Finance Corporation, a transformer should not be loaded beyond 75 to 80 **per cent** of its capacity. Excessive load on the distribution transformers resulted in increase in their failure rate. Thus, the Board had not kept up its assurance (July 1992) to COPU that instruction was issued to implement their recommendation to increase the distribution transformer capacity so that the connected load was not exceeded and to bring down the failure rate of distribution transformers.

3A.5 Procurement of transformers

Shortfall in procurement of distribution transformers resulted in excessive load and high failure rate.

Based on the Transmission and Distribution Programme and the requirements of transformers received from the field offices, procurement of transformers is made by the Chief Engineer, Materials Management and the Chief Engineer, Transmission after obtaining the approval of the Tender Committee/Board.

The table below indicates the total requirement of transformers, actual procurement and expenditure incurred thereon during the last five years up to 2000-01:

(Rupees in lakh)

Year	Total requirement (Number)		Actual procurement (Number)		Expenditure incurred	
	Power trans-formers	Distri-bution trans-formers	Power trans-formers	Distri-bution trans-formers	Power trans-formers	Distri-bution trans-formers
1996-97	158(1949)	13009(1537)	158(1949)	3526(460)	6532	2196
1997-98	145(3744)	14813(1759)	145(3744)	6478(909)	9281	4357
1998-99	10(500)	17956(2148)	10(500)	2788(662)	970	2818
1999-2000	96(1604)	7870(1003)	96(1604)	10734(1224)	4517	5002
2000-01	98(1320)	18000(2155)	98(1320)	14615(2020)	5521	8572

Note: Figures in brackets indicate capacity in MVA

From the above table, it could be seen that though the requirement of power transformers was fully met during the last five years, there was a shortfall in the procurement of distribution transformers to the extent of 33507 numbers and 3327 MVA (in capacity) representing 46.7 and 38.7 **per cent** of the total requirement respectively. This shortfall in procurement had resulted in over loading on the available transformers, which led to increase in failure rate of transformers as discussed in Paragraph 3A.6.2.

3A.5.1 Vendor Assessment Services

Vendor assessment services introduced to improve vendor rating was discontinued.

Vendor rating is the process of grading each manufacturer of transformer after assessment of performance of different makes with reference to their capacity to manufacture, trouble free performance, failures and promptness in repairing the failed transformers by the vendors. In order to improve the existing system of rating of vendors, the Board approved (September, 1998) the formation of a Vendor Assessment Services (VAS) under the Chief Engineer (R & D) at an annual recurring expenditure of Rs.25.67 lakh. The VAS had the following functions:

(i) Screening of vendors based on documents furnished by them.

(ii) Inspection of vendors' premises to assess their capabilities.

(iii) Registration of vendors.

(iv) Evaluation of vendors' performances and taking follow up action.

The VAS was formed with one Executive Engineer and one Assistant. Various formulae for vendor rating were designed, standard design of distribution transformers was prepared and vendors manufacturing poor quality transformers were identified. The software for vendor assessment works was also developed for computerisation of Purchase Order Database. However, the post sanctioned for VAS was attached (May 2000) to Technical audit and finally abolished (November 2000). It was observed that except for the standardisation of design for distribution transformers, the other output of VAS **i.e**., software package was not being put to use. Thus, even after incurring an expenditure of Rs.34.23 lakh, the purpose of forming the VAS has not been achieved.

3A.5.2 Orders placed without assessing the performance of trial order

A trial order was placed (February 1997) on Industrial Meters Limited for supply of three numbers of 8 MVA transformers (value: Rs.59.98 lakh). Two transformers were supplied (May 1997) and one of them failed immediately after installation (June 1997) and the same was repaired and put back in service in October 1997. The third transformer was supplied in December 1997. It was seen that without assessing the performance of these transformers supplied against the trial order, Board placed (December 1997) a bulk order on the same supplier for supply of 22 numbers of 16 MVA transformers (value: Rs.11.03 crore). These transformers were supplied and commissioned between July 1998 and June 2000. Of these, seven transformers failed within the guarantee period, out of which, one transformer was repaired after a delay of six months, four transformers were repaired after one year and two transformers, which failed in July and September 2000 respectively were yet to be even lifted for repair (March 2001) by the supplier. In addition to these, three more transformers failed after the guarantee period and were repaired by the supplier with delays ranging from three months to one year. The interest loss to the Board on account of delays in repairing the failed transformers worked out to Rs.54.68 lakh. No liquidated damages could be levied on the supplier for the above delays in repairing the failed transformers as the purchase order did not contain such a provision.

From the above facts, it would be seen that bulk order was placed on the supplier without assessing the performance of trial order resulting in frequent failures of transformers and avoidable loss of interest.

Some of the deficiencies noticed during test check of procurement of transformers are discussed below:

3A.5.3 Deficiency in terms and conditions of purchase order

(i) Omission of interest clause in the purchase order

Letters of intent for the supply of 10 numbers 100 MVA Auto Transformers covered under ADB loan were issued (December 1995) to Apex Electricals and the supplier was paid an interest free advance of Rs.1.28 crore in April 1996. Apex Electricals supplied all the 10 units beyond the contractual delivery period with delays ranging from 96 to 313 days. According to Tender Regulations, 1991 of the Board, if interest free advance is given, the supplier will have to pay interest at Board's borrowing rate in case supply is delayed beyond the contractual delivery period. It was, however, observed that no interest could be collected from the supplier for the delayed supplies as no provision was included in the purchase order for charging interest on advance payments in cases of delayed supplies. Thus, failure to incorporate necessary provision in the purchase order for levy of interest on advances paid in case of delays in supplies as provided in the Board's Tender Regulations resulted in the Board foregoing an interest of Rs.34.65 lakh (computed at the Board's borrowing rate of 22 **per cent** per annum).

(ii) Non-levy/short levy of interest on advance payment

Orders were placed (January 1995) for the supply of nine power transformers (100 MVA) on Crompton Greaves Limited (CGL) (seven transformers) and GEC Alsthom Limited (GEC) (two transformers)and an interest free advance of Rs.2.73 crore and Rs.76.44 lakh was given to M/s CGL and GEC, respectively.

The Board did not levy penal interest of Rs.0.48 crore for delayed supplies.

As per the terms of purchase order, interest at the rate of 22 **per cent** was chargeable on the advance payment, if the supplies were made beyond the stipulated delivery schedule. According to supply order, GEC was to complete the supplies by January 1996 but actually supplied the two units only in June and July 1996. In the case of CGL, three units to be supplied between November 1995 and February 1996 were actually supplied during June/August 1996. It was however, observed in Audit that the Board had not levied penal interest of Rs.48.23 lakh for the delay in supply.

(iii) Omission of clause for levy of liquidated damages

Purchase orders for supply of distribution transformers contained a clause providing for levy of Liquidated Damages (LD) in case of delay beyond two months on the part of the suppliers to rectify the defects in the transformers that fail within the guarantee period. However, in respect of power transformers procured, no such clause was included, though the purchase orders contained a clause providing for repair within two months. During test check, it was observed that there were delays beyond two months in repairing four numbers of 8 MVA transformers and five numbers of 16 MVA transformers, which failed within the guarantee period. These delays ranged from 131 to 507 days and no LD could be levied on the supplier as there was no such provision in the purchase order. Thus, failure to include a clause for levy of LD resulted in inordinate delays in repairing the failed transformers and interest loss of Rs.33.28 lakh to the Board.

3A.5.4 Uneconomical purchase of Amorphous Metal Core Distribution Transformers

Failure to take into account interest charges on higher cost of Amorphous Metal Core Distribution Transformers resulted in extra expenditure of Rs.4.13 crore.

During the period from 1995-96 to 1999-2000 the Board procured 960 numbers of 63 KVA/11 KV and 943 numbers of 100 KVA/11 KV Amorphous Metal Core Distribution Transformers (AMDTs) at a total cost of Rs.13.31 crore. The extra cost on account of rate difference between AMDT and the cheaper conventional Cold Rolled Grain Oriented Silicon Steel Core (CRGO) transformer on these purchases amounted to Rs.4.70 crore. The no load loss (loss of energy when the transformer is not loaded) of 63 KVA and 100 KVA AMDTS were less by 135 watts and 194 watts respectively when compared to CRGO Transformers and this would result in the savings of Rs.4.78 crore over the useful life of transformers as per REC calculations for capitalisation of losses. However, it was observed in Audit that the interest on higher cost incurred on procuring AMDTs was not considered while evaluating the financial aspects, which resulted in an extra expenditure of Rs.4.13 crore (considering the net present value of interest on higher cost) to the Board. It is pertinent to mention here that the Board decided (August 1999) to stop purchase of AMDTs based on technical opinion.

3A.5.5 Violation of tender regulations

As per the Board's tender regulations, an extension order could be placed against a previous order for meeting urgent requirements provided there was no decline in price and not more than one repeat order could be placed. Two instances, where these criteria were not followed, resulting in extra expenditure of Rs.2.66 crore to the Board are discussed below:

Purchases made through extension orders in violation of tender regulation resulted in extra expenditure of Rs.2.66 crore.

(a) An extension order was placed (December, 1997) on Andrew Yule for supply of 12 numbers of 10 MVA Power Transformer for meeting immediate requirements, since they had completed supplies of 22 numbers against the earlier order (September 1996). The extension order was justified on the grounds that it would take seven months for supply to commence if fresh tender were to be floated and that there was no decline in price. The transformers were supplied (April 1998 – September 1998) against this repeat order and commissioned (September 1998 to May 1999).

It was also observed that the same supplier had quoted a lesser evaluated price of Rs.57.34. lakh per transformer as against the repeat order evaluated price of Rs.68.66 lakh in October 1997 itself well before the placement of repeat order by the Board (December 1997). Thus, the decision of the Board to place repeat order in violation (as there was no urgency and prices came down) of tender regulations resulted in an avoidable extra expenditure of Rs.1.36 crore {(Rs.68.66 lakh – Rs.57.34 lakh) X 12}.

(b) A second extension order for the purchase of nine numbers of 16 MVA power transformer was placed (February 1996) with Apex Electricals Limited for meeting the urgent requirements for evacuation of power from wind farms. Before this order was placed, another tender for supply of the same capacity of transformers was opened in June 1995 wherein the lowest evaluated price (Rs.96.75 lakh) was less than the extension order rate (Rs.111.16 lakh) by Rs.14.41 lakh. Despite this, the Board placed extension orders resulting in avoidable expenditure of Rs.1.3 crore. It was observed in Audit that out of nine transformers procured, seven were commissioned with a delay ranging from 29 to 472 days after supply indicating that there was no urgent need for these transformers.

3A.5.6 Delay in commissioning of power transformers

Delays in commissioning of power transformers resulted in loss of interest of Rs.9.48 crore on idle investment.

During the period from 1996-97 to 2000-01, the Board procured 507 power transformers. Out of these, erection and commissioning details of 310 transformers were test checked in audit and it was observed that there were delays in commissioning of 252 transformers (value: Rs.141.92 crore) ranging from one day to 29 months (after allowing 30 days for commissioning). These delays resulted in an interest loss of Rs.9.48 crore to the Board (computed with reference to interest rate of 12 **per cent per annum**) on idle investment in these transformers. A further analysis revealed that the delays were abnormal in case of high value transformers, **viz**., 25 KVA, 50 KVA and 100 KVA as out of 52 transformers test checked in these categories (total transformers procured: 63), there were delays from 4 days to 29 months in erecting 47 numbers (value: Rs.66.95 crore), which resulted in an interest loss of Rs.5.69 crore to the Board. This indicates that there was no proper planning and co-ordination between the agencies responsible for procurement and erection/commissioning.

3A.6 Maintenance and repair of transformers

Proper maintenance of transformers in service and timely repair of failed transformers are a pre-requisite for their optimum utilisation and uninterrupted supply of power.

3A.6.1 Maintenance of distribution transformers

A maintenance planning system for distribution network was developed (October 1995) by In-house Management Consultancy Services (ICMS) of the Board with the object of reducing interruption in power supply and improving the performance of the Board by reducing failure rate of transformers through systematic planning and maintenance activities. The system was implemented from 1996.

It was expected that by carrying out various maintenance work on distribution transformers and lines effectively, the failure rate could be kept below 5 **per cent** as against the permissible limit of 6 **per cent** thereby saving in expenditure on repair. The implementation of the Annual Maintenance Programme in each distribution circle was also to be test checked annually by the Superintending Engineer/Rural Electrification and Improvements (Distribution).

3A.6.2 Failure rate of distribution transformers

The Board is not maintaining proper records regarding details of distribution transformers that failed within the guarantee period and those failed after the guarantee period. The overall failure rate of distribution transformers in all the eight regions of the Board during the period 1995-96 to 1999-2000 are given in **Annexure-22**.

Failure rate of transformer was much higher than permissible limits due to overloading and poor maintenance.

It may be seen that despite the introduction of maintenance planning system, the overall failure rate increased from 8.99 **per cent in** 1995-96 to 10.6 **per cent** in 1999-2000 against the expected failure rate of 5 **per cent**. The failure rate was particularly high in Villupuram, Trichy and Vellore regions. During 1999-2000 the failure rate was 14.54 **per cent** in Villupuram, 13.67 **per cent** in Trichy and 10.96 **per cent** in Vellore, which were more than the overall failure rate of 10.6 **per cent** in 1999-2000.

The cause wise analysis for failure of distribution transformer as per the annual review conducted by the Board for the period 1995-96 to 1999-2000 is given in the table below:

		1995-96		1996-97		1997-98		1998-99		1999-2000	
		No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
1.	Inadequate maintenance	2127	22.18	1868	18.65	2286	19.36	2547	20.55	3120	23.09
2.	Natural cause	1529	15.95	2148	21.45	2023	17.12	2738	22.09	3587	26.56
3.	Over load	1723	17.97	1549	15.47	1901	16.09	1846	14.89	2978	22.04
4.	Design defect	49	0.51	52	0.52	169	1.43	168	1.35	175	1.3
5.	Ageing and deterioration of insulation	1264	13.18	998	9.96	1000	8.46	1178	9.5	1002	7.41
6.	Others	2897	30.21	3400	33.95	4435	37.54	3919	31.62	2648	19.6
	Total	9589		10015		11814		12396		13510	

It may be seen from the above table that overloading and inadequate maintenance, which are controllable factors were the major causes for the high failure rate. Despite instructions issued each year to improve maintenance so as to prevent failure due to causes such as oil leak/low oil level, poor quality of oil/deterioration of oil, loose connection, poor earthing, silica gel not provided/not reconditioned, fault on LT side and poor tree clearance attributable to poor maintenance, the position has not improved.

3A.6.3 Repair of transformers

The repair of power transformers are done at the Transformer Repair Bay (TRB), Ambattur and also by outside agencies. Repair of distribution transformers are carried out in the Transformer Repair Yards (TRY) of the special maintenance division attached to the EDCs and also through private agencies. Out of 37 EDCs, 31 have transformer repair yards.

3A.6.3.1Abnormal delay in repair of power transformers resulted in avoidable purchases.

Delays in repair of power transformers led to avoidable new purchases, which resulted in loss of interest of Rs.2.72 crore.

During the period from 1995-96 to 1999-2000, 154 power transformers failed beyond the guarantee period of which110 transformers were repaired by the TRB, Ambattur during the same period. A test check of 83 failed transformers during this period revealed that 52 transformers were repaired with delays ranging from 116 to 1606 days and 31 transformers had not been repaired till date (March 2001) and lying unrepaired for more than four years. Had these transformers been repaired at least within one year of their failure, the Board could have postponed purchase of 9 numbers 33 KV power transformers and 18 numbers of 110 KV power transformers by one to five years period and saved interest on investment (Rs.9.73 crore) on these purchases to the extent of Rs.2.72 crore.

3A.6.3.2 Idle investment on expansion of TRB

The existing capacity of repair of the Transformer Repair Bay (TRB), Ambattur is 12 transformers **per annum**. In order to increase this capacity to 24 transformers, work on expansion of TRB was awarded (January 1998) at an estimated cost of Rs.50.76 lakh. Though the work was completed in August 1999 at a total cost of Rs.43.09 lakh (except provision of wooden planks for test bench platform), the expanded bay could not be put to use by the Board as no action had been taken to procure the related equipment leading to idle investment of Rs43.09 lakh.

3A.6.4 Repair of distribution transformers

The out turn for each TRY was fixed (January 1994) as 30 numbers **per month per yard**.

The details of distribution transformers failed and repaired in TRYs and private agencies during the last five years ended 1999-2000 are given below:

Year	Capacity of TRY	Total number of failures	Repaired by TRY	Percentage of utilisation of TRY	Repaired by private agencies	Transformers to be repaired at the end of the year
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1995-96	11160	9589	5669	50.79	3257	663
1996-97	11160	10015	6193	55.49	2722	1763
1997-98	11160	11814	6887	61.71	5632	1058
1998-99	11160	12396	6851	61.38	4661	1942
1999-2000	11160	13510	7115	63.75	5481	2856
Total	55800	57324	32715	58.63	21753	

Avoidable extra expenditure of Rs.3.28 crore on repair of transformers by private agencies.

From the above table, it could be observed that the percentage utilisation of TRY ranged from 50.79 per cent to 63.75 per cent during 1995-96 to 1999-2000, but despite having idle capacity the Board repaired the transformers at higher rates from private agencies. It is pertinent to mention here that though the Board had assured COPU (July 1992) that the efficiency of TRYs would be improved so as to utilise them to the maximum capacity and that the number of transformers to be repaired by private agencies would be limited to 1500 **per annum** only, the Board had not kept up its assurance as evidenced by the fact that the number of transformers repaired by the private agencies was much more than 1500 in all the last five years. Computed with reference to the average cost of repair of a transformer by private agencies (Rs.12400) and by TRY (Rs.10100), the avoidable extra expenditure incurred by the Board during the last five years in not implementing its assurance to COPU worked out to Rs.3.28 crore {(21753-7500) X Rs.2300}.

3A.7 Condemnation and disposal of unserviceable transformers/ spares

Instructions were issued (August 1987) by the Chairman that in respect of failed power transformers, which were beyond economical repair, the condemnation proposals should be finalised expeditiously and the transformers disposed off. It was however, noticed in Audit, that there were considerable delays in condemning unserviceable transformers and spares and their disposal as discussed below:

Delays in condemning and disposing of unserviceable transformers/spares resulted in blocking of Rs.5.75 crore on idle assets.

(i) 22 transformers which failed between 1982 and 2000 and lying in Singaperumalkovil Sub Station (SS), Villupuram SS, TRB Ambattur and Repair Bay, Samayanallur and 41 coils lying at TRB Ambattur since 1977 have not been disposed off, though they had been condemned. The reserve price fixed for these transformers was Rs.3.13 crore.

(ii) 90 transformers, which failed between 1990 and 2000, were lying in various EDCs, for which condemnation proposals were yet to be initiated. The realisable value of these failed transformers, as assessed in Audit, was Rs.2.62 crore.

The above matters were reported to the Board/Government in June 2001; their replies had not been received (September 2001).

Conclusion

Transformers play a vital role in both transmission and distribution of power and involves huge investment which necessitate proper planning in the procurement, maintenance and repair. It was, however, observed that Tamil Nadu Electricity Board suffered various deficiencies, which **inter alia**, included overloading of transformers due to less procurement of distribution transformers, consequently higher rate of failure at the same time idle investment due to delay in commissioning of the transformers, abnormal delay in repair, **etc**. Despite Board's assurance to increase the efficiency of its own repair yard, the Board got the transformers repaired from private agencies at higher rates. There is need to improve the over all system by procuring sufficient number of distribution transformers so as to avoid overloading and consequent failures as well as timely repair of transformers, **etc**.

SECTION 3B

TAMIL NADU ELECTRICITY BOARD

REVIEW ON PYKARA ULTIMATE STAGE HYDRO ELECTRIC PROJECT

HIGHLIGHTS

Pykara Ultimate Stage Hydro Electric Project was initially conceived in 1981-82 to add capacity of 100 MW (two units of 50 MW each) to the existing Pykara Power House at Singara. The capacity of the project was subsequently increased to 150 MW (three units of 50 MW each) in 1985-86.

(Paragraph 3B.1)

The project cost of Rs.70.16 crore as per DPR (1985-86) had undergone three revisions and as per latest revision (April 2000) the project cost was Rs.382.81 crore i.e, more than 500 per cent increase in the project cost.

(Paragraph 3B.4)

Delay in implementation of the project had resulted not only in cost overrun of Rs.312.65 crore but also resulted in potential loss of generation of Rs.275 crore.

(Paragraph 3B.5.2)

Failure of the Board to include interest clause on mobilisation and machinery advances despite agreeing to by the contractor resulted in interest loss of Rs.5.17 crore. Further, payment of escalation without deducting interest free advance to the contractor resulted in excess payment of Rs.2.13 crore.

{Paragraph 3B.6.1(b)(i)}

Placement of purchase orders for machinery even after the stoppage of civil works resulted in idle investment of Rs.46.14 crore and loss of interest of Rs.12.77 crore.

{Paragraph 3B.6.2 (i)}

Laying of transmission line and tail race tunnel without forest clearance had resulted not only in idle investment of Rs.25.69 crore but also rendered the commissioning of the project difficult unless it is approved by the Forest Department.

(Paragraph 3B.7.1)

3B.1 Introduction

Pykara Ultimate Stage Hydro Electric Project (PUSHEP) was conceived (1981-82) to have an additional capacity of 100 MW (2 units of 50 MW each) to the existing Pykara Power House at Singara, Nilgiris district with a generating capacity of 70 MW so as to effectively utilise all the available flows of Pykara river and its neighbouring tributaries and to meet the growing peak demand of power. The initial (1981-82) estimated cost of the project of Rs.38.14 crore was revised to Rs.70.16 crore as per Detailed Project Report (DPR) prepared in 1985-86 consequent to the increase in generation capacity to 150 MW (3 units of 50 MW each) on the suggestion of the Central Electricity Authority (CEA).

According to the Project Report, the generation of power would be by utilising the flow over the head available between the full reservoir level of the existing Glenmorgan Forebay and Maravakandy Dam near Masinagudi in an underground powerhouse located near Glenmorgan. The annual generation of power estimated at 19 million units (MUs) was to be evacuated through 230 KV Double Circuit (DC) line to be laid from Pykara to M.G Pudur (Arasur) in Coimbatore district.

The environmental clearance of the project was obtained in March 1985. The techno-economic clearance for the project was given by CEA in November 1987 and by Union Planning Commission in August 1988 for Rs.70.16 crore. The Board accorded administrative approval for the project in September 1988. However, based on the revised administrative approval in June 1990 for Rs.114.87 crore (1989 price level), the project commenced only in August 1990. Taking into account the gestation period of six years as stipulated by Planning Commission at the time of project clearance, the project should have been completed by September 1994. Even adopting the actual date of the commencement of the project **i.e**, August 1990, it should have been completed by August 1996. But the project has not been completed so far (August 2001).

In the meantime, the cost of the project underwent two revisions for Rs.136.32 crore (1991-92 price level) and Rs.382.81 crore (1999-2000 price level) in September 1992 and April 2000 respectively. The actual expenditure incurred up to March 2001 was Rs.197.57 crore.

3B.2 Scope of audit

The review conducted from January to April 2001 covered planning and implementation of the project for the period from August 1990 to March 2001. The findings of the audit are discussed in the succeeding paragraphs.

3B.3 Funding of the project

The project is financed by borrowed funds.

The project included in Seventh Plan was proposed to be partly funded from Japanese Overseas Economic Co-operation Fund (OECF) loan package available during the years 1991-92 to 1994-95 for procurement of electrical generating equipments worth Rs.60.62 crore. Other components of the project were to be funded by Board's funds. As the OECF assistance could not be obtained due to longer gestation period of the project, the entire project cost was to be met by Board's borrowed funds.

3B.4 Project viability

The viability of the project based on the financial parameters as envisaged in the Detailed Project Report (DPR) as well as at the time of subsequent revisions of the project cost by the Board and worked out by Audit based on the parameters contained in DPR in subsequent revisions are given below:

Sl. No	Particulars	As per DPR (1985-86)	June 1990 (First revision) Worked out by		September 1992 (Second revision) Worked out by		April 2000 (Latest revision) Worked out by	
			Board	Audit	Board	Audit	Board	Audit
1.	Cost of project (Rupees in crore)	70.16	114.87	---	136.32	---	382.81	---
2.	Revenue return (in per cent)	12.15	N.A.*	(-) 6.45	12.32	(-) 2.12	14.54	5.56
3.	Benefit cost ratio (ratio)	1.08	N.A.	0.72	1.37	0.74	0.98	0.79
4.	Cost of generation (paise per unit)	40	N.A.	81	95	103	185	211

* **N.A. indicates not available as these were not worked out by the Board.**

The benefit cost ratio fell below one and cost of generation per unit worked out by Audit exceeded the average realisation in the latest revision.

It may be seen from the above that the benefit cost ratio of the project as worked out by the Board, fell below one at the escalated project cost of Rs.382.81 crore in April 2000 indicating that the project is economically unviable. Further, the percentage of revenue return projected at 12.15 in DPR had come down to 5.56 (as worked out by audit). The cost of generation of 40 paise per unit at DPR stage had gone up to 185 paise as worked out by Board during the latest revision (April 2000), whereas the same worked out to 211 paise per unit (as per audit) as compared to the average realisation of 210 paise per unit.

More than 500 **per cent** increase in the project cost was mainly due to time over run and consequent cost escalation, incorrect/unrealistic estimation as discussed in the succeeding paragraphs coupled with lack of effective control over the time schedule of the project had rendered the project economically unviable.

3B.5 Implementation of the project

3B.5.1 Time over run

Delay in invitation and finalisation of tenders and geological mishap etc., had caused time overrun.

As mentioned earlier, though the project was cleared by the Planning Commission in August 1988, actual implementation was commenced only in August 1990, **i.e**., after a delay of two years. The contract for civil works was awarded in August 1995 and the Board prepared the PERT chart only in March 1997 and revised it twice subsequently to match the progress of the work. According to the revised schedule, the project has been slated for commissioning in October 2002.

In the absence of effective project management and monitoring, there were heavy slippages in the implementation of the project and the time over run was mainly due to:

- Delay of 36 months in inviting tenders for civil works.
- Delay in finalisation of tenders.
- Delay in execution of civil works.
- Delay of 23 months in recommencing the excavation work for lower pressure shaft due to occurrence of major loose rock fall in May 1997, while tunneling for pressure shaft.

These delays are discussed in subsequent paragraphs.

3B.5.2 Cost overrun

The project cost, which was estimated at Rs.70.16 crore in the DPR was revised to Rs.382.81 crore in April 2000. The revision of more than 500 **per cent** in the project cost at various stages is detailed below:

Non-inclusion of interest element, taking up additional works, escalation and accident caused cost overrun of Rs.312.65 crore.

(Rupees in crore)

Components	As per DPR (1985-86)	First revision (1989-90)	Second revision (1991-92)	Third revision (1999-2000)	Increase in percentage as compared to DPR
(1)	(2)	(3)	(5)	(7)	(8)
Civil works	22.72	43.78	53.21	148.49	653.37
Electrical works	40.29	60.62	68.39	106.62	264.63
Transmission works	7.15	10.47	14.72	33.00	461.54
Interest during construction period				94.70	
Total	70.16	114.87	136.32	382.81	545.62

The steep increase in project cost was mainly attributed to:

Delay in implementation of the project had resulted not only in cost over run but also resulted in potential loss of generation of Rs.275 crore.

		(Rupees in crore)
1.	**Subsequent inclusion of cost of financing which was omitted to be considered at the time of DPR**	**94.70**
2.	**Addition of new items**	**41.48**
3.	**Increase in cost due to escalation**	**124.02**
4.	**Increase in quantities**	**5.68**
5.	**Increase in establishment cost in project implementation**	**20.92**
6.	**Increase in the cost of transmission works**	**25.85**
	Total	**312.65**

Besides for every month of delay in completion the Board has worked out the revenue loss on generation as Rs.5 crore. Thus, delay in implementation of the project had resulted not only in cost overrun of Rs.312.65 crore but also resulted in potential loss of generation of Rs.275 crore (up to the revised scheduled date of commissioning **viz**., October 2002).

3B.6 Execution of the project

The project included mainly civil works comprising construction of access tunnel, pressure shaft, cable shaft, power house and Tail Race Tunnel (TRT), **etc**., and electrical works comprising procurement and erection of generating equipments, auxiliary equipments, power transformers of transmission lines, **etc**. The execution of these works, are discussed in the succeeding paragraphs.

3B.6.1 Civil works

(a) Award of contract

Though the Planning Commission cleared the project in August 1988, tenders were invited only in August 1991 **i.e**., after 36 months. These tenders were opened in November 1991 to execute the civil works in a single package comprising construction of Access Tunnel, Adit – II and TRT at an estimated cost of Rs.13.11 crore.

Subsequently, the Board decided (April 1992), to split the work into two packages, so as to take up both packages simultaneously as it was felt that both Access Tunnel and TRT were in critical path. Negotiation was held with two of the eligible tenderers for this purpose without any success. Consequently, Board decided to award the entire work to one tenderer (M/s RPNN Ltd.). As the Government did not approve the award due to poor rating of the vendor, Board called for fresh tenders (April 1994) enlarging the scope of the work to include all the civil works, (**viz**., construction of Access Tunnel, TRT, Pressure Shaft, Powerhouse Cavern, Cable Shaft and Adits) so as to award entire civil works as a single package (at a total cost of Rs.44.58 crore). Finally, the civil works were awarded (June 1995) to KCT Brothers, New Delhi (KCT).

Thus, the indecisiveness of the Board **viz**., frequent changes made in the scope of work by the Board resulted not only in a time over run of 28 months (from November 1991 to April 1994) but also in cost escalation of Rs.5 crore (being the difference between the value of the items of work in the cancelled tender and the subsequent contract for the same items of work).

It was also observed that at the time of award of this work, KCT had not executed works of such a magnitude. Although, KCT was stated to have carried out 10 works of lesser magnitude between 1972 and 1994, the Board did not enquire adequately about the performance of the contractor. Thus, awarding the contract to the tenderer without adequately verifying their previous performances resulted in abnormal delay in execution of civil works as discussed in succeeding paragraphs.

(b) Execution of work

(i) Mobilisation and machinery advances

Loss of Rs.7.30 crore due to payment of interest free advances and non-consideration of these advances while allowing escalation.

As per general conditions, which formed part of the contract, no mobilisation advance would be considered for works and procurement of machinery. However, KCT requested for release of mobilisation and machinery advances and offered to pay interest at 14 **per cent per annum** on these advances. The Board released Rs.8.91 crore being the 20 **per cent** of the contract value (10 **per cent** for mobilisation and 10 **per cent** for machinery) as an interest free advance for no recorded reasons. Subsequently, another advance of Rs.4.46 crore (10 **per cent**) was released as interest free machinery advance in lieu of contractors' agreement to advance the completion of the works by two months (**i.e.** from 48 months to 46 months). However, no penal clause was incorporated in the contract to protect the Board's financial interest in the event of non-completion of the works within the stipulated time. As the project is being funded by borrowed funds, any delay in completing the project in time would render the investment made so far idle with consequent interest burden to the Board.

It was observed in audit that failure to include suitable clause in the agreement regarding interest at 14 **per cent** on the advances as agreed by the contractor resulted in an interest loss of Rs.5.17 crore. Besides by admitting the contractor's escalation claim for value of work done without deduction of interest free advance, the Board suffered loss by way of excess payment of escalation amounting to Rs.2.13 crore.

(ii) Delay in execution of civil works

The civil works were commenced in August 1995. However, PERT chart for the project was prepared only in March 1997. The following table indicates the delay in completion of various components of civil works.

Sl. No.	Activity	Completion schedule		Delay in months
		Due	Actual	
1.	Access tunnel	March 1996	April 1996	1
2.	Power house cavern	March 1997	February 2000	35
3.	Transformer cavern	April 1998	May 1999	13
4.	Tail race tunnel	March 1999	October 2000	19

Sl. No.	Activity	Completion schedule		Delay in months
		Due	Actual	
5.	Pressure shaft – upper reach	June 1997	March 1998	9
6.	Pressure shaft – lower reach	December 1997	Not yet completed	---
7.	Cable shaft	August 1998	Not yet completed	---

It would be seen from the above that the contractor had completed five out of seven works with a delay ranging from one to 35 months. The main reasons for the delays were inadequate mobilisation of men and machinery by the contractor. The remaining two works, which are under execution are discussed in the succeeding paragraph. Board's attempt to identify a new contractor to carry out the balance works has not borne fruit so far (August 2001). The Board could not levy any penalty/liquidated damages on the contractor for delay in completion of these works due to its failure to include such clause in the agreement. At the same time, the Board was incurring interest expenditure on the borrowed funds invested in these works.

(iii) Incomplete civil works

(a) The excavation work in lower pressure shaft was commenced in November 1996 as per schedule. The work was carried out up to 176 metre at a cost of Rs.37 lakh but further excavation had to be stopped (May 1997) due to major rock fall. Based on the recommendations of the expert committee, the work already done was abandoned and excavation in different alignment was entrusted (February 1998) to KCT at an additional estimated cost of Rs.6.12 crore. However, KCT commenced the work belatedly in April 1999 and has not completed it so far (August 2001).

(b) The excavation of cable shaft, which was scheduled to be commenced in October 1997 as per PERT chart was actually commenced in January 1999 only due to accidents on account of loose rock fall similar to that faced while tunneling for lower pressure shaft and the work was still under progress (August 2001).

3B.6.2 Mechanical and electrical works

(i) Idle investment in procurement of machinery

Placement of purchase orders when civil works were stopped had resulted in idle investment of Rs.46.14 crore and interest loss of Rs.12.77 crore.

As per the PERT chart prepared in March 1997, the generating machinery and power transformers, **etc**., were to be procured in seven to 24 months so as to be ready for erection on completion of the civil works. As mentioned earlier, the civil work in lower pressure shaft, which was to be completed in December 1997 was stopped indefinitely in May 1997 due to major rock fall. The Board was not sure of resumption of civil work immediately as the problem was to be studied by an expert committee and finally the civil work was recommenced only in April 1999. But even before knowing the probable date of recommencement of the civil work, the Board placed orders (November 1997) for generating machinery (value: Rs.58.17 crore) and cables (value: Rs.8.75 crore) and made payments to suppliers amounting to Rs.46.14 crore up to March 2001.

Generating machinery were delivered by the supplier at site between April 1998 and February 2001. These are being kept in open yard subjecting them to vagaries of nature and not taken into Board's accounts as the storage and custody are the responsibilities of the suppliers until the erection as per the terms of the contract. The erection and commissioning of the machinery still could not be carried out, as the work front has not been made available to the suppliers. Thus, non-synchronisation of supply with project commissioning has led to locking up of borrowed funds of Rs.46.14 crore without beneficial use besides interest loss thereon amounting to Rs.12.77 crore up to March 2001.

It is pertinent to note that as the warranty period of the machinery had already lapsed, the Board might not be able to hold the suppliers responsible for defects in supply/specification, if any, in respect of these high value items at the time of commissioning.

(ii) Non-provision of butterfly valve

Provisioning of an isolating valve **viz**., butterfly or gate valve to the individual turbine in a power house in addition to the spherical valve would enable carrying out repair work on the spherical valves and would avoid draining of the entire water in the penstock during such repairs. A suggestion by the Chief Engineer/PUSHEP (September 1997) to have a butterfly valve in the power house was rejected (September 1997) by the Board on the ground that PUSHEP was to be a peak load station running for about six hours a day. It is observed in audit that non-provisioning of butterfly valve was not referred to CEA and Central Water Commission, project consultants. In this connection, it is pertinent to mention that in Servalar project the open power house was flooded during operation due to non-provision of a similar valve and then the same was provided with great difficulty with forced outages for four to six months. Even a peak load station had to maintain continuous generation during the period of surplus water and any repair even in a single spherical valve during such period would adversely affect the generation in all the units of the power house. In view of this, the Board should consider to instal butterfly valve.

3B.7 Non-obtaining of statutory clearance

(i) Transmission line

Idle investment of Rs.25.69 crore due to non-obtaining the prior clearance from Forest Department.

The project envisaged erection of 230 KV DC line of 85 KMs length for evacuation of power from Pykara to MG Pudur (Arasur sub-station) including 14 KMs through forest area. The planning commission while approving the project in August 1988, had stated that forest clearance for transmission system had to be obtained before commencing transmission works. It was, however, observed that without waiting for such prior approval from the Forest Department for construction of line in the forest area, the Board went ahead with the construction of the line in non-forest area for a route length of 26 KMs at a cost of Rs.8.30 crore. An alternative proposal at the instance of Forest Department (March 1998) for erecting 220 KV DC line along the corridor of existing 110 KV SC Pykara Nellithurai line is yet to be submitted by the Board to the Forest Department.

Besides, the Board constructed TRT which passes through the Forest Land/Reserve Forest area, at a cost of Rs.17.39 crore without obtaining the forest clearance. As informed by the Ministry of Environment and Forest in May 2000, construction of TRT was violative of the Forest Conservation Act 1980 and required Ministry's clearance. The Board is yet to obtain Ministry's clearance for this work. Thus, non-obtaining the forest clearance both for TRT and transmission lines has not only rendered the expenditure of Rs.25.69 crore idle but also rendered the very commissioning of the project, even if all the works are completed, difficult unless it is approved by the Forest Department.

(ii) Storage capacity of Maravakandy Dam

Project envisaged that water discharged from the Power House of PUSHEP was to be led into Maravakandy Dam for further discharge to Moyar forebay through flume. The existing storage capacity of 34.2 Million Cubic Feet (mcft.) of the dam was sufficient to store and conduct water discharged from the already existing power house at Singara. Later the Board found (1993) that in order to operate both power houses to the full capacity increasing the storage of the dam by increasing height of the dam by another 5 feet and increasing carrying capacity of the flume by widening and deepening were necessary. Otherwise, water discharged from both power houses would result in surplussing 53.5 mcft of water equivalent to generation of 1.25 MUs per day.

But the Board did not succeed in increasing the carrying capacity of the flume or the height of the dam as these were objected to by the forest department (September 1996) and as a result the Board would be able to operate both power houses for a maximum of 11.5 hours a day only. This would yield generation of 3.4 MUs only against full generation capacity of 6.16 MUs per day. This is contrary to the principle of operating the hydro stations for full generation and backing down the generations in non-hydro stations during the monsoon period to avoid surplussing of water.

Thus, the failure to study these aspects at investigation/planning stage itself had rendered the power house inoperable with full capacity during the monsoon period.

The above matters were reported to the Board/Government in June 2001; their replies had not been received (September 2001).

Conclusion

The project, which was initially conceived in 1981-82 was yet to be completed. It suffered right from the initial stage due to excessive delay in calling for tenders and finalising the contractor for civil works, wrong selection of main contractor, ineffective project management and monitoring. These coupled with the failure to obtain prior forest clearance for laying of transmission line and for construction of TRT and inability of the Board to raise storage level of Maravakandy dam so as to run the power house to the optimum level led to depriving the benefits of the project such as eco-friendly energy generation at a low cost, shorter gestation period **etc**. Thus, poor implementation of the project with reference to DPR and PERT chart had not only increased the project cost by more than 500 **per cent** and cost of generation from 40 paise at the DPR level to 185 paise in 1999-2000, but also resulted in potential loss of generation of Rs.275 crore up to the revised scheduled date of commissioning **viz**., October 2002. In view of this critical position there is an urgent need to complete the project by removing all the bottlenecks so as to utilise the idle investment incurred so far fruitfully as well as to provide power to the public.

CHAPTER-4

SECTION-4A

4A.1 TAMIL NADU CIVIL SUPPLIES CORPORATION LIMITED

4A.1.1 Undue benefit to the Roller Flour Mills

Company's failure to recover the cost of gunny bags from Roller Flour Mills resulted in undue benefit of Rs.8.77 crore to them.

Due to non-recovery of cost of gunny bags, the Company afforded undue benefit of Rs.8.77 crore to Roller Flour Mills.

Government of India (GOI) permitted (December 1992) the State Government to convert a portion of wheat supplied from the Central Pool for Public Distribution System (PDS) into wheat products like Maida and Rava and distribute them to the ration card holders through PDS outlets at the rates fixed by the State Government. The State Government in turn entrusted (May 1993) the conversion and distribution work to the Company.

The Company in turn entered into separate agreements with private Roller Flour Mills (RFMs) for conversion of wheat into maida and rava. Wheat allotted for the purpose of conversion was to be delivered in gunny bags by the Company and the flour (maida and rava) were to be packed by the RFMs in prescribed retail packets (primary packing) and bundled in gunny bags (secondary packing).

The agreement with RFMs provided for payment of packing charges for retail packing of maida and rava and also packing them in gunny bags (each gunny bag contains 50 to 100 retail packets) in addition to milling charges. Accordingly, the claims of RFMs were regulated and packing charges were paid. However, it was noticed in audit that the cost of gunny bags in which wheat was supplied by the Company to RFMs was not adjusted/recovered against the claims of RFMs. This resulted in undue benefit of Rs.8.77 crore to the RFMs on 72.63 lakh gunny bags supplied during the period from 1993-94 to 1999-2000.

The Government in its reply (April 2001) stated that the millers need a total of 16 gunny bags per tonne of wheat (including 10 gunny bags that were supplied with every tonne of wheat) for holding smaller packets of wheat products that were supplied to the Company and for selling the remaining quantity of wheat products in the open market and hence the question of retrieval of gunny bags from RFMs did not arise.

The reply of the Government is not tenable as the Company has not adjusted the gunny bags supplied by it, though it made the payment for 16 gunny bags required for holding smaller packets.

4A.1.2 Extra expenditure due to non-lifting of allotted rice under BPL quota

Lifting of allotted rice under Above Poverty Line (APL) quota cost of which was higher as compared to cost of rice for Below Poverty Line (BPL) resulted in avoidable extra expenditure of Rs.1.02 crore.

Non-lifting of entire allotted quantity of BPL rice resulted in extra expenditure of Rs.1.02 crore.

Government of India (GOI) allots rice from Central Pool to the States on monthly basis for distribution under Public Distribution System (PDS). The allotment is made under two categories **viz.,** for BPL beneficiaries and APL beneficiaries at issue rates of Rs.3500 and Rs.9050 per MT respectively. The Government of Tamil Nadu as a policy sells both the categories of rice at the same rate **viz.** Rs.3.50 per Kg. to all beneficiaries under the PDS. Being the agency of the Government, the Company procures the rice against Central Pool Allotment and distributes it at the rate fixed by the State Government to PDS shops for sale to ration cardholders. According to procedure, the monthly quota of allotted rice is to be lifted latest by 15^{th} of the succeeding month by the Regional Offices (ROs) of the Company from the nearest godowns of the Food Corporation of India (FCI) after paying the cost in advance.

On a review of the lifting of Central Pool rice allotment by the ROs of the Company, it was noticed that for the month of June 1999, Trichy RO of the Company was allotted 3000 MTs of rice under BPL category and 2000 MTs under APL category. Indents were placed by the RO for lifting the allotment first under APL category by remitting Rs.90.50 lakh on 11 June 1999 (for 1000 MTs) and another Rs.90.50 lakh on 18 June 1999 for the balance 1000 MTs and the entire quantity allotted under this category (2000 MTs) was lifted by 15 July 1999. The first payment (Rs.35 lakh) for BPL allotment was made only on 25 June for lifting 1000 MTs and the second on 30 June for 2000 MTs (Rs.70 lakh) through adjustment of balance amount available with the FCI in respect of earlier months indent. Due to delay in indenting for BPL rice despite availability of sufficient balance fund with the FCI, it could lift only 1166.433 MTs out of the allotted 3000 MTs by 15 July 1999 and the unlifted quantity of 1833.57 MTs lapsed.

It could be observed from the above that had the Company indented for the BPL allotment first by adjusting balance fund with FCI, it could have lifted the entire BPL allotment. Failure to do so had resulted in an avoidable extra expenditure of Rs.1.02 crore in lifting APL allotment in full while leaving the BPL allotment to lapse. (Rs.5550 x 1833.57).

The Government in their reply stated (July 2001) that liftment of both APL and BPL rice was done on need basis to the optimum level and omission to lift the cheaper variety rice could not be construed to have caused additional/avoidable expenditure. The reply is not tenable as there was Company's failure to make indent for BPL rice immediately on allotment (1 June 1999) despite availability of balance fund with the FCI.

4A.2 TAMIL NADU INDUSTRIAL INVESTMENT CORPORATION LIMITED

4A.2.1 Disbursement of term loan in deviation of terms and conditions

Disbursement of loan by the Company by relaxing the terms and conditions of sanction and not ensuring the fulfilment of assurance by the loanee resulted in non-recovery of Rs.5.92 crore.

Disbursement of term loan without ensuring the fulfilment of the assurance by the loanee resulted in non-recovery of Rs.5.92 crore.

A term loan of Rs.2.50 crore was sanctioned (February 1996) by the Company for a new project promoted by N.R.S Textile Mills Limited, Coimbatore (unit) to manufacture and export cotton yarn. The estimated project cost of Rs.9.90 crore was proposed to be financed by (i) promoter's contribution (Rs.3.30 crore) (ii) Public issue of shares (Rs.3.30 crore) and (iii) term loans from the Company (Rs.2.50 crore) and bank (Rs.0.80 crore).

The terms and conditions of the loan sanctioned by the Company **inter alia**, included that (i) the loan was to be released only after public issue of shares for Rs.3.30 crore fully subscribed and paid-up and (ii) the loan of Rs.0.80 crore from the bank should be tied up before execution of loan document.

In April 1996, the loanee unit made a representation to the Company stating that public issue of the shares was fully subscribed and 50 **per cent** amount was received and as per the terms of public issue, the remaining amount of 50 **per cent** would be realised in April 1996 and hence requested for relaxation of terms for disbursement of loan sanctioned. Thereupon, the Company relaxed (April 1996) the above conditions and disbursed Rs.2.23 crore between May and November 1996. However, the balance amount of share capital was not received till the closure of loan in September 1997.

The loanee unit could not commence full-fledged operations till September 1997 due to its failure to mobilise anticipated project cost and working capital requirement. Due to default in payment of dues, the Company foreclosed the loan (September 1997) and took possession of the assets of the unit in December 1999.

The following points were noticed in audit:

(i) As per the existing policy of the Company, term loans exceeding Rs.1.50 crore could be sanctioned only to existing units in operation for a period not less than three years. In case of new units promoted by the existing industrial groups, the existing units of the same group should have earned profit/declared dividend during the previous two years to make them eligible for term loans exceeding Rs.1.50 crore. However, in the instant case, term loan was sanctioned to a new unit one of whose existing associated units incurred loss in the previous two years. (ii) Though the Company took possession of assets of unit as early as in December 1999, its efforts to dispose off the assets had not yielded any results so far (January 2001).

Thus, the sanction and disbursement of term loan by the Company in (i) contravention of the existing policy and (ii) relaxation of terms of sanction and disbursing the term loan without raising the entire share capital by loanee resulted in non-recovery of dues amounting to Rs.5.92 crore (principal: Rs.2.23 crore and interest: Rs.3.69 crore).

The Government replied (May 2001) that the unit was at the advanced stage of implementation and the imported machinery envisaged in the project had arrived, which were incurring demurrage, hence the terms and conditions were relaxed. However, it was noticed in audit that at the time of relaxation (April 1996) promoter's statement that they had brought in Rs.1.55 crore as unsecured loan and their assurance that balance of share capital of Rs.1.65 crore would be received within one month was belied as neither did they bring the additional amount nor the balance of share capital amount was actually received even after two years, which resulted in non-commencement and eventual failure of the project.

4A.2.2 Loss due to acceptance of grossly overvalued collateral securities

Failure to ascertain the guideline value of collateral securities from the Registration Authorities resulted in loss of Rs.0.65 crore

(1) The Company sanctioned (March 1997) a term loan of Rs.20 lakh to M/s. Excel Engineering, Chennai (loanee) for the purchase of plant and machinery required for preventive maintenance/reclamation of scarce resources in power plants, Railways, Port Trusts, **etc**. The loanee offered 50 cents of land with buildings in Arumanthai Village, Chengalpet District as collateral security, which was valued at Rs.21.52 lakh by the Company's valuer (April 1997). The Company disbursed (April 1997) a sum of Rs.19.23 lakh against the sanctioned loan.

As the loanee defaulted in payment of principal and interest and on noticing missing of machinery from the factory premises, the Company foreclosed (April 1998) the loan after disbursement of Rs19.23 lakh. While taking over the possession of the machinery in October 1998, it was found that a major portion of the costly machinery was missing. As the value of the available machinery was meagre, the Company took possession of the collateral security in October 1999.

When this property (collateral security) was auctioned in March 2000, the maximum offer received was Rs.0.21 lakh only (as against the value of Rs.21.52 lakh assessed by the Company valuer) and hence was not disposed of. At this juncture the Company wrote to the Sub-registrar, Red Hills who intimated that the guideline value of the said property was Rs.22950 only (at Rs.45900 per acre) and the Company also found the property to be a part of the paddy field and not land with buildings as certified by the Company's valuer. The total amount to be recovered from the borrower as on 30 June 2000 was Rs.35.01 lakh (including interest of Rs.15.78 lakh).

It was replied (July 2001) by the Government that the collateral security was assessed by the Company's approved panel valuer and that criminal complaints had been lodged against the promoter, owner of collateral security and the valuer.

(2) Similarly in another case (M/s. Raviraj Apparels, Chennai) a loan of Rs.18.33 lakh was disbursed (July 1997) against collateral security of 1.82

acres of land in Keezhapakkam village. The borrower defaulted in payment and absconded after closing down the unit (April 1998). The Company lodged a police complaint as a major portion of the machinery hypothecated to the Company was missing. The available machinery were taken over by the Company and sold in public auction for Rs.2.80 lakh (November 1999). The total amount due from the borrower as on 30 September 2000 was Rs.29.56 lakh (including interest of Rs.14.03 lakh).

In this case also, the collateral security was valued afresh after the borrower defaulted (April 1998) and it was observed that the guideline value in February 1997 as well as in April 1998 was Rs.19100 only **per acre** and consequently the value of the collateral security was Rs.34762 only (1.82 acres).

It was replied (July 2001) by the Government that the original valuation of the collateral security was made on square foot basis as per sale deed and while making subsequent valuation, the guideline value was taken on acre basis. The reply is untenable, as the basis of valuation could not make such a huge difference in valuation. Further, the guideline value of agriculture land was always fixed on acreage basis.

From the above mentioned facts, it could be seen that the **modus operandi** of the borrowers in both the cases was to boost the value of the collateral security. This could have easily been detected by the Company had it approached the Registration Authorities (Sub-Registrars) before the disbursement of loans at the time of valuation of properties instead of after disbursement. It is pertinent to mention here that in March 1995 (D.O.letter No.5277/J2/95-2, dated 16 March 1995) the Sub-Registrars in the State had been directed by the Inspector General of Registration to furnish the guideline value in writing as and when requested by the Company but it failed to make use of this directive before disbursement of loan.

No action has been taken by the Company against the officers responsible for the lapse in this regard.

4A.2.3 Sanction of term loans based on bogus collateral securities

Release of term loans relying on bogus collateral securities resulted in non-recovery of dues amounting to Rs.0.43 crore.

(a) The Company sanctioned (March 1997) a term loan of Rs.20 lakh (repayable in 28 quarterly instalments) to M/s. Sree Kamakshi Polymers (SKP), Chennai for the purchase and erection of plastic bag manufacturing plant. The loan was **inter alia** secured by mortgage of six grounds of land (31.75 cents) at Madipakkam owned by a third party as collateral security and a sum of Rs.17.77 lakh was disbursed (October 1997). However, borrower defaulted in repayment of both principal and interest and during the inspection (May 1998) of unit by the Company machinery purchased out of the loan amount were found missing. Thereafter, the Company foreclosed (May 1999) the loan. The overdues as on March 2000 stood at Rs.25.25 lakh (including entire principal amount of Rs.17.77 lakh) and the same was yet to be recovered (September 2001).

(b) Similarly, the Company sanctioned (August 1996) a term loan of Rs.7.30 lakh, working capital loan of Rs.6.25 lakh and subsidy bridge loan against subsidy of Rs.2.34 lakh to M/s. Sastha Leathers Private Limited (unit). The term loan was repayable in 24 quarterly instalments and the working capital loan was repayable in 12 instalments. Against these loans, an amount of Rs.12.93 lakh was disbursed to the unit, which was **inter alia** based on a collateral security of a residential house (valued at Rs.14 lakh) in Chennai held in the name of Mrs. Dhanalakshmi, a third party. As the borrower defaulted in payment of dues, the Company foreclosed (June 1999) the loan and took over possession (September 1999) of the assets. The assets were subsequently sold in auction for Rs.4.05 lakh only (October 2000). The balance amount of Rs.17.25 lakh (including interest of Rs.8.37 lakh) could not be recovered so far (March 2001).

It was observed in audit that in both the cases mentioned above, after disbursement of the loan, it was found (December 1998 and February 2000) by the Company that the collateral securities offered were bogus/fictitious. In the case of SKP, the land offered as collateral security was found to have been sold by the owner as early as in 1964-65 itself. In the other case, the owner of the collateral security claimed (December 1998) that she did not offer her property as security to any one. The Company also did not obtain any personal guarantees from the Directors.

Thus, failure of the Company in verifying the validity of the collateral securities before disbursement of the loans especially when collateral securities offered were owned by third parties other than the promoter coupled with failure to obtain personal guarantees of Directors resulted in non-recovery of Rs.42.50 lakh.

The Government while admitting (July 2001) the facts stated that criminal complaints were lodged against the promoters as well as the collateral owner in the case of SKP in September 2000 and the action was being taken against the officials responsible for the lapses in this regard.

4A.3 STATE INDUSTRIES PROMOTION CORPORATION OF TAMIL NADU LIMITED

4A.3.1 Disbursement of loan on second hand machinery

The Company disbursed loan on imported second hand machinery which failed to achieve the desired level of productivity and consequently, it could not realise Rs.4.67 crore.

Disbursement of loan on imported second hand machinery resulted in non-realisation of Rs.4.67 crore.

State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) and Tamil Nadu Industrial Investment Corporation Limited (TIIC) sanctioned (December 1995) term loans of Rs.2.50 crore and Rs.1.50 crore respectively to M/s Coimbatore Vijay Cotton and Synthetics Limited to jointly finance a project to set up a spinning mill at Palladam taluk. The original project cost of Rs.7.80 crore was subsequently reduced to Rs.6.68 crore with consequent reduction in financing by SIPCOT (Rs.2.14 crore) and TIIC (Rs.1.23 crore). The balance project cost (Rs.3.31 crore) was to be arranged by the loanee unit itself by share capital (Rs.3.10 crore) and unsecured loan (Rs.0.21 crore).

A sum of Rs.1.61 crore was disbursed by SIPCOT between November 1996 and September 1997 and Rs.71 lakh was disbursed by TIIC between May 1997 and February 1998. Both these loans were repayable with interest in 24 quarterly instalments commencing after two years from the date of first disbursement. As the borrower defaulted in payment of principal and interest to both TIIC and SIPCOT, the loan accounts were foreclosed (January/February 2000) by these companies and the amount due from the borrower to SIPCOT was Rs.3.42 crore (Rs.1.61 crore principal plus interest: Rs.1.81 crore) as on 30 April 2001 and TIIC was Rs.1.25 crore (Rs.71 lakh principal plus Rs.54.45 lakh interest) as on 31 March 2001.

After inspecting the unit in May 2000, SIPCOT observed (June 2000) that the machines were grossly underutilised due to lack of adequate working capital support and the unit was unable to achieve the desired level of productivity with the imported second hand machinery.

In audit, it was observed that the appraisal of the project was defective due to the following reasons:

(1) The Company had failed to ensure export market potential for the product especially, when the borrower had to fulfil export obligation (as the machinery were imported under Export Promotion Capital Goods Scheme).

(2) While extending the term loan, the Company failed to assess the suitability of the imported second hand machinery for the project through independent body in the textile field like South India Textile Research Association (SITRA).

The Government in their reply stated (July 2001) that market tie-up arrangement for export was not insisted upon as India is one of the few countries that export cotton yarn/fabrics/garments and there was good scope for export. Regarding suitability of the machinery, it was stated that the textile machinery were normally maintained by replacing the worn out parts and the suitability of the machinery was ensured through chartered engineer.

Even after accepting the Government's reply, fact remains that the unit was unable to achieve the desired level of productivity with the imported second hand machinery, which should have been ensured before disbursement of loan in order to safeguard the interest of the financial institutions.

4A.3.2 Loss due to irregular disbursement of loan

Failure of the Company to exercise basic checks before disbursement resulted in non-recovery of Rs.2.36 crore.

Loss of Rs.1.61 crore due to irregular release of term loan.

(a) Sri Prasanna Vinayagar Textiles Private Limited (borrower) proposed to set up a new automatic fabric weaving unit at Katheri village of Namakkal District at an estimated cost of Rs.1.85 crore and approached (July 1996) the Company for sanction of a term loan of Rs.1.15 crore for purchase of plant and machinery. The Company sanctioned (January 1997) Rs.1 crore as term loan to purchase 20 sunrise brand auto looms and other machinery. The promoter offered collateral securities, whose market value was assessed by a

Chartered Engineer at Rs.57 lakh and two Directors gave personal guarantee for the term loan.

Based on the xerox copies of invoices of Rs.63 lakh for the purchase of plant and machinery from M/s Sunrise Industrials, Bangalore and the Chartered Accountant's certificate to that effect and raising of capital envisaged in the project report, the Company released (March 1997) Rs.54 lakh as first instalment of term loan direct to the borrower instead of supplier, as reimbursement for purchase of plant and machinery. Subsequent instalments were also released in April 1997 (Rs.15.80 lakh), September 1997 (Rs.26 lakh) and September 1998 (Rs.4.20 lakh) by way of adjustment towards interest.

During April 1999, the Company learnt from M/s Sunrise Industrials that they had not at all supplied any machinery to the borrower and that the invoices produced by the borrower for the drawal of term loan were fabricated and fictitious. Consequently, the Company foreclosed the loan account (September 1999) and took possession of the unit (September 1999). As against the outstanding amount of Rs.1.61 crore (principal: Rs.one crore **plus** interest: Rs.60.95 lakh) the value of assets taken over was Rs.18.79 lakh only including the value of plant and machinery (Rs.4.08 lakh). The Company also found (December 2000) that the collateral securities were also fictitious and a major portion of the same was not owned by the promoters and hence legally unenforceable.

It was observed in audit that though the Company's guidelines on disbursement of term loan provided for inspection of assets created/purchased, the first instalment of Rs.54 lakh, which was reimbursement of plant and machinery purchased was disbursed without such an inspection and solely based on xerox copies of invoices. From July 1997 onwards, it was recorded by the inspection officials of the Company that the borrowers had purchased and installed the machinery as envisaged in the project report but this turned out to be false as the borrowers themselves admitted (July 1999) that they did not purchase the plant and machinery from M/s Sunrise Industrials but purchased only second hand machinery from Gwalior. Similarly, the genuineness of the collateral securities and their market/guideline value was not verified by the Company by reference to Revenue/Registration authorities, which subsequently turned out to be fictitious and fabricated. It was also observed that though the Company obtained personal guarantees from two directors, these were yet to be invoked (May 2001).

Thus, the failure of the Company to exercise basic checks before disbursement of term loan resulted in a loss of Rs.1.61 crore.

It was replied (July 2001) by the Government that the instalment amounts were released directly to the borrowers as reimbursement for purchase of plant and machinery on the Chartered Accountant's certificate. It was also stated that a criminal complaint had been lodged against the borrowers with Crime Branch/Criminal Investigation Department (CB/CID), Namakkal and that Departmental enquiry was being conducted to fix responsibility for the lapses. The reply is untenable as the Company failed to comply with the disbursement procedure, which resulted in non-recovery of Rs1.61 crore.

Release of loan without physical verification of machinery resulted in loss of Rs.0.75 crore.

(b) A term loan of Rs.1.27 crore was sanctioned (December 1996) by the Company to Unigold Jewellery Limited for setting up a project for the manufacture of gold and silver ornaments.

On representation by the loanee that he had already purchased machinery worth Rs.53.69 lakh, the Company disbursed (31 March 1997) Rs.41.69 lakh to the unit without physical verification of the machinery.Just after ten days of disbursement of part of the term loan, the Company found (10 April 1997), based on a complaint by an employee of the loanee unit, that the promoter had absconded after encashing the cheque received from the Company. Consequently, the Company took possession of the machinery in the unit's premises and the loan was foreclosed on 11 June 1997. But this machinery could not be sold as a criminal complaint was made by the deposit holders of the borrower.

The Company also took possession (October 1998) of the collateral security (9.45 acres of land) valued at Rs.2.06 crore by a panel valuer (February 1997), but it could not dispose of the same as the owner of the land had filed a civil suit against the take over. It was also found (October 1998) by the Company that the actual value of the collateral security was Rs.3 lakh only and not Rs.2.06 crore.

Thus, the Company's disbursement of term loan without physical verification of machinery as provided in the guidelines resulted in non-recovery of Rs.74.77 lakh including interest of Rs.32.93 lakh as on 31 March 2001.

It was replied (May 2001) by the Company that based on the Chartered Accountant's Certificate that the promoter had brought in Rs.1.17 crore towards share capital and based on the verification of plant and machinery purchased for Rs.68.69 lakh the payment was directly made to the party as reimbursement. The reply is not tenable as there was nothing on record to show that any physical verification of plant and machinery was ever made.

The above matters were reported to the Government in July 2001; their reply had not been received (September 2001).

4A.3.3Idle investment on Export Promotion Industrial Parks

Improper selection of location of Export Promotion Industrial Parks (EPIP) resulted in idle investment of Rs.15.67 crore

Infructuous expenditure of Rs.15.67 crore on development of EPIP.

As a part of the centrally sponsored scheme of the Government of India (GOI) to set up EPIPs in various States for strengthening export production infrastructure, the proposal of the Company to establish an EPIP at Gummidipoondi was approved by GOI in December 1994. The estimated cost of Rs.19.90 crore of the scheme was to be met by GOI grant of Rs.10 crore and the balance by internal resources of the Company.

The Company decided (February 1994) to earmark 211 acres of land which was already in its possession in Gummidipoondi Phase II scheme for development of EPIP. The project scheduled to be completed in September 1997 was actually completed (barring some minor works) only in March 2000 at a cost of Rs.15.67 crore.

The demand for plots under the scheme was not encouraging and no plot had been sold till date (July 2001) in spite of the fact that the selling price of plots which was initially fixed at Rs.13 lakh **per acre** was reduced to Rs.9 lakh **per acre** in October 2000.

The main reason for the poor response to the EPIP scheme as analysed in audit was improper selection of location. As mentioned earlier, the site at Gummidipoondi was chosen as it was in possession of the Company at the time of launching of the scheme by GOI (November 1993). In view of the export orientation of the scheme, a proper market survey/study should have been conducted by the Company before selection of the location but this was not done. It is pertinent to point out that Gummidipoondi meets neither of the two requirements stipulated by GOI in the guidelines issued (May 1999) on choice of location **viz.** that it should have concentration of export units or should be a leading trade centre of the State.

Thus, improper selection of location for setting up EPIP scheme had rendered the expenditure of Rs.15.67 crore incurred on the scheme infructuous besides non-achievement of the objective of the scheme **viz.,** promotion of export.

It was replied (July 2001) by the Company that it is exploring all possible ways and means to market the plots through regular advertisements in the print media as well as through web site. The fact remains that the Company could not sell even a single plot till July 2001.

The matter was reported to the Government in July 2001; their reply had not been received (September 2001).

4A.4 TAMIL NADU POWER FINANCE AND INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED

4A.4.1 Delay in revision of interest rates on deposits

Delay in reducing interest rate on deposits resulted in additional burden of interest of Rs.1.87 crore.

Additional interest burden of Rs.1.87 crore due to delay in revision of interest rate.

The Company mobilises funds through public deposits at varying rates of interest based on the market conditions and the same are generally at par with Tamil Nadu Transport Development Finance Corporation Limited (TDFC), a Government of Tamil Nadu undertaking. The funds mobilised by the Company are mostly lent to Tamil Nadu Electricity Board (TNEB) after adding administrative cost (0.35 **per cent**) and margin of 0.30 **per cent**.

TDFC reduced the interest rates on deposits by 0.5 **per cent** with effect from 12 July 2000. However, the Board of Directors of the Company in its 42nd meeting on 25 July 2000 decided to retain the prevailing interest rates on deposits for a further period of three months and watch the developments in money market/commercial banks and then decide on the quantum of revision required.

It was observed in audit that the Company did not review the position immediately after the expiry of three months as per decision of the Board. It was only on 12 December 2000 that the Company decided to reduce the interest rate on deposits by half a **per cent** with effect from 10 January 2001 and also to correspondingly reduce the lending rate to the Board by the same margin from the same date. Failure to reduce the interest rate on deposits from 1 November 2000 itself (after three months from July 2000) had resulted in an avoidable additional interest burden of Rs.1.87 crore on deposits (Rs.152.29 crore) mobilised by the Company during the period from 1 November 2000 to 9 January 2001.

The Company replied (February 2001) that it was not paying any additional interest as its lending rate was based upon borrowing rate. The reply is not tenable in view of the fact that the delay in revision of interest rate on deposits had actually resulted in foregoing the benefit of reduced cost of borrowing, which could have been passed on to the TNEB.

The matter was reported to the Government in May 2001; their reply had not been received (September 2001).

4A.5 TAMIL NADU SMALL INDUSTRIES DEVELOPMENT CORPORATION LIMITED

4A.5.1 Non-recovery of differential cost from the allottees

Defective provisional allotment order and delay in working out final cost of construction resulted in non-recovery of Rs.1.25 crore.

Non-recovery of Rs.1.25 crore due to defective allotment order.

With a view to promote electronic industries in the State, the Company decided to construct an electronic complex at Guindy comprising two blocks of 40 modules each at an estimated cost of Rs.3.60 crore. Based on applications received from time to time, provisional allotment orders were issued for 35 modules in each block to the prospective entrepreneurs. The provisional allotment order indicated that the tentative cost of the modules had been fixed as Rs.400 per Sq.ft. plus 5 **per cent** service charge (SC) (subsequently revised to Rs.500 per Sq.ft. with effect from 1 July 1995 and Rs.713 per Sq. ft with effect from 1 January 1996) and that this was subject to revision depending upon the floor during regular allotment.

The construction of the two blocks was completed in June 1995 and December 1995 at a total cost of Rs.2.04 crore and Rs.2.08 crore respectively (including common development expenditure but excluding land cost and interest). The modules were handed over to allottees during the period from1995-96 to 1997-98, after collecting the cost as per provisional allotment order.

The Company worked out the final cost of construction as Rs.927 and Rs.940 per Sq.ft. plus SC for Blocks-I and II modules respectively (which included cost of construction, cost of land, expenditure on common amenities and interest up to 31 July 1997) in July 1997 and intimated the same to the allottees (August 1997) with a request to pay the balance amount.

The SIDCO Electronic Complex Owners' Association representing the allottees filed (December 1997) a writ petition in Chennai High Court challenging the additional amount demanded by the Company on the plea that as per the provisional allotment order, the final cost was dependent on the floor only and therefore there was no justification for demanding such a huge amount as differential cost. The High Court granted (May 1999) interim injunction subject to the condition that the petitioners should pay half the revised demand within six weeks. Neither the allottees complied with the Court's directives nor the Company took steps to get the interim injunction vacated. Consequently, the differential cost remains unrealised till date (September 2001).

The main reasons for the non-recovery of the differential cost of modules as analysed in audit were:

(i) The tentative cost of Rs.400 per Sq.ft. plus SC was very low and it was fixed without any reference to the estimated cost of construction of Rs.3.60 crore (for approximately 78000 Sq.ft.) excluding cost of land.

(ii) The provisional allotment orders did not specifically indicate that the tentative cost would be subject to revision based on the actual cost of construction on completion but merely mentioned that it would be subject to revision based on floor of allotment. There was also no explicit clause to the effect that the allottees would have to pay the differential cost before taking over possession.

(iii) The modules were handed over without working out or collecting the differential cost and there was an inordinate delay of more than two years, in working out the final cost by the Company after completion of construction of blocks.

Thus, the failure of the Company to draft the provisional allotment order properly and inordinate delay in working out and intimating the final cost of construction resulted in non-recovery of Rs.1.25 crore for more than five years. Consequently, the Company also suffered interest loss of Rs.1 crore (calculated at the borrowing rate of 16 **per cent per annum**) on this unrecovered amount.

The matter was reported to the Company and the Government in July 2001; their replies had not been received (September 2001).

4A.6 STATE TRANSPORT UNDERTAKINGS

4A.6.1 Loss of revenue due to delay in finalisation of tenders

Non-finalisation of tenders in time resulted in loss of revenue of Rs.0.84 crore to State Transport Undertakings.

Due to delay in finalisation of tenders, the STUs incurred a loss of revenue of Rs.0.84 crore.

In order to augment the revenue, the State Government directed (April 1998) all State Transport Undertakings (STUs) to go ahead with display of advertisement in the buses after following the usual financial procedure.

Accordingly, the High Level Committee on Central Purchase of STUs of the State decided (April 1998) that the STUs themselves can invite tenders for advertisement on the terms and conditions prescribed by the committee.

It was noticed in audit that there were abnormal delays in calling for and finalisation of tenders by the STUs. A test check in audit in respect of five STUs (out of 19) indicated that after taking into consideration normal period of four months in the finalisation of the contracts, the delays ranged from four to 14 months leading to a revenue loss of Rs.83.87 lakh during the period of delay (computed with reference to the revenue realised on advertisements after awarding the contract).

In view of the fact that the evaluation and awarding of tenders did not involve much technical expertise and that urgent and effective steps were required to be taken to reduce the mounting losses, such abnormal and avoidable delays lacked justification.

The Government in their reply stated (August 2001) that the rates offered for advertisement in buses in response to the tenders floated by some STUs were not encouraging and the low rates quoted by advertisement agencies might be one of the reasons for delay in finalisation of tenders. The reply is not tenable as there were delays in initiating action to call for tenders and their finalisation.

4A.6.2 Loss of revenue due to delay in leasing out shop

Due to injudicious rejection of initial offer and consequent delay in leasing out the shop the Company suffered loss of revenue of Rs.0.19 crore.

The motel complex comprising a hotel and five shops constructed (June 1990) by the Tamil Nadu State Transport Corporation (Villupuram - Division I) Limited (Company) at Mamandur for the convenience of the travelling public was let out on lease basis. In respect of Shop No.5, whose lease period was to expire in January 2000, the Company conducted tender-cum-public auction in November 1999 after inviting tenders. The single tender received for a lease rent of Rs.1.87 lakh **per month** was rejected on the ground that it was less than the existing lease rent of Rs.2.78 lakh **per month.** In response to the re-tender held in December 1999, again a single tender for Rs.1.51 lakh quoted by the same person was rejected (March 2000) in view of low offer received. Meanwhile, the existing licensee on completion of lease period vacated the shop on 6 January 2000. Against the fresh limited tenders invited in June 2000, the offer received for Rs.1.63 lakh from one of the two participants was negotiated (August 2000) and increased to Rs.1.65 lakh **per month** with an increase of 15 **per cent** over previous year's licence fee for the second and third year. The shop was let out on lease from 13 November 2000.

In this connection, it was observed in audit that the rejection of the single offer received in November 1999 on the ground that the offer was very low compared to the existing lease amount lacked justification as:

(i) The Company was already aware of the fact that licence fees for the motel complex offered in various auctions during previous two years were low compared to the existing lease amount due to non-stopping of point-to-point bus services at the motel for refreshment.

(ii) The Company on an earlier occasion (December 1998) had finalised a lease for the hotel in the same complex for a lesser amount of Rs.2.25 lakh **per month** compared to the two previous lease amounts of Rs.2.68 lakh and Rs.3.51 lakh **per month** respectively.

As such the Company should have analysed the trend before rejecting the offer received in the first auction in November 1999 itself as only one tenderer responded even after wide publicity and there was continuous decline in the offers for lease. Alternatively, when the single tenderer in the first auction quoted a still lesser amount in the second auction, he should have been called for negotiation and persuaded to accept his earlier offer. Non-acceptance of the first offer received in November 1999 and subsequent delay of 10 months in finalisation of tender resulted in loss of revenue amounting to Rs.19.07 lakh (from 7 January 2000 to 12 November 2000 at Rs.1.87 lakh **per month**) besides a recurring annual loss of Rs.2.64 lakh (Rs.1.87 lakh **minus** Rs.1.65 lakh for 12 months).

The Government stated (June 2001) that the single tender was rejected as the tenderer did not furnish solvency certificate as per tender conditions and the rate quoted in November 1999 could not be accepted as it was very low, when compared to the previous year's licence fee. The reply is not tenable as the single tenderer, who quoted in November 1999 was running the hotel in the same complex from December 1998 and was paying the licence fee regularly till then. The Company had also failed to consider the down trend in the licence fee of the motel complex on account of non-stoppage of point-to-point bus service at the motel.

4A.7 TAMIL NADU EX-SERVICEMEN'S CORPORATION LIMITED

4A.7.1 Non-collection of service tax and house rent allowance from the clients

Failure of the Company to include suitable clause in the agreement with clients regarding the service tax and house rent allowance resulted in avoidable liability of Rs.0.46 crore and non-recovery of Rs.0.15 crore respectively.

(a) The Company rehabilitates ex-servicemen by utilising their services for providing security to Public Sector Undertakings (PSUs) on contract basis. For this purpose, the Company entered into agreements with the PSUs and accordingly claimed service charges along with the salary payable to ex-servicemen whose services were placed at the disposal of the PSUs.

Through a notification dated 7 October 1998, Government of India (GOI) brought services rendered by the security agencies also under the purview of service tax with effect from 16 October 1998. As such, the Company became liable to pay service tax at 5 **per cent** on the gross amount received by it from the clients by way of security charges. Further, according to Section 83 of the

Finance Act, 1994 read with Section 12-B of the Central Excise Act, 1944 service tax being an indirect tax was legally reimbursable by the clients.

It was noticed in audit that instead of taking up the matter with the clients (PSUs) by including the same in the bills raised by the Company from November 1998, the Company approached (April 1999) the GOI seeking exemption from the payment of service tax, which was turned down (April 1999).

Thus, due to failure of the Company to include service tax in the claims for security charges from its clients from the date it became liable to pay the same **i.e.**, 16 October 1998, it became liable to pay Rs.77.20 lakh (Rs.46.13 lakh in case of Central Government PSUs and Rs.31.07 lakh in case of State Government PSUs) up to March 2000. Besides, the Company had also become liable to pay interest/penalty for delayed/non-remittance of service tax as provided in the Act.

The Government while accepting the loss on account of non-recovery of service tax had stated (June 2001) that orders were issued directing the Company to collect service tax with effect from October 1998 from State Government Departments/PSUs. However, the fact remained that a sum of Rs.46.13 lakh due from Central Government Departments/Undertakings for the period up to March 2000 become irrecoverable as the said order was not binding on them.

(b) The guidelines of Director General of Rehabilitation (DGR) **inter alia** stipulated that in addition to salary payable to ex-servicemen and the service charges, House Rent Allowance (HRA) at 10 **per cent** of Basic Pay (BP) **plus** Variable Dearness Allowance (VDA) would be paid by the clients, wherever suitable accommodation was not provided to the ex-servicemen posted on security duty in their establishments. Accordingly, the Board of Directors of the Company decided (May 1996) that the Company should explore the possibility of either getting free accommodation from the clients or get reimbursement of the cost of hired accommodation from them.

It was noticed in audit that most of the clients did not provide accommodation to the ex-servicemen posted on security duty in their establishments and the Company incurred an expenditure of Rs.14.64 lakh during the period from April 1998 to January 2001 in providing rent free accommodation to those ex-servicemen but it could not recover this amount from the clients as it failed to include suitable clause in the agreement.

It was replied by the Company (February 2001) that the rent free accommodation provided to ex-servicemen was a sales promotion technique. However, the fact remained that the Company had neither followed the guidelines of DGR in this regard nor acted on the directives of its Board of Directors.

The above matters were reported to the Government in April 2001; their reply had not been received (September 2001).

4A.8 TAMIL NADU STATE MARKETING CORPORATION LIMITED

4A.8.1 Extension of undue benefit to Beer supplier

Due to incorrect fixation of normal supply level, the Company extended an undue benefit of Rs.0.22 crore to the supplier.

Incorrect fixation of normal supply level had resulted in undue benefit of Rs.0.22 crore to beer supplier.

In order to overcome the acute scarcity of beer, the Company decided (July 1998) to import the beer from other States. One of the conditions of supply order provided for payment of additional amount towards freight and other charges for the quantities supplied in excess of normal supply. In August 1998, the Company placed order for 5 lakh cases of King Fisher beer from outside the State. Against the above order, 359100 cases were supplied between August and October 1998. The additional payment of Rs.14 per case was made for 319100 cases. In this connection, it is pertinent to mention here that consumption of beer depends on weather conditions. It was, however, observed that while ordering for five lakh cases of Kingfisher beer, instead of adopting 98600 cases per month as the normal supply level computed with reference to the actual supplies during the corresponding three months in the previous year (August to October 1997), the Company fixed 20000 cases per month being average of actual supplies during the previous four months (April to July 1998). Considering the fact that in the past supplies were in the order of 98600 cases **per month,** the additional payment of Rs.14 per case should have been restricted to 161900 cases, instead it was made for 319100 cases. This resulted in additional payment of Rs.22.01 lakh.

The Company in reply stated (August 2000) that the additional cost was recovered from the licensees. The fact remained that the consumers were overcharged.

The matter was reported to the Government in January 2001; their reply had not been received (September 2001).

4A.9 TAMIL NADU ADI DRAVIDAR HOUSING AND DEVELOPMENT CORPORATION LIMITED

4A.9.1 Misappropriation due to inadequate internal control systems

Failure to evolve effective internal control systems resulted in an avoidable loss of Rs.0.17 crore.

Inadequate internal control systems resulted in loss of Rs.0.17 crore.

The branch offices of the Company collect cash/cheque/demand draft towards repayment of loan/interest from the beneficiaries of welfare schemes and miscellaneous receipts and also incur expenses by drawing self cheques.

It was observed in audit that during the years 1998-99 and 1999-2000, a sum of Rs.20.56 lakh was misappropriated from the three branches of the Company at Madurai, Pudukottai and Thanjavur as detailed below:

Sl. No.	Details of misappropriation	Name of the branch/ month of transaction	Amount misappropriated (Rupees in lakh)
1.	Payments by bank against bogus nodal proceedings of sanction	Madurai/ March to May 1998	9.00
2.	Altering figures in the self cheques and short remittance of collections into banks	Pudukottai and Thanjavur/ February 1998 to April 2000	11.56
		Total	20.56
	LESS : Amount recovered (Rupees 3.20 lakh against item 1 and Rs.0.20 lakh against item 2)		3.40
		Loss	17.16

The Company had placed the delinquent officials under suspension and also lodged criminal complaints. The outcome of the investigation is awaited.

A test check in audit revealed the following system deficiencies, which facilitated the misappropriation:

(1) Maintenance of control records for collection and remittance by the same person.

(2) Issue of receipts by cashier without counter signature by the competent authority.

(3) Inordinate delay in preparation of Bank Reconciliation Statements.

(4) No check regarding collection of margin money, subsidy **etc**., and similarly payments to the beneficiaries by the branches.

Thus, the failure of the Company to ensure effective internal control checks in spite of repeatedly being pointed out by Statutory Auditors resulted in an avoidable loss of Rs.17.16 lakh.

The Company, while accepting the loss, further stated (June 2001) that action has been taken to improve the existing system with respect to collections, issue of cash receipts, **etc.**

The matter was reported to the Government in June 2001; their reply had not been received (September 2001).

SECTION 4B

4B.1 TAMIL NADU ELECTRICITY BOARD

4B.1.1 Heavy financial burden due to routing of loan through POWERFIN

Board incurred an avoidable extra expenditure of Rs.26.96 crore on routing of ADB loan through POWERFIN though not a party to the loan transaction.

The Board obtained (January 1987 and December 1990) loans from Asian Development Bank (ADB) and Overseas Economic Co-operation Fund (OECF) (International Institutions) for part financing North Chennai Thermal Power Project (NCTPP), Chennai Augmentation and Up-gradation Project (CAUP), external coal handling plant for Tuticorin Power Project and Basin Bridge Gas Turbine Power Project. The loans consisted of (loan No.798-IND) sanctioned initially for 150 million US dollars and (loan No.1029-IND) for 200 million US dollars were subsequently reduced to 110 and 170 million US dollars and 11450 million Japanese Yen respectively. These loans were repayable in twenty equal annual instalments.

The loans would initially be made available to Government of India (GOI) and GOI would in turn release the same to Government of Tamil Nadu. The tripartite project agreements amongst International Institutions, Government of Tamil Nadu and the Board envisaged that Government of Tamil Nadu should transfer the amounts released by the International Institutions to the Board. The rates of interest and repayment terms for such on lending should not be less than rates/terms as applicable to loan from Government of India to Government of Tamil Nadu.

Notwithstanding the provisions of the tripartite agreement, the Government of Tamil Nadu routed the loan through Tamil Nadu Power Finance and Infrastructure Development Corporation Limited (POWERFIN) and the Board also agreed to this arrangement. During the period 1991-92 to 1996-97, the Government of Tamil Nadu released Rs.805 crore, full amount of loan received from GOI to POWERFIN at interest rate of 10.75, 11.75, 13.5 and 14.5 **per cent per annum** for onward lending to the Board. The POWERFIN in turn released the amounts to the Board with addition of 0.25 **per cent** as its margin to the interest rates stipulated by the Government of Tamil Nadu, besides levying interest tax at 3 **per cent**.

Thus, by routing the loan through POWERFIN, which is not a party to the transaction, the Board has been burdened with additional commitment of Rs.55.81 crore for the entire tenure of loan. Of this, Rs.26.96 crore (Rs.10.42 crore towards 0.25 **per cent** margin to POWERFIN and Rs.16.54 crore towards interest tax) has been paid, future (un-extinguished) commitment of Rs.28.85 crore is devolving on the Board.

The Board replied (April 2001) that as the Government of Tamil Nadu is compensating the loss of the Board, payment of higher interest charges would be ultimately to the Government account necessitating additional tariff compensation. The reply is not tenable as higher financing charges would increase the cost of generation and would have to be made good either by the consumers by way of increased tariff or by the Government out of tax collections.

The matter was reported to the Government in June 2001; their reply had not been received (September 2001).

4B.1.2 Avoidable extra expenditure due to non-availing concessional Sales Tax

Failure to avail concessional Sales Tax on purchase of furnace oil due to delay in communication resulted in an avoidable extra expenditure of Rs.3.26 crore.

Delay in communication regarding concessional Sales Tax resulted in an extra expenditure of Rs.3.26 crore.

The thermal power stations of the Board procure large quantities of Furnace Oil (FO) for lighting boilers for generation of steam, which in turn runs the turbines to produce electricity.

As per amended Section 3(3) of Tamil Nadu General Sales Tax Act, the concessional sales tax of 3 **per cent** was applicable on production of Form-XVII for sale of any goods including consumables, packing materials and labels but excluding plant and machinery by one dealer to another. Further, as per clarification of Sales Tax Department Circular dated 24 February 1999 on purchase of furnace oil also concessional sales tax is applicable subject to production of Form-XVII.

The Board requested the Special Commissioner and Commissioner of Commercial Tax (CCT) (April 1999) to get approval of the Government for extending concessional rate to FO on the plea that this is used in thermal power stations for initial lighting of boilers, which in turn rotate turbines and generate electricity. CCT informed (June 1999) the Board that it could purchase FO against Form XVII but not HSD Oil and LSD Oil in view of the specific proviso to Section 3(3) of the Act. It was noticed that this clarification by CCT was only a reiteration of Department's circular dated 24 February 1999 mentioned above, which categorically stated that FO could be purchased against Form XVII.

Even after Sales Tax Department's clarification **vide** circular dated 24 February 1999 and receiving such a clear cut clarification from the CCT about the eligibility of FO for concessional tax, the Board inordinately delayed the communication of this clarification to the users **viz.,** thermal power stations. It was only on 8 September 1999 that the CFC wrote to all the Chief Engineers and the Superintending Engineers to avail of concessional sales tax. It was, observed in audit that thermal power stations received this letter after a delay ranging from one to eight months. Thus, an important clarification by the CCT involving huge financial savings to the Board was not communicated to the thermal stations immediately and this delay resulted in an avoidable extra expenditure of Rs.3.26 crore on payment of sales tax on FO purchased from 16 August 1999 to 31 May 2000 at 16 **per cent** instead of the concessional rate of 3 **per cent** (after allowing one month for communication).

The matter was reported to the Board and the Government in April 2001; their replies had not been received (September 2001).

4B.1.3 Locking up of Board's funds and consequent loss of interest due to non-commissioning of circuit breakers

Failure to allot allied equipment resulted in non-commissioning of circuit breakers leading to locking up of Board's funds to the extent of Rs.0.85 crore and interest loss of Rs.0.45 crore.

Non-commissioning of circuit breakers resulted in locking up of funds (Rs.0.85 crore) and consequent interest loss of Rs.0.45 crore.

Orders for procurement of twenty 110 KV SF6 Gas Circuit Breakers (GCBs) was placed (February 1996) on M/s. Asea Brown Bovery Limited (ABB) at a total cost of Rs.1.70 crore and the supplies were to be completed within four months from the date of receipt of purchase order. These circuit breakers were required for the Transmission and Distribution (T and D) and Operation and Maintenance (O and M) works for 1995-96.

It was observed in audit that though these circuit breakers were received by the General Construction Circles (GCCs) at Chennai (1), Trichy (10), Madurai (2), Salem (1) and Coimbatore (6) between September 1996 and August 1997, there were inordinate delays in the commissioning of ten circuit breakers ranging from 15 to 48 months and remaining ten circuit breakers had not been commissioned at all till date (March 2001).

Non-commissioning of these ten circuit breakers had resulted in locking up of Board's funds to the extent of Rs.85.24 lakh for periods ranging from 42 to 54 months and consequent interest loss of Rs.44.95 lakh. It is also pertinent to point out that the performance guarantee period for these circuit breakers (12 months from the date of commissioning or 18 months from the date of despatch, whichever was earlier) had already lapsed.

It was replied by the concerned divisions that these circuit breakers could not be commissioned due to non-allotment of allied equipment like Current Transformers (CTs), cables **etc**., by the Board's Headquarters Office.

The matter was reported to the Board and the Government in May 2001; their replies had not been received (September 2001).

4B.1.4 Infructuous expenditure due to availing of loan without infrastructure

Availing of loan without infrastructure facilities for execution of project resulted in an infructuous expenditure of Rs.0.30 crore towards interest.

Availment of OECF loan for a mini-hydro project rendered the interest expenditure of Rs.0.30 crore infructuous.

The Board's proposal (May 1994) to execute 2 x 2 MW small hydro electric project at Amaravathy at an estimated cost of Rs.5.19 crore was approved by the Government in October 1994. The project cost was subsequently revised (January 1995) to Rs.12.46 crore. The Government also approved (January 1995) the Board's proposal to avail Overseas Economic Corporation Fund (OECF) loan assistance which was to be routed through Rural Electrification Corporation (REC). REC sanctioned (November 1995) the OECF loan assistance of Rs.13.11 crore (after including Rs.0.37 crore towards consultancy charges and Rs.0.28 crore towards physical contingency charges) with an interest rate of 14 **per cent per annum.** For the purpose of availing the OECF loan, the Board entered into a Memorandum of Agreement (MOA) with REC in January 1997.

The terms and conditions of MOA **inter alia** included the following:

(1) The Board would maintain a separate account in respect of all transactions pertaining to the project cost as per the financial procedure of the Board.

(2) Procurement of goods and services for execution of the project should be on turnkey basis through International Competitive Bid (ICB).

Based on the Board's request for payment of first instalment of loan, REC released (December 1997) Rs.92.92 lakh. This amount was kept in separate current account in Canara Bank. Of this amount, the Board could spend Rs.0.56 lakh only on the project till April 2000. The balance could not be put to any beneficial use, as no expenditure was incurred on the project due to non-availability of land, office building, vehicles and staff for the project. Due to inability of the Board to spend Rs.92.36 lakh, this amount was transferred to the Board's general account in May 2000. The Board, however, continued to pay interest on the amount drawn at 14 **per cent** from the date of drawal **viz**., 17 December 1997.

The main reason for the non-utilisation of the advance amount as analysed in audit was the non-availability of land required for construction activities for power house and other components and staff quarters. It was observed that a portion of the land allotted by the Public Works Department (PWD) in November 1995 for construction of quarters was found to have been handed over to Sainik School, Amaravathy and the remaining portion was found to be unfit for construction purposes.

In view of the conditions attached to the loan in regard to separate account, execution on turnkey basis, **etc**., the Board should have availed the first instalment of loan only after finalizing the basic infrastructure required for executing projects **viz**., land for power house and staff quarters. Failure to do so had resulted in the Board incurring an infructuous expenditure of Rs.30.17 lakh towards interest for the 28 months period (January 1998 to April 2000) during which the amount remained idle.

The matter was reported to the Board and the Government in June 2001; their replies had not been received (September 2001).

4B.1.5 Short recovery on excess payment of price variation claims in the purchase of ACSR conductors

Incorrect revision of basic rate for steel wires of ACSR conductors in the price variation claims resulted in short recovery of Rs.0.25 crore.

Short recovery of Rs.0.25 crore due to erroneous revision of basic rate.

Based on the complaints that the suppliers of Aluminium Core Steel Reinforced (ACSR) conductor to the Tamil Nadu Electricity Board (Board) had claimed excessive Price Variation (PV) on High Tensile Grade (HTG) steel wires used for manufacturing of ACSR conductors, the Chairman of the

Board instructed (May 1998) the vigilance wing of the Board to conduct investigations on the allegations. On completion of investigations, the Chairman directed (June 1998) that the PV claims admitted in respect of steel against purchase orders issued during the period from January 1992 to December 1995 and the pending bills in respect of the purchase orders issued from January 1996 be revised by adopting the average of the official rates of M/s. Special Steels Limited (TATA) and M/s. Mukund Steels Limited. Inspector General of Police/Vigilance (IGP) of the Board, while intimating this directive to Superintending Engineers (General Construction Circles) had instructed that the basic rates of HTG steel wire mentioned in the relevant purchase orders should be ignored and the average of official rates of HTG wires communicated by the vigilance wing would have to be adopted. Based on these instructions, Board revised the PV claims admitted earlier.

During the test check of General Construction Circle, Coimbatore, it was observed in audit that the method intimated by IGP for recovery of excess PV claims paid earlier was erroneous as nowhere in the orders of the Chairman it was recorded that the basic price mentioned in the purchase orders would be ignored. It was only recorded that the average rate computed on the official rates of M/s. Mukund Steels Limited and M/s. Special Steels Limited (TATA) would be adopted and the excess payment of PV claim already made would be recovered.

Thus, due to not reckoning/regulating the PV claim with reference to basic price originally quoted by the supplier and the average price on the date of supply as communicated by IGP, there was short recovery of Rs.25.08 lakh.

The matter was reported to the Board and the Government in June 2001; their replies had not been received (September 2001).

4B.1.6 Purchase of VCB panels without having land

Improper planning in purchase of 22 KV VCB panels resulted in locking up of Board's funds of Rs.0.90 crore and consequent loss of interest of Rs.0.23 crore.

Hasty purchase of VCB Panels resulted in locking up of Board's funds (Rs.0.90 crore) and interest loss of Rs.0.23 crore.

The Board placed (June 1998) an order on M/s Eswaran and Sons Limited, Chennai for the supply of 27 numbers 22 KV Indoor Vacuum Circuit Breaker (VCB) panels at a total cost of Rs.1.21 crore required for the commissioning of 110/22 KV sub-stations at Hasthampatty and Kandanpatty under Salem Urban Development Scheme.

12 Panels were received (February 1999) by General Construction Circle (GCC) stores in Salem but the remaining 15 panels were diverted (June 1999) to GCC, Chennai as the proposal to commission the sub-station at Kandanpatty was dropped due to non-availability of suitable land. These 15 panels have not been put to use till date (March 2001). It was observed that even the 12 panels received in Salem GCC could not be utilised as the proposed indoor sub-station at Hasthampatty was shifted to another locality (Kichilipalayam) due to non-availability of land. Out of these 12, seven panels were used in 11 KV indoor sub-station at Taluk Office, Thirupur. The remaining five panels were lying unutilised till date (March 2001).

Thus, out of 27 indoor panels procured, 20 panels remained unutilised till March 2001, which had resulted in locking up of Board's funds to the extent of Rs.89.63 lakh with consequential interest loss of Rs.22.77 lakh up to March 2001 (computed at 14 **per cent per annum**).

While admitting the non-commissioning of 20 numbers 22 KV indoor VCB panels, the Board stated (February 2001) that these panels were proposed to be commissioned in Ukkadam and Adigaretty sub-stations and the proposed 22 KV indoor switching station in Kodaikanal Hills in March 2001. However, the fact remained that these panels remained unutilised till date (September 2001).

The matter was reported to the Government in April 2001; their reply had not been received (September 2001).

(T.THEETHAN)
Accountant General (Audit)II
Tamil Nadu

Chennai
The 05 FEB 2002

Countersigned

V. K. Shunglu.

(V.K. SHUNGLU)
Comptroller and Auditor General of India

New Delhi
The 12 FEB 2002

2-28—15a

ANNEXURES

ANNEXURE-1

(Referred to in Paragraph 1.2.1.1, 1.2.1.2, 1.2.2, 1.3.1 and 1.3.2)

Statement showing particulars of up-to-date paid-up capital, budgetary outgo, loans given out of budget and loans outstanding as on 31 March 2001 in respect of Government companies and Statutory corporations

(Figures in Column 3(a) to 4(f) are Rupees in lakh)

Sl. No.	Sector and Name of the Company	Paid-up capital as at the end of the current year					Equity/loans received out of budget during the year		Other loans received during the year	Loans outstanding at the close of 2000-01♠			Debt equity ratio for 2001 (previous year) 4(f)/3(e)
		State Government	Central Government	Holding companies	Others	Total	Equity	Loans		Government	Others	Total	
(1)	(2)	3(a)	3(b)	3(c)	3(d)	3(e)	4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	(5)
A.	**WORKING COMPANIES**												
	AGRICULTURE												
1.	Tamil Nadu Fisheries Development Corporation Limited	445.52	---	---	---	445.52	---	---	---	---	---	---	---
2.	Tamil Nadu Tea Plantation Corporation Limited	596.18	---	---	---	596.18	---	---	---	---	337.15	337.15	0.57:1 (0.57:1)
3.	Tamil Nadu Agro Industries Development Corporation Limited	435.98	165.00	---	---	600.98	---	---	---	477.00	117.92	594.92	0.99:1 (1.15:1)
	Sector-wise total	**1477.68**	**165.00**	---	---	**1642.68**	---	---	---	**477.00**	**455.07**	**932.07**	**0.57:1**
	INDUSTRY												
4.	Tamil Nadu Industrial Development Corporation Limited (TIDCO)	9417.31	---	---	---	9417.31	---	396.04	18834.62	209.78	---	209.78	0.02:1 (0.08:1)
5.	Tamil Nadu Industrial Explosives Limited (Subsidiary of TIDCO)	---	---	2214.14	481.54	2695.68	---	---	---	3188.06	---	3188.06	1.18:1 (1.18:1)

♠ **Except in respect of companies which finalised their accounts for 2000-01 (Serial Numbers 4, 6, 7, 11 to 14, 17, 20, 21, 23, 24, 26, 27, 39 to 41, 45 to 49, 52 to 57, 59 to 62, 64, 65 and 68) figures are provisional and as given by the companies.**
Figures in bracket indicate the share application money.
Loans outstanding at the close of 2000-01 represent long term loans only.

(1)	(2)	3(a)	3(b)	3(c)	3(d)	3(e)	4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	(5)
6.	Tamil Nadu Paints and Allied Products Limited (Subsidiary of TANSI)	---	---	2.05	---	2.05	---	---	---	---	---	---	---
7.	Tamil Nadu Small Industries Corporation Limited (TANSI)	1505.26	---	---	---	1505.26	---	---	---	2903.88	---	2903.88	1.93:1 (0.84:1)
8.	Tamil Nadu Small Industries Development Corporation Limited (SIDCO)	730.00	---	---	---	730.00	---	---	---	61.02	---	61.02	0.08:1 (0.08:1)
9.	State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT)	5791.25	---	---	---	5791.25	---	---	1066.00	1979.50	14300.00	16279.50	2.81:1 (3.12:1)
10.	Tamil Nadu Salt Corporation Limited	317.01	---	---	---	317.01	---	---	---	---	---	---	---
11.	Tamil Nadu Magnesite Limited	1665.00	---	---	---	1665.00	---	---	---	1937.75	---	1937.75	1.16:1 (1.16:1)
12.	Tamil Nadu Leather Development Corporation Limited	250.00	---	---	---	250.00	---	---	---	290.91	---	290.91	1.16:1
13.	Arasu Rubber Corporation Limited	200.00	---	---	---	200.00	---	---	---	26.45	408.86	435.31	2.18:1
14.	Tamil Nadu Graphites Limited	10.00	---	---	---	10.00	---	---	---	---	---	---	---
	Sector-wise total	**19885.83**	---	**2216.19**	**481.54**	**22583.56**	---	**396.04**	**19900.62**	**10597.35**	**14708.86**	**25306.21**	**1.12:1**
	ENGINEERING												
15.	State Engineering and Servicing Company of Tamil Nadu Limited (SESCOT) (Subsidiary of TANSI)	---	---	49.71	---	49.71	---	---	---	---	---	---	(19.78:1)
16.	Southern Structurals Limited	3435.50	---	---	18.80	3454.30	---	---	---	2236.20	---	2236.20	0.65:1 (0.65:1)
	Sector-wise total	**3435.50**	---	**49.71**	**18.80**	**3504.01**	---	---	---	**2236.20**	---	**2236.20**	**0.64:1**
	ELECTRONICS												
17.	Electronics Corporation of Tamil Nadu Limited (ELCOT)	2593.05	---	---	---	2593.05	---	---	---	---	---	---	---
18.	Tamil Nadu Institute of Information Technology	1000.00	---	---	---	1000.00	---	---	---	---	---	---	---
	Sector-wise total	**3593.05**	---	---	---	**3593.05**	---	---	---	---	---	---	---

(1)	(2)	3(a)	3(b)	3(c)	3(d)	3(e)	4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	(5)
	TEXTILES												
19.	Tamil Nadu Textile Corporation Limited	154.00	---	---	---	154.00	---	---	---	100.87	---	100.87	0.66:1 (0.65:1)
20.	Tamil Nadu Zari Limited	34.40	---	---	---	34.40	---	---	---	---	---	---	---
	Sector-wise total	**188.40**	---	---	---	**188.40**	---	---	---	**100.87**	---	**100.87**	**0.54:1**
	HANDLOOM AND HANDICRAFTS												
21.	Tamil Nadu Handicrafts Development Corporation Limited	176.69	116.00	---	0.71	293.40	10.00	---	---	31.49	---	31.49	0.11:1 (0.11:1)
22.	Tamil Nadu Handloom Development Corporation Limited	267.00	---	---	161.83	428.83	0.49	---	---	3.18	---	3.18	0.01:1
	Sector-wise total	**443.69**	**116.00**	---	**162.54**	**722.23**	**10.49**	---	---	**34.67**	---	**34.67**	**0.05:1**
	FOREST												
23.	Tamil Nadu Forest Plantation Corporation Limited	300.00	---	---	---	300.00	---	---	---	---	---	---	---
	Sector-wise total	**300.00**	---	---	---	**300.00**	---	---	---	---	---	---	---
	MINING												
24.	Tamil Nadu Minerals Limited (TAMIN)	786.90	---	---	---	786.90	---	---	---	---	---	---	---
	Sector-wise total	**786.90**	---	---	---	**786.90**	---	---	---	---	---	---	---
	CONSTRUCTION												
25.	Tamil Nadu State Construction Corporation Limited	500.00	---	---	---	500.00	---	---	---	100.00	---	100.00	0.20:1 (0.20:1)
26.	Tamil Nadu Police Housing Corporation Limited	100.00	---	---	---	100.00	---	---	10378.66	---	27796.43	27796.43	277.96:1 (211.61:1)
	Sector-wise total	**600.00**	---	---	---	**600.00**	---	---	**10378.66**	**100.00**	**27796.43**	**27896.43**	**46.49:1**
	DRUGS AND CHEMICALS												
27.	Tamil Nadu Medicinal Plant Farms and Herbal Medicine Corporation Limited	20.75	---	---	---	20.75	---	---	---	---	---	---	---

(1)	(2)	3(a)	3(b)	3(c)	3(d)	3(e)	4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	(5)
28.	Tamil Medical Services Corporation Limited	300.00	---	---	---	300.00	---	---	---	---	---	---	---
	Sector-wise total	**320.75**	---	---	---	**320.75**	---	---	---	---	---	---	---
	SUGAR												
29.	Tamil Nadu Sugar Corporation Limited (TASCO)	679.15	---	---	100.00	779.15	---	---	---	50.92	---	50.92	0.07:1
30.	Perambalur Sugar Mills Limited (Subsidiary of TASCO)	---	---	226.75	190.60	417.35	---	---	---	---	---	---	---
	Sector-wise total	**679.15**	---	**226.75**	**290.60**	**1196.50**	---	---	---	**50.92**	---	**50.92**	**0.04:1**
	CEMENT												
31.	Tamil Nadu Cements Corporation Limited	1799.13	---	---	---	1799.13	---	---	---	319.00	1715.37	2034.37	1.14:1 (1.17:1)
	Sector-wise total	**1799.13**	---	---	---	**1799.13**	---	---	---	**319.00**	**1715.37**	**2034.37**	**1.14:1**
	AREA DEVELOPMENT												
32.	Dharmapuri District Development Corporation Limited	15.00	---	---	---	15.00	---	---	---	---	---	---	---
	Sector-wise total	**15.00**	---	---	---	**15.00**	---	---	---	---	---	---	---
	ECONOMICALLY WEAKER SECTION												
33.	Tamil Nadu Adi Dravidar Housing and Development Corporation Limited	4024.00	3219.91	---	---	7243.91	---	---	---	9.19	---	9.19	0.001:1 (0.001:1)
34.	Tamil Nadu Backward Classes Economic Development Corporation Limited	1119.01	---	---	---	1119.01	---	---	276.24	---	1245.56	1245.56	1.1:1 (1.21:1)
35.	Tamil Nadu Minorities Economic Development Corporation Limited	(320.00)	---	---	---	(320.00)	320.00	---	---	---	---	---	---
36.	Tamil Nadu Corporation for Development of Women Limited	40.00	38.42	---	---	78.42	---	---	---	---	---	---	---

(1)	(2)	3(a)	3(b)	3(c)	3(d)	3(e)	4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	(5)
37.	Tamil Nadu Ex-servicemen's Corporation Limited	17.91	---	---	5.00	22.91	---	---	---	---	---	---	(1.11:1)
	Sector-wise total	**5200.92 (320.00)**	**3258.33**	---	**5.00**	**8464.25 (320.00)**	**320.00**	---	**276.24**	**9.19**	**1245.56**	**1254.75**	**0.14:1**
	PUBLIC DISTRIBUTION												
38.	Tamil Nadu Civil Supplies Corporation Limited	3271.10	---	---	---	3271.10	16.00	---	---	---	---	---	---
	Sector-wise total	**3271.10**	---	---	---	**3271.10**	**16.00**	---	---	---	---	---	---
	TOURISM												
39.	Tamil Nadu Tourism Development Corporation Limited	678.63	---	---	---	678.63	---	---	---	205.32	159.48	364.80	0.54:1 (0.40:1)
	Sector-wise total	**678.63**	---	---	---	**678.63**	---	---	---	**205.32**	**159.48**	**364.80**	**0.54:1**
	FINANCING												
40.	Tamil Nadu Industrial Investment Corporation Limited (TIIC)	2502.28	---	---	1747.28	4249.56	---	600.00	52363.00	10350.00	87829.00	98179.00	23.10:1 (23.86:1)
	Sector-wise total	**2502.28**	---	---	**1747.28**	**4249.56**	---	**600.00**	**52363.00**	**10350.00**	**87829.00**	**98179.00**	**23.10:1**
	INFRASTRUCTURE DEVELOPMENT												
41.	Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited	3102.00	---	---	98.00	3200.00	---	60.98	---	587.55	709.12	1296.67	0.41:1 (1.50:1)
42.	Tamil Nadu Power Finance and Infrastructure Development Corporation Limited	2200.00	---	---	---	2200.00	--	---	---	41090.00	5143.00	46233.00	21.02:1 (23.33:1)
43.	Tamil Nadu Corporation for Industrial Infrastructure Development Limited	6600.00	1980.00	---	---	8580.00	50.00	---	---	2716.70	---	2716.70	0.32:1 (0.32:1)
	Sector-wise total	**11902.00**	**1980.00**	---	**98.00**	**13980.00**	**50.00**	**60.98**	---	**44394.25**	**5852.12**	**50246.37**	**3.59:1**
	TRANSPORT												
44.	Metropolitan Transport Corporation (Chennai) Limited	24296.80	---	---	---	24296.80	---	---	1458.93	---	4818.46	4818.46	0.20:1 (0.37:1)

(1)	(2)	3(a)	3(b)	3(c)	3(d)	3(e)	4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	(5)
45.	Tamil Nadu State Transport Corporation (Madurai Division-I) Limited	4448.57	---	---	---	4448.57	---	---	168.14	---	1324.86	1324.86	0.30:1 (0.55:1)
46.	Tamil Nadu State Transport Corporation (Coimbatore Division-I) Limited	5728.86	---	---	---	5728.86	---	---	---	---	12.50	12.50	0.002:1 (0.82:1)
47.	Tamil Nadu State Transport Corporation (Kumbakonam Division-I) Limited	4131.07	---	---	---	4131.07	---	---	---	---	1093.41	1093.41	0.26:1 (0.39:1)
48.	Tamil Nadu State Transport Corporation (Salem Division-I) Limited	2569.40	---	---	---	2569.40	---	---	873.20	---	2485.10	2485.10	0.97:1 (1.02:1)
49.	Tamil Nadu State Transport Corporation (Madurai Division-II) Limited	7193.57	---	---	---	7193.57	---	---	172.22	---	1400.10	1400.10	0.19:1 (0.33:1)
50.	Poompuhar Shipping Corporation Limited	2053.00	---	---	---	2053.00	---	---	---	---	2850.00	2850.00	1.39:1 (1.56:1)
51.	Tamil Nadu State Transport Corporation (Villupuram Division-I) Limited	2149.00	---	---	---	2149.00	380.00	---	1408.84	---	2352.30	2352.30	1.09:1 (1.05:1)
52.	Tamil Nadu Transport Development Finance Corporation Limited	4303.00		1871.18	---	6174.18	---	---	3000.00	---	2350.00	2350.00	0.38:1
53.	State Express Transport Corporation Limited (Tamil Nadu Division-I) Limited	9827.15	---	---	---	9827.15	---	---	123.00	---	1249.97	1249.97	0.13:1 (0.34:1)
54.	Tamil Nadu State Transport Corporation (Kumbakonam Division-III) Limited	3661.23	---	---	---	3661.23	---	---	266.77	---	900.02	900.02	0.25:1 (0.42:1)
55.	Tamil Nadu State Transport Corporation (Villupuram Division-II) Limited	1968.93	---	---	---	1968.93	---	---	568.10	---	1559.15	1559.15	0.79:1 (1.22:1)
56.	Tamil Nadu State Transport Corporation (Coimbatore Division-II) Limited	2010.22	---	---	---	2010.22	---	---	1295.30	---	1893.34	1893.34	0.94:1 (0.79:1)
57.	Tamil Nadu State Transport Corporation (Madurai Division-III) Limited	4112.69	---	---	---	4112.69	---	---	94.26	---	1221.74	1221.74	0.30:1 (0.43:1)

(1)	(2)	3(a)	3(b)	3(c)	3(d)	3(e)	4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	(5)
58.	Pallavan Transport Consultancy Services Limited	10.00	---	---	---	10.00	5.00	---	40.90	---	20.84	20.84	2.08:1
59.	Tamil Nadu State Transport Corporation (Kumbakonam Division-II) Limited	2150.69	---	---	---	2150.69	---	---	1235.42	---	2652.96	2652.96	1.23:1 (1.20:1)
60.	Tamil Nadu State Transport Corporation (Madurai Division-IV) Limited	1853.13	---	---	---	1853.13	---	---	199.30	---	992.48	992.48	0.54:1 (1.18:1)
61.	Tamil Nadu State Transport Corporation (Salem Division-II) Limited	1465.34	---	---	---	1465.34	---	---	1063.12	---	1809.21	1809.21	1.23:1 (1.27:1)
62.	Tamil Nadu State Transport Corporation (Villupuram Division-III) Limited	2492.28	---	---	---	2492.28	---	---	649.81	---	1371.81	1371.81	0.55:1 (0.55:1)
63.	State Express Transport Corporation (Tamil Nadu Division II) Limited	2248.22	---	---	---	2248.22	---	---	129.03	---	237.87	237.87	0.11:1 (0.26:1)
64.	Tamil Nadu State Transport Corporation (Madurai Division-V) Limited	1088.00	---	---	---	1088.00	---	---	347.33	---	744.95	744.95	0.68:1 (0.69:1)
65.	Tamil Nadu State Transport Corporation (Kumbakonam Division-IV) Limited	541.05	---	---	---	541.05	---	---	344.68	---	755.09	755.09	1.40:1 (1.69:1)
	Sector-wise total	**90302.20**	---	**1871.18**	---	**92173.38**	**385.00**	---	**13438.35**	---	**33893.70**	**33893.70**	**0.37:1**
	MISCELLANEOUS												
66.	Overseas Manpower Corporation Limited	15.00	---	---	---	15.00	---	---	---	---	---	---	---
67.	Tamil Nadu Film Development Corporation Limited	1391.00	---	---	---	1391.00	---	---	---	707.93	---	707.93	0.51:1 (0.14:1)
68.	Tamil Nadu State Marketing Corporation Limited (TASMAC)	700.00	---	---	---	700.00	---	---	565.88	---	504.91	504.91	0.72:1
	Sector-wise total	**2106.00**	---	---	---	**2106.00**	---	---	**565.88**	**707.93**	**504.91**	**1212.84**	**0.58:1**
	TOTAL (A)	**149488.21 (320.00)**	**5519.33**	**4363.83**	**2803.76**	**162175.13 (320.00)**	**781.49**	**1057.02**	**96922.75**	**69582.70**	**174160.50**	**243743.20**	**1.5:1**

(1)	(2)	3(a)	3(b)	3(c)	3(d)	3(e)	4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	(5)
B.	**WORKING STATUTORY CORPORATIONS**												
	POWER												
1.	Tamil Nadu Electricity Board	10000.00	---	---	---	10000.00	---	---	129213.00	---	552458.00	552458.00	55.25:1 (15.59:1)
	Sector-wise total	**10000.00**	---	---	---	**10000.00**	---	---	**129213.00**	---	**552458.00**	**552458.00**	**55.25:1**
	AGRICULTURE												
2..	Tamil Nadu Warehousing Corporation	380.50	380.50	---	---	761.00	---	---	---	---	---	---	---
	Sector-wise total	**380.50**	**380.50**	---	---	**761.00**	---	---	---	---	---	---	---
	TOTAL (B)	**10380.50**	**380.50**	---	---	**10761.00**	---	---	**129213.00**	---	**552458.00**	**552458.00**	**51.34:1**
	GRAND TOTAL (A+B)	**159868.71 (320.00)**	**5899.83**	**4363.83**	**2803.76**	**172936.13 (320.00)**	**781.49**	**1057.02**	**226135.75**	**69582.70**	**726618.50**	**796201.20**	**4.60:1**
C.	**NON-WORKING COMPAIES**												
	AGRICULTURE												
1.	Tamil Nadu Poultry Development Corporation Limited	125.43	---	---	1.25	126.68	---	---	---	63.19	---	63.19	0.50:1 (0.50:1)
2.	Tamil Nadu Sugarcane Farm Corporation Limited	27.50	---	---	---	27.50	---	---	---	---	---	---	---
3.	Tamil Nadu State Farms Corporation Limited	155.13	---	---	---	155.13	---	---	---	537.46	---	537.46	3.46:1 (3.46:1)
4.	Tamil Nadu State Tube wells Corporation Limited	31.50	---	---	---	31.50	---	---	---	---	---	---	---
5.	Tamil Nadu Dairy Development Corporation Limited	207.36	---	---	---	207.36	---	---	---	---	---	---	---
	Sector-wise total	**546.92**	---	---	**1.25**	**548.17**	---	---	---	**600.65**	---	**600.65**	**1.10:1**
	INDUSTRY												
6.	Tamil Nadu Magnesium and Marine Chemicals Limited (Subsidiary of TIDCO)	---	---	362.00	---	362.00	---	---	---	1282.00	31.39	1313.39	3.63:1 (3.62:1)

(1)	(2)	3(a)	3(b)	3(c)	3(d)	3(e)	4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	(5)
7.	Tamil Nadu Ceramics Limited	186.11	---	---	---	186.11	---	---	---	---	---	---	---
	Sector-wise total	**186.11**	---	**362.00**	---	**548.11**	---	---	---	**1282.00**	**31.39**	**1313.39**	**2.40:1**
	ENGINEERING												
8.	Tamil Nadu Steels Limited	392.00	---	---	---	392.00	---	---	---	584.37	465.99	1050.36	2.68:1 (2.68:1)
	Sector-wise total	**392.00**	---	---	---	**392.00**	---	---	---	**584.37**	**465.99**	**1050.36**	**2.68:1**
	FINANCING												
9.	The Chit Corporation of Tamil Nadu Limited	5.92	---	---	---	5.92	---	---	---	---	---	---	---
	Sector-wise total	**5.92**	---	---	---	**5.92**	---	---	---	---	---	---	---
	TRANSPORT												
10.	Tamil Nadu Goods Transport Corporation Limited	26.56	---	---	6.10	32.66	---	---	---	---	---	---	---
	Sector-wise total	**26.56**	---	---	**6.10**	**32.66**	---	---	---	---	---	---	---
	MISCELLANEOUS												
11.	Tamil Nadu State Sports Development Corporation Limited	0.002	---	---	---	0.002	---	---	---	---	---	---	---
12.	Tamil Nadu Spirit Corporation Limited (Subsidiary of TASMAC)	160.00	---	240.00	---	400.00	---	---	---	---	---	---	---
	Sector-wise total	**160.002**	---	**240.00**	---	**400.002**	---	---	---	---	---	---	---
	TOTAL (C)	**1317.512**	---	**602.00**	**7.35**	**1926.862**	---	---	---	**2467.02**	**497.38**	**2964.40**	**1.54:1**
	GRAND TOTAL (A+B+C)	**161186.222 (320.00)**	**5899.83**	**4965.83**	**2811.11**	**174862.992 (320.00)**	**781.49**	**1057.02**	**226135.75**	**72049.02**	**727115.88**	**799165.80**	**4.56:1**

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362
602

ANNEXURE-2

(Referred to in Paragraph 1.2.3, 1.2.4, 1.2.5, 1.3.4 and 1.3.5)

Summarised financial results of Government companies and Statutory corporations for the latest year for which accounts were finalised

(Figures in Columns 7 to 12 are Rupees in lakh)

Sl. No.	Sector and Name of the Company	Name of Department	Date of incorpo-ration	Period of accounts	Year in which accounts finalised	Net profit/ loss (-)	Net impact of audit comments	Paid-up capital	Accumu-lated profit/ loss (-)	Capital employed A	Total return on capital employed	Percen tage of total return on capital emplo-yed	Arrears of accounts in terms of years
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
A.	**WORKING COMPANIES**												
	AGRICULTURE												
1.	Tamil Nadu Agro Industries Development Corporation Limited	Agriculture	15 July 1966	1999-2000	2000-01	(-)171.23	---	600.98	(-)1795.94	1527.20	(-)42.72	---	1
2.	Tamil Nadu Fisheries Development Corporation Limited	Fisheries	11 April 1974	1999-2000	2000-01	(-)55.79	---	445.52	(-)576.28	(-)20.70	(-)55.79	---	1
3.	Tamil Nadu Tea Plantation Corporation Limited	Environ-ment and Forest	22 August 1975	1999-2000	2000-01	120.78	---	596.18	1701.30	2270.44	147.04	6.48	1
	Sector-wise total					**(-)106.24**		**1642.68**	**(-)670.92**	**3776.94**	**48.53**	**1.28**	
	INDUSTRY												
4.	Tamil Nadu Industrial Development Corporation Limited (TIDCO)	Industries	21 May 1965	2000-01	2001-02	23.73	---	9417.31	2133.59	125078.90	3235.48	2.59	---

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
5.	Tamil Nadu Industrial Explosives Limited (Subsidiary of TIDCO)	Industries	9 February 1983	1999-2000	2000-01	(-)56.49	---	2695.68	(-)1610.71	5530.97	158.90	2.87	1
6.	Tamil Nadu Paints and Allied Products Limited (Subsidiary of TANSI)	Small Industries	18 November 1985	2000-01	2001-02	0.41	---	2.05	3.32	27.62	8.75	31.68	---
7.	Tamil Nadu Small Industries Corporation Limited (TANSI)	Small Industries	10 September 1965	2000-01	2001-02	178.46	---	1505.26	(-)5610.18	4311.51	464.68	10.78	---
8.	Tamil Nadu Small Industries Development Corporation Limited (SIDCO)	Small Industries	23 March 1970	1999-2000	2000-01	68.07	---	730.00	262.40	938.51	592.07	63.09	1
9.	State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT)	Industries	25 March 1971	1999-2000	2000-01	(-)1372.69	---	5791.25	(-)3016.90	24824.42	1218.64	4.91	1
10.	Tamil Nadu Salt Corporation Limited	Industries	22 July 1974	1999-2000	2000-01	255.14	---	317.01	109.55	448.84	255.23	56.86	1
11.	Tamil Nadu Magnesite Limited	Industries	17 January 1979	2000-01	2001-02	(-)163.10	---	1665.00	(-)3394.36	(-)2476.76	225.18	---	---
12.	Tamil Nadu Leather Development Corporation Limited	Small Industries	21 March 1983	2000-01	2001-02	(-)259.68	---	250.00	(-)1330.78	298.84	(-)182.46	---	---
13.	Arasu Rubber Corporation Limited	Environment and Forest	10 August 1984	2000-01	2001-02	(-)482.52	Loss increased by Rs.4.82 lakh	200.00	(-)1970.13	(-)1305.25	(-)433.91	---	---
14.	Tamil Nadu Graphites Limited	Industries	19 March 1997	2000-01	2001-02	---	---	10.00	---	(-)12.05	---	---	Under implementation
	Sector-wise total					**(-)1808.67**		**22583.56**	**(-)14424.20**	**157665.53**	**5542.56**	**3.52**	
	ENGINEERING												
15.	State Engineering and Servicing Company of Tamil Nadu Limited (SESCOT) (Subsidiary of TANSI)	Small Industries	25 April 1977	1999-2000	2000-01	(-)142.19	---	49.71	(-)1447.63	(-)121.59	(-)82.12	---	1

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
16.	Southern Structurals Limited	Industries	17 October 1956	1999-2000	2000-01	(-)192.28	---	3454.30	(-)5907.60	1072.47	70.01	6.53	1
	Sector-wise total					**(-)334.47**	---	**3504.01**	**(-)7355.23**	**950.88**	**(-)12.11**		
	ELECTRONICS												
17.	Electronics Corporation of Tamil Nadu Limited (ELCOT)	Information and Technology	21 March 1977	2000-01	2001-02	28.89	---	2593.05	67.23	1329.90	34.40	2.59	---
18.	Tamil Nadu Institute of Information Technology	Higher Education	20 February 1998	1998-99	2001-02	(-)54.69	---	1000.00	(-)54.69	936.75	(-)54.69	---	2
	Sector-wise total					**(-)25.80**	---	**3593.05**	**12.54**	**2266.65**	**(-)20.29**		
	TEXTILES												
19.	Tamil Nadu Textile Corporation Limited	Handloom, Handicraft, Textiles and Khadi	24 April 1969	1999-2000	2000-01	1.69	---	154.00	(-)195.54	570.64	13.36	2.34	1
20.	Tamil Nadu Zari Limited	Handloom, Handicraft, Textiles and Khadi	6 December 1971	2000-01	2001-02	72.48	---	34.40	321.05	405.08	79.40	19.60	---
	Sector-wise total					**74.17**	---	**188.40**	**125.51**	**975.72**	**92.76**	**9.51**	---
	HANDLOOM AND HANDICRAFTS												
21.	Tamil Nadu Handicrafts Development Corporation Limited	Handloom, Handicraft, Textiles and Khadi	26 July 1973	2000-01	2001-02	(-)60.84	---	293.40	(-)103.69	419.05	(-)37.16	---	---
22.	Tamil Nadu Handloom Development Corporation Limited	Handloom, Handicraft, Textiles and Khadi	10 September 1964	1999-2000	2000-01	8.20	---	428.83	(-)19.36	(-)276.58	(-)21.82	---	1
	Sector-wise total					**(-)52.64**	---	**722.23**	**(-)123.05**	**142.47**	**(-)58.98**	---	---

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	FOREST												
23.	Tamil Nadu Forest Plantation Corporation Limited	Environ-ment and Forest	13 June 1974	2000-01	2001-02	124.88	---	300.00	2342.12	2794.90	125.25	4.48	---
	Sector-wise total					**124.88**	---	**300.00**	**2342.12**	**2794.90**	**125.25**	**4.48**	---
	MINING												
24.	Tamil Nadu Minerals Limited (TAMIN)	Industries	6 April 1977	2000-01	2001-02	1127.48	---	786.90	8323.78	6869.48	1136.15	16.54	---
	Sector-wise total					**1127.48**	---	**786.90**	**8323.78**	**6869.48**	**1136.15**	**16.54**	---
	CONSTRUCTION												
25.	Tamil Nadu State Construction Corporation Limited	Public Works	8 February 1980	1999-2000	2000-01	(-)569.51	---	500.00	1666.61	5223.74	(-)532.50	---	1
26.	Tamil Nadu Police Housing Corporation Limited	Home	30 April 1981	2000-01	2001-02	34.55	---	100.00	440.31	28819.86	73.22	0.22	---
	Sector-wise total					**(-)534.96**	---	**600.00**	**2106.92**	**34043.60**	**(-)459.28**	---	---
	DRUGS AND CHEMICALS												
27.	Tamil Nadu Medicinal Plant Farms and Herbal Medicine Corporation Limited	Indian Medicine and Homeo-pathy	27 September 1983	2000-01	2001-02	37.52	---	20.75	62.51	138.27	38.78	28.05	---
28.	Tamil Nadu Medical Services Corporation Limited	Health and Family Welfare	1 July 1994	1999-2000	2001-02	3.55	---	300.00	30.11	1878.56	3.55	0.19	1
	Sector-wise total					**41.07**	---	**320.75**	**92.62**	**2016.83**	**42.33**	**2.10**	---
	SUGAR												
29.	Tamil Nadu Sugar Corporation Limited (TASCO)	Industries	17 October 1974	1999-2000	2000-01	(-)1113.62	---	779.15	(-)2298.50	3970.26	(-)309.52	---	1
30.	Perambalur Sugar Mills Limited (Subsidiary of TASCO)	Industries	24 July 1976	1999-2000	2000-01	(-)923.50	---	417.35	(-)2041.58	3502.36	(-)187.27	---	1
	Sector-wise total					**(-)2037.12**	---	**1196.50**	**(-)4340.08**	**7472.62**	**(-)496.79**	---	---

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	CEMENT												
31.	Tamil Nadu Cements Corporation Limited	Industries	11 February 1976	1999-2000	2000-01	(-)3058.56	Loss increased by Rs.105.25 lakh	1799.13	(-)1043.83	8657.08	(-)1510.31	---	1
	Sector-wise total					**(-)3058.56**	**---**	**1799.13**	**(-)1043.83**	**8657.08**	**(-)1510.31**	**---**	**---**
	AREA DEVELOPMENT												
32.	Dharmapuri District Development Corporation Limited	Rural Development and Local Administration	7 November 1975	1999-2000	2000-01	2.67	---	15.00	57.17	113.24	3.62	3.20	1
	Sector-wise total					**2.67**	**---**	**15.00**	**57.17**	**113.24**	**3.62**	**3.20**	**---**
	ECONOMICALLY WEAKER SECTION												
33.	Tamil Nadu Adi Dravidar Housing and Development Corporation Limited	Adi Dravidar and Tribal Welfare	15 February 1974	1997-98	2000-01	(-)14.47	---	6122.41	54.81	7190.31	26.30	0.37	3
34.	Tamil Nadu Backward Classes Economic Development Corporation Limited	Backward Classes and Most Backward Classes Welfare	16 November 1981	1999-2000	2000-01	71.55	---	1119.01	51.51	2234.96	134.68	6.03	1
35.	Tamil Nadu Minorities Economic Development Corporation Limited	Backward Classes and Most Backward Classes Welfare	31 August 1999	1999-2000	2001-02	4.10	---	320.00	4.10	331.48	4.10	1.24	1
36.	Tamil Nadu Corporation for Development of Women Limited	Social Welfare and Noon-Meal Programme	9 December 1983	1998-99	2000-01	(-)3.05	---	78.42	0.86	458.55	(-)3.05	---	2

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
37.	Tamil Nadu Ex-servicemen's Corporation Limited	Public (Ex-servicemen)	28 January 1986	1998-99	2000-01	77.29	Decrease in profit by Rs.33.04 lakh	22.91	72.67	152.84	90.64	59.30	2
	Sector-wise total					**135.42**	---	**7662.75**	**183.95**	**10368.14**	**252.67**	**2.44**	---
	PUBLIC DISTRIBUTION												
38.	Tamil Nadu Civil Supplies Corporation Limited	Food and Consumer protection	21 April 1972	1999-2000	2000-01	---	---	3255.10	(-)7116.12	141428.40	7235.31	5.12	1
	Sector-wise total					---	---	**3255.10**	**(-)7116.12**	**141428.40**	**7235.31**	**5.12**	---
	TOURISM												
39.	Tamil Nadu Tourism Development Corporation Limited	Information and Tourism	30 June 1971	2000-01	2001-02	72.95	---	678.63	223.05	1310.57	39.31	3.0	---
	Sector-wise total					**72.95**	---	**678.63**	**223.05**	**1310.57**	**39.31**	**3.0**	---
	FINANCING												
40.	Tamil Nadu Industrial Investment Corporation Limited (TIIC)	Small Industries	26 March 1949	2000-01	2001-02	(-)2879.18	---	4249.56	17581.92	108046.30	9753.25	9.03	---
	Sector-wise total					**(-)2879.18**	---	**4249.56**	**17581.92**	**108046.30**	**9753.25**	**9.03**	---
	INFRASTRUCTURE DEVELOPMENT												
41.	Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited	Municipal Adminis-tration and Water Supply	21 March 1990	2000-01	2001-02	3598.19	---	3200.00	1269.20	45982.07	4139.96	9.0	---
42.	Tamil Nadu Power Finance and Infrastructure Development Corporation Limited	Energy	27 June 1991	1999-2000	2000-01	1849.39	Current assets under stated by Rs.3.82 crore	2200.00	709.11	111141.90	15136.74	13.62	1
43.	Tamil Nadu Corporation for Industrial Infrastructure Development Limited	Industries	21 March 1992	1999-2000	2001-02	(-)1.96	---	8530.00	17.93	11220.17	(-)1.96	---	1
	Sector-wise total					**5445.62**	---	**13930.00**	**1996.24**	**168344.14**	**19274.74**	**11.45**	---

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	TRANSPORT												
44. (a)	Metropolitan Transport Corporation (Chennai Division-I) Limited	Transport	10 December 1971	1999-2000	2000-01	(-)3222.12	---	8381.64	(-)24217.73	(-)6459.17	(-)2591.69	---	1
44. (b)	Metropolitan Transport Corporation (Chennai Division II) Limited	Transport	18 October 1993	1999-2000	2000-01	(-)2606.47	---	7650.99	(-)12451.70	352.91	(-)21000.10	---	1
45.	Tamil Nadu State Transport Corporation (Madurai Division-I) Limited	Transport	10 December 1971	2000-01	2000-02	(-)1324.03	---	4448.57	(-)12761.82	(-)891.72	(-)378.85	---	---
46.	Tamil Nadu State Transport Corporation (Coimbatore Division-I) Limited	Transport	17 February 1972	2000-01	2001-02	(-)2942.26	---	5728.86	(-)17119.16	(-)3814.90	(-)1834.08	---	---
47.	Tamil Nadu State Transport Corporation (Kumbakonam Division-I) Limited	Transport	17 February 1972	2000-01	2001-02	(-)172.91	---	4131.07	(-)9685.30	(-)795.17	(-)656.62	---	---
48.	Tamil Nadu State Transport Corporation (Salem Division-I) Limited	Transport	23 January 1973	2000-01	2001-02	(-)472.53	---	2162.00	(-)7035.29	(-)1282.00	103.42	---	---
49.	Tamil Nadu State Transport Corporation (Madurai Division-II) Limited	Transport	12 December 1973	2000-01	2001-02	(-)3647.19	---	7193.57	(-)21899.62	(-)1477.92	(-)2046.89	---	---
50.	Poompuhar Shipping Corporation Limited	Highways	11 April 1974	1999-2000	2000-01	(-)797.64	---	2053.00	834.36	7707.54	(-)302.77	---	1
51.	Tamil Nadu State Transport Corporation (Villupuram Division-I) Limited	Transport	9 January 1975	1999-2000	2000-01	44.81	---	1769.00	(-)2696.45	1834.45	561.24	30.59	1
52.	Tamil Nadu Transport Development Finance Corporation Limited	Transport	25 March 1975	2000-01	2001-02	1850.38	---	6174.19	4220.67	90430.01	13125.28	14.51	---
53.	State Express Transport Corporation Limited (Tamil Nadu Division-I) Limited	Transport	14 January 1980	2000-01	2001-02	(-)3075.32	---	9827.15	(-)23766.99	(-)3077.61	(-)1645.85	---	---
54.	Tamil Nadu State Transport Corporation (Kumbakonam Division-III) Limited	Transport	1 September 1982	2000-01	2001-02	(-)363.30	---	3661.23	(-)9842.96	(-)183.08	442.89	---	---

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
55.	Tamil Nadu State Transport Corporation (Villupuram Division-II) Limited	Transport	11 November 1982	2000-01	2001-02	(-)744.56	---	1968.93	(-)6456.86	241.93	(-)120.71	---	---
56.	Tamil Nadu State Transport Corporation (Coimbatore Division-II) Limited	Transport	28 December 1982	2000-01	2001-02	43.01	---	2010.22	(-)3254.60	1001.89	352.57	35.19	---
57.	Tamil Nadu State Transport Corporation (Madurai Division-III) Limited	Transport	16 February 1983	2000-01	2001-02	(-)1763.61	---	4112.69	(-)12342.92	(-)399.36	(-)650.66	---	---
58.	Pallavan Transport Consultancy Services Limited	Transport	20 February 1984	1999-2000	2000-01	(-)26.55	---	5.00	5.55	6.43	(-)25.19	---	1
59.	Tamil Nadu State Transport Corporation (Kumbakonam Division-II) Limited	Transport	1 January 1985	2000-01	2001-02	33.53	---	2150.69	(-)4838.72	615.76	488.88	79.39	---
60.	Tamil Nadu State Transport Corporation (Madurai Division-IV) Limited	Transport	19 March 1986	2000-01	2001-02	(-)1283.77	---	1853.13	(-)6764.30	(-)987.72	(-)797.20	---	---
61.	Tamil Nadu State Transport Corporation (Salem Division-II) Limited	Transport	26 March 1987	2000-01	2001-02	193.59	---	1465.34	(-)2793.82	796.41	520.11	65.31	---
62.	Tamil Nadu State Transport Corporation (Villupuram Division-III) Limited	Transport	24 February 1992	2000-01	2001-02	(-)1078.58	---	2492.28	(-)9324.54	(-)732.49	(-)317.24	---	---
63.	State Express Transport Corporation (Tamil Nadu Division II) Limited	Transport	1 October 1993	1999-2000	2000-01	(-)825.87	---	1714.32	(-)4680.43	800.51	(-)301.35	---	1
64.	Tamil Nadu State Transport Corporation (Madurai Division-V) Limited	Transport	8 March 1996	2000-01	2001-02	(-)183.19	---	1088.00	(-)2780.05	38.60	19.91	51.58	---
65.	Tamil Nadu State Transport Corporation (Kumbakonam Division-IV) Limited	Transport	8 March 1996	2000-01	2001-02	(-)200.80	---	541.05	(-)2740.46	(-)53.56	68.62	---	---
	Sector-wise total					**(-)22565.38**	---	**82582.92**	**(-)192393.19**	**83671.74**	**(-)15673.01**	---	---

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	MISCELLANEOUS												
66.	Overseas Manpower Corporation Limited	Labour and employment	30 November 1978	1999-2000	2000-01	1.36	---	15.00	13.91	29.12	1.46	5.01	1
67.	Tamil Nadu Film Development Corporation Limited	Information and Tourism	12 April 1972	1999-2000	2001-02	(-)230.02	---	1391.00	(-)1219.93	1209.39	(-)3.40	---	1
68.	Tamil Nadu State Marketing Corporation Limited (TASMAC)	Prohibition and Excise	23 May 1983	2000-01	2001-02	150.24	---	700.00	295.01	1259.92	499.07	39.6	---
	Sector-wise total					**(-)78.42**	---	**2106.00**	**(-)911.01**	**2498.43**	**497.13**	---	---
	TOTAL (A)					**(-)26457.18**	---	**151717.17**	**(-)195331.81**	**743413.59**	**25812.84**	**3.47**	---
B.	**WORKING STATUTORY CORPORATIONS**												
	POWER												
1.	Tamil Nadu Electricity Board	Energy	1 July 1957	1999-2000	2000-01	35625.00	Net surplus decreased by Rs.3464.71 lakh	---	300626.00	941068.00	84999.00	9.03	1
	Sector-wise total					**35625.00**	---	---	**300626.00**	**941068.00**	**84999.00**	---	---
	AGRICULTURE												
2.	Tamil Nadu Warehousing Corporation	Food and Consumer Protection	2 May 1958	1999-2000	2000-01	354.98	---	761.00	2103.63	2884.82	351.06	12.17	1
	Sector-wise total					**354.98**	---	**761.00**	**2103.63**	**2884.82**	**351.06**	---	---
	TOTAL (B)					**35979.98**	---	**761.00**	**302729.63**	**943952.82**	**85350.06**	**9.04**	---
	GRAND TOTAL (A+B)					**9522.80**	---	**152478.17**	**107397.82**	**1687366.41**	**111162.90**	**6.59**	---
C.	**NON-WORKING COMPAIES**												
	AGRICULTURE												
1.	Tamil Nadu Poultry Development Corporation Limited	Animal Husbandry and Fisheries	12 July 1973	2000-01	2001-02	(-)302.93	---	126.68	(-)954.91	(-)249.22	(-)266.57	---	---

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
2.	Tamil Nadu Sugarcane Farm Corporation Limited	Agriculture	22 February 1975	2000-01	2001-02	(-)0.16	---	27.50	(-)17.62	9.87	(-)0.16	---	---
3.	Tamil Nadu State Farms Corporation Limited	Agriculture	8 December 1974	2000-01	2001-02	(-)0.03	---	155.13	(-)1570.75	1.22	(-)0.03	---	---
4.	Tamil Nadu State Tube wells Corporation Limited	Public Works	19 March 1982	1998-99	2000-01	(-)2.39	---	31.50	(-)209.07	72.1	(-)2.39	---	2
5.	Tamil Nadu Dairy Development Corporation Limited	Agriculture	4 May 1972	1992-93	1999-2000	(-)0.03	---	207.36	(-)40.80	166.56	(-)0.03	---	8
	Sector-wise total					**(-)305.54**	---	**548.17**	**(-)2793.15**	**0.53**	**(-)269.18**	---	---
	INDUSTRY												
6.	Tamil Nadu Magnesium and Marine Chemicals Limited (Subsidiary of TIDCO)	Industries	10 February 1987	1999-2000	2000-01	(-)380.52	---	362.00	(-)1550.81	140.38	(-)380.48	---	1
7.	Tamil Nadu Ceramics Limited	Small Industries	14 December 1973	2000-01	2001-02	2.88	---	186.11	(-)186.11	---	2.88	---	---
	Sector-wise total					**(-)377.64**	---	**548.11**	**(-)1736.92**	**140.38**	**(-)377.60**	---	---
	ENGINEERING												
8.	Tamil Nadu Steels Limited	Industries	17 September 1981	1999-2000	2000-01	(-)948.21	---	392.00	(-)7131.27	(-)2053.95	(-)86.99	---	1
	Sector-wise total					**(-)948.21**	---	**392.00**	**(-)7131.27**	**(-)2053.95**	**(-)86.99**	---	---
	FINANCING												
9.	The Chit Corporation of Tamil Nadu Limited	Commercial Taxes	11 January 1984	1998-99	2000-01	(-)4.23	---	5.92	(-)35.32	(-)8.22	(-)0.63	---	2
	Sector-wise total					**(-)4.23**	---	**5.92**	**(-)35.32**	**(-)8.22**	**(-)0.63**	---	---
	TRANSPORT												
10.	Tamil Nadu Goods Transport Corporation Limited	Transport	26 March 1975	1989-90		0.21	---	32.66	(-)132.55	(-)29.85	6.57	---	11
	Sector-wise total					**0.21**	---	**32.66**	**(-)132.55**	**(-)29.85**	**6.57**	---	---
	MISCELLANEOUS												
11.	Tamil Nadu State Sports Development Corporation Limited	Education	15 November 1984	1996-97	1998-99	36.38	---	0.002	59.96	77.69	41.32	53.19	4

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
12.	Tamil Nadu Spirit Corporation Limited (Subsidiary of TASMAC)	Prohibition and Excise	10 July 1989	2000-01	2001-02	(-)132.15	---	400.00	1120.69	1479.05	19.92	1.35	---
	Sector-wise total					**(-)95.77**	---	**400.002**	**1180.65**	**1556.74**	**61.24**	---	---
	TOTAL (C)					**(-)1731.18**	---	**1926.862**	**(-)10648.56**	**(-)394.37**	**(-)666.59**	---	---
	GRAND TOTAL (A+B+C)					**7791.62**	---	**154405.032**	**96749.26**	**1686972.04**	**110496.31**	**6.55**	

NOTE:

A: **Capital employed represents net fixed assets (including capital work-in-progress) PLUS working capital except in case of finance companies/corporations, where the capital employed is worked out as a mean of aggregate of the opening and closing balances of paid-up capital, free reserves, bonds, deposits and borrowings (including refinances).**

ANNEXURE-3

(Referred to in Paragraph 1.2.2 and 1.3.2)

Statement showing subsidy/grants received, guarantees received, waiver of dues, loans on which moratorium allowed and loans converted into equity during the year and subsidy receivable and guarantees outstanding at the end of March 2001

(Figures in Columns 3(a) to 7 are Rupees in lakh)

Sl. No.	Name of the Company/ Statutory Corporation	♠Subsidy received during the year				*Guarantees received during the year and outstanding at the end of the year					Waiver of dues during the year				Loans on which moratorium allowed	Loans converted into equity during the year
		Central Government	State Government	Others	Total	Cash credit from banks	Loans from other sources	Letters of credit opened by banks in respect of import	Payment obligation under agreement with foreign consultants	Total	Loans repayment written off	Interest waived	Penal interest waived	Total		
(1)	(2)	3(a)	3(b)	3(c)	3(d)	4(a)	4(b)	4(c)	4(d)	4(e)	5(a)	5(b)	5(c)	5(d)	(6)	(7)
(A)	WORKING COMPANIES															
	AGRICULTURE															
1.	Tamil Nadu Tea Plantation Corporation Limited	---	---	---	---	---	(337.15)	---	---	(337.15)	---	---	---	---	---	---
2.	Tamil Nadu Agro Industries Corporation Limited	---	---	---	---	---	(117.92)	---	---	(117.92)	---	---	---	---	---	---

♠ Subsidy includes subsidy receivable at the end of year, which is also shown in brackets.

* Figures in bracket indicate guarantees outstanding at the end of the year

(1)	(2)	3(a)	3(b)	3(c)	3(d)	4(a)	4(b)	4(c)	4(d)	4(e)	5(a)	5(b)	5(c)	5(d)	(6)	(7)
	INDUSTRY															
3.	Tamil Nadu Industsrial Development Corporation Limited	---	---	---	---	---	105939.00 (105939.00)	---	---	105939.00 (105939.00)	---	---	---	---	---	---
4.	Tamil Nadu Industrial Explosives Limited	436.45	---	---	436.45	---	---	---	---	---	---	---	---	---	---	---
5.	Tamil Nadu Small Industries Corporation Limited	---	---	---	---	150.00 (14.54)	300.00 (200.00)	---	---	450.00 (214.54)	---	---	---	---	---	---
6.	Tamil Nadu Small Industries Development Corporation Limited	92.03	---	---	92.03	---	---	---	---	---	---	---	---	---	---	---
7.	State Industries Promotion Corporation of Tamil Nadu Limited	264.00	1063.00	---	1327.00	---	3500.00 (5319.00)	---	---	3500.00 (5319.00)	---	---	---	---	---	---
	HANDLOOM AND HANDICRAFTS															
8.	Tamil Nadu Handicrafts Development Corporation Limited	28.57	15.00	---	43.57	---	---	---	---	---	---	---	---	---	---	---
9.	Tamil Nadu Handloom Development Corporation Limited	---	---	---	---	550.00 (550.00)	---	---	---	550.00 (550.00)	---	---	---	---	---	---
	CONSTRUCTION															
10.	Tamil Nadu State Construction Corporation Limited	---	---	---	---	(250.00)	17000.00 (17000.00)	---	---	17000.00 (17250.00)	---	---	---	---	---	---
11.	Tamil Nadu Police Housing Corporation Limited	---	---	---	---	---	9998.00 (27796.43)	---	---	9998.00 (27796.43)	---	---	---	---	---	---
	SUGAR															
12.	Perambalur Sugar Mills Limited	---	---	---	---	---	(858.00)	---	---	(858.00)	---	---	---	---	---	---
	CEMENT															
13.	Tamil Nadu Cements Corporation Limited	---	---	---	---	---	(600.00)	---	---	(600.00)	---	---	---	---	---	---

(1)	(2)	3(a)	3(b)	3(c)	3(d)	4(a)	4(b)	4(c)	4(d)	4(e)	5(a)	5(b)	5(c)	5(d)	(6)	(7)
	ECONOMICALLY WEAKER SECTION															
14.	Tamil Nadu Adi Dravidar Housing and Development Corporation Limited	6455.44	231.44	---	6686.88	---	(2816.99)	---	---	(2816.99)	---	---	---	---	---	---
15.	Tamil Nadu Backward Classes Economic Development Corporation Limited	---	31.64	---	31.64	---	(1245.56)	---	---	(1245.56)	---	---	---	---	---	---
16.	Tamil Nadu Corporation for Development of Women Limited	---	2215.70	---	2215.70	---	---	---	---	---	---	---	---	---	---	---
	PUBLIC DISTRIBUTION															
17.	Tamil Nadu Civil Supplies Corporation Limited	---	154000.00	---	154000.00	2000.00 (2000.00)	4000.00 (2000.00)	---	---	6000.00 (4000.00)	---	---	---	---	---	---
	FINANCING															
18.	Tamil Nadu Industrial Investment Corporation Limited	---	576.00	---	576.00	---	47125.00 (56852.00)	---	---	47125.00 (56852.00)	---	---	---	---	---	---
	INFRASTRUCTURE DEVELOPMENT															
19.	Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited	1924.50	1793.65	---	3718.15	(5000.00)	---	---	---	(5000.00)	---	---	---	---	---	---
20.	Tamil Nadu Power Finance and Infrastructure Development Corporation Limited	---	---	---	---	(5143.00)	---	---	---	(5143.00)	---	---	---	---	---	---
	TRANSPORT															
21	Metropolitan Transport Corporation (Chennai) Limited	---	---	---	---	280.00 (233.34)	---	---	---	280.00 (233.34)	---	---	---	---	---	8264.17
22.	Tamil Nadu State Transport Corporation (Madurai – Division I) Limited	---	---	---	---	300.00 (100.00)	---	---	---	300.00 (100.00)	---	---	---	---	---	516.00

(1)	(2)	3(a)	3(b)	3(c)	3(d)	4(a)	4(b)	4(c)	4(d)	4(e)	5(a)	5(b)	5(c)	5(d)	(6)	(7)
23.	Tamil Nadu State Transport Corporation (Coimbatore Division I) Limited	---	1867.30 (102.30)	---	1867.30 (102.30)	---	100.00 (5.00)	---	---	100.00 (5.00)	---	---	---	---	---	569.00
24.	Tamil Nadu State Transport Corporation (Kumbakonam Division I) Limited	---	966.05 (116.05)	---	966.05 (116.05)	---	350.00 (50.00)	---	---	350.00 (50.00)	---	---	---	---	---	117.55
25.	Tamil Nadu State Transport Corporation (Salem Division I) Limited	---	738.42 (43.42)	---	738.42 (43.42)	---	---	---	---	---	---	---	---	---	---	407.40
26.	Tamil Nadu State Transport Corporation (Madurai - Division II) Limited	---	---	---	---	803.00 (803.00)	---	---	---	803.00 (803.00)	---	---	---	---	---	981.83
27.	Tamil Nadu State Transport Corporation (Villupuram Division I) Limited	---	665.92 (665.92)	---	665.92 (665.92)	---	---	---	---	---	---	---	---	---	---	---
28.	State Express Transport Corporation (Tamil Nadu - Division I) Limited	---	---	---	---	500.00 (850.00)	---	---	---	500.00 (850.00)	---	---	---	---	---	1293.40
29.	Tamil Nadu State Transport Corporation (Kumbakonam - Division III) Limited	---	666.46 (41.46)	---	666.46 (41.46)	---	94.00 (47.00)	---	---	94.00 (47.00)	---	---	---	---	---	461.19
30.	Tamil Nadu State Transport Corporation (Villupuram - Division II) Limited	---	1457.86 (407.86)	---	1457.86 (407.86)	---	---	---	---	---	---	---	---	---	---	179.99
31.	Tamil Nadu State Transport Corporation (Coimbatore - Division II) Limited	---	686.64 (361.64)	---	686.64 (361.64)	---	---	---	---	---	---	---	---	---	---	220.22
32.	Tamil Nadu State Transport Corporation (Madurai Division III) Limited	---	583.44	---	583.44	150.00 (578.61)	120.00 (118.40)	---	---	270.00 (697.01)	---	---	---	---	---	469.90
33.	Tamil Nadu State Transport Corporation (Kumbakonam - Division II) Limited	---	1316.80 (726.80)	---	1316.80 (726.80)	---	---	---	---	---	---	---	---	---	---	222.69
34.	Tamil Nadu State Transport Corporation (Madurai - Division IV) Limited	---	638.46 (28.46)	---	638.46 (28.46)	190.00 (150.00)	---	---	---	190.00 (150.00)	---	---	---	---	---	231.13

(1)	(2)	3(a)	3(b)	3(c)	3(d)	4(a)	4(b)	4(c)	4(d)	4(e)	5(a)	5(b)	5(c)	5(d)	(6)	(7)
35.	Tamil Nadu State Transport Corporation (Salem – Division II) Limited	---	648.64 (268.64)	---	648.64 (268.64)	---	250.00 (70.00)	---	---	250.00 (70.00)	---	---	---	---	---	230.34
36.	Tamil Nadu State Transport Corporation (Villupuram – Division III) Limited	---	1066.54 (161.54)	---	1066.54 (161.54)	---	320.00 (129.86)	---	---	320.00 (129.86)	---	---	---	---	---	62.12
37.	State Express Transport Corporation (Tamil Nadu Division II) Limited	---	---	---	---	(60.00)	---	---	---	(60.00)	---	---	---	---	---	533.90
38.	Tamil Nadu State Transport Corporation (Madurai – Division V) Limited	---	492.91 (142.91)	---	492.91 (142.91)	(75.00)	---	---	---	(75.00)	---	---	---	---	---	13.60
39.	Tamil Nadu State Transport Corporation (Kumbakonam – Division IV) Limited	---	327.86 (62.86)	---	327.86 (62.86)	---	100.00 (49.34)	---	---	100.00 (49.34)	---	---	---	---	---	9.54
	MISCELLANEOUS															
40.	Tamil Nadu State Marketing Corporation Limited	---	---	---	---	5000.00 (5000.00)	---	---	---	5000.00 (5000.00)	---	---	---	---	---	---
	TOTAL (A)	**9200.99**	**172049.73** **(3129.86)**	---	**181250.72** **(3129.86)**	**9923.00** **(20807.49)**	**189196.00** **(221551.65)**	---	---	**199119.00** **(242359.14)**	---	---	---	---	---	**14783.97**
(B)	**STATUTORY CORPORATIONS**															
	Tamil Nadu Electricity Board	---	26655.00	---	26655.00	---	163000.00 (134100.00)	---	---	163000.00 (134100.00)	---	---	---	---	---	10000.00
	TOTAL (B)	---	**26655.00**	---	**26655.00**	---	**163000.00** **(134100.00)**	---	---	**163000.00** **(134100.00)**	---	---	---	---	---	**10000.00**
	GRAND TOTAL (A+B)	**9200.99**	**198704.73** **(3129.86)**	---	**207905.72** **(3129.86)**	**9923.00** **(20807.49)**	**352196.00** **(355651.65)**	---	---	**362119.00** **(376459.14)**	---	---	---	---	---	**24783.97**

ANNEXURE-4

(Referred to in Paragraph 1.2.4)

Statement showing financial position of Statutory Corporations

(Rupees in crore)

Particulars	1998-99	1999-2000	2000-01
1. TAMIL NADU ELECTRICITY BOARD			(Provisional)
A. LIABILITIES			
Equity capital♣	219.43	---	100.00
Loans from Government	---	---	---
Other long-term loans (including bonds)	4099.87	4976.17	5524.58
Reserves and surplus	3525.36	4026.88	3277.48
Others (subsidy)	1510.09	1662.14	1854.11
Current liabilities and provisions	3613.76	4206.72	6250.94
TOTAL (A)	**12968.51**	**14871.91**	**17007.11**
B. ASSETS			
Gross fixed assets	9596.45	10514.80	11545.58
LESS: Depreciation	2719.51	3267.91	3855.29
Net fixed assets	6876.94	7246.89	7690.29
Capital works-in-progress	2763.34	3047.47	3672.02
Assets not in use	4.45	0.96	0.84
Deferred cost	2.79	3.18	3.57
Current assets	3277.10	3323.04	4390.13
Investments	43.89	43.48	43.37
Subsidy receivable from the Government	---	1206.89	1206.89
Miscellaneous expenditure	---	---	---
Deficits	---	---	---
TOTAL (B)	**12968.51**	**14871.91**	**17007.11**
C. CAPITAL EMPLOYED♠	**9303.62**	**9410.68**	**9501.50**

♣ **It represents loan converted into equity capital and are subject to adjustment against subsidy receivable from Government.**

♠ **Capital employed represents net fixed assets (including works-in-progress) PLUS working capital. While working out working capital, the element of deferred cost and investments are excluded from current assets.**

(Rupees in crore)

2. TAMIL NADU WAREHOUSING CORPORATION			
Particulars	**1998-99**	**1999-2000**	**2000-01**
A. LIABILITIES			(Provisional)
Paid-up capital	7.61	7.61	7.61
Reserves and surplus	18.41	21.04	24.92
Borrowings (others)	0.09	---	---
Subsidy	0.21	0.20	0.20
Trade dues and current liabilities (including provision)	5.33	5.65	6.16
TOTAL (A)	**31.65**	**34.50**	**38.89**
B. ASSETS			
Gross block	32.12	32.89	33.62
LESS: Depreciation	7.38	8.15	8.85
Net fixed assets	24.74	24.74	24.77
Capital works-in-progress	---	---	---
Investment	---	---	---
Current assets, loans and advances	6.91	9.76	14.12
Profit and loss account	---	---	---
TOTAL (B)	**31.65**	**34.50**	**38.89**
C. CAPITAL EMPLOYED*	**26.32**	**28.85**	**32.73**

* **Capital employed represents net fixed assets PLUS working capital**

ANNEXURE-5

(Referred to in Paragraph 1.2.4)

Statement showing working results of Statutory Corporations

1. TAMIL NADU ELECTRICITY BOARD

(Rupees in crore)

Sl. No	Particulars	1998-99	1999-2000	2000-01 (Provisional)
1.	(a) Revenue receipts	5682.53	6473.48	7400.34
	(b) Subsidy/subvention from Government	1076.22	1776.39	250.00
	TOTAL	**6758.75**	**8249.87**	**7650.34**
2.	Revenue expenditure (net of expenses capitalised) including write off of intangible assets but excluding depreciation and interest	5432.22	6778.52	7353.76
3.	Gross surplus (+) / deficit (-) for the year (1-2)	1326.53	1471.35	296.58
4.	Adjustments relating to previous years	(-)130.34	(-)78.74	(-)262.04
5.	Final gross surplus (+) / deficit (-) for the year (3+4)	1196.19	1392.61	34.54
6.	(a) Depreciation (LESS: Capitalised)	443.03	542.62	581.88
	(b) Interest on Government loans	---	---	---
	(c) Interest on others, bonds, advance, etc., and finance charges	595.73	719.80	797.87
	(d) Total interest on loans and finance charges (b) + (c)	595.73	719.80	797.87
	(e) LESS: Interest capitalized	177.51	226.06	249.29
	(f) Net interest charged to revenue (d) – (e)	418.22	493.74	548.58
	(g) Total appropriations (a) + (f)	861.25	1036.36	1130.46
7.	Surplus (+) / deficit (-) before accounting for subsidy from State Government {(5) – 6 (g) – 1 (b)}	(-)741.28	(-)1420.14	(-)1345.92
8.	Net surplus (+)/ deficit (-) {(5) – 6(g)}	334.94	356.25	(-)1095.92
9.	**Total return on capital employed•**	**753.16**	**849.99**	**(-)547.34**
10.	**Percentage of return on capital employed**	**8.1**	**9.0**	**---**

• **Total return on capital employed represents net surplus/deficit PLUS total interest charged to Profit and Loss account (LESS interest capitalised).**

2.TAMIL NADU WAREHOUSING CORPORATION

	Particulars	1998-99	1999-2000	2000-01
1.	**Income**			(Provisional)
(a)	Warehousing charges	10.83	12.60	16.56
(b)	Other income	0.72	1.24	1.21
	TOTAL (1)	**11.55**	**13.84**	**17.77**
2.	**Expenses**			
(a)	Establishment charges	5.85	6.72	6.81
(b)	Other expenses	3.72	3.61	6.42
	TOTAL (2)	**9.57**	**10.33**	**13.23**
3.	Profit (+) / Loss (-) before tax	1.98	3.51	4.54
4.	Other appropriations	---	---	---
5.	Amount available for dividend	2.45	3.55	4.55
6.	Dividend for the year	0.23	0.76	0.61
7.	**Total return on capital employed**	**2.02**	**3.51**	**4.55**
8.	**Percentage of return on capital employed**	**7.67**	**12.17**	**13.90**

ANNEXURE-6

(Referred to in Paragraph 1.2.4.2.2)

Statement showing operational performance of Statutory Corporations

1. TAMIL NADU ELECTRICITY BOARD

Sl. No	Particulars	1998-99	1999-2000	2000-01 (Provisional)
1.	Installed capacity		(MW)	
(a)	Thermal	2970	2970	2970
(b)	Hydel	1963	1993	1996
(c)	Gas	130	130	227
(d)	Other	19	19	19
	TOTAL	**5082**	**5112**	**5212**
2.	Normal maximum demand	5196	5580	6290
3.	Power generated		(MKWH)	
(a)	Thermal	17076	18861	19464
(b)	Hydel	4918	4444	5450
(c)	Gas	124	217	215
(d)	Other	23	27	18
	TOTAL	**22141**	**23549**	**25147**
	LESS: Auxiliary consumption			
(a)	Thermal	1564	1697	1650
	(Percentage)	9.16	9.00	8.48
(b)	Hydel	79	59	92
	(Percentage)	1.61	1.33	1.69
(c)	Gas	0	0	0
	TOTAL	**1643**	**1756**	**1742**
	(Percentage)	7.4	7.5	6.9
5.	Net power generated	20498	21793	23405
6.	Power purchased			
(a)	Within the State			
	(i) Government	---	---	---
	(ii) private	1579	3096	3353
(b)	Other States	776	880	129
(c)	Central grid	10676	10788	13135

Sl. No	Particulars	1998-99	1999-2000	2000-01 (Provisional)
7.	**Total power available for sale**	**33529**	**36557**	**40022**
8.	Power sold			
	(a) Within the State	27657	30238	33418
	(b) Outside the State	205	196	---
9.	Transmission and distribution losses	5667	6123	6604
10.	Load factor (Percentage)			
(a)	Hydel	28.6	25.2	31.2
(b)	Thermal	65.6	71.3	78.0
11.	Percentage of transmission and distribution losses to total power available for sale	16.9	16.8	16.5
12	Number of villages/towns electrified (in lakh)	0.64	0.64	0.64
13.	Number of pump sets/wells energised (in lakh)	16.43	16.79	17.23
14.	Number of sub-stations	831	876	913
15.	Transmission and Distribution lines (in lakh KMs)			
(a)	High/medium voltage	1.3	1.37	1.63
(b)	Low voltage	4.09	4.15	4.23
16.	Connected load (in MW)	22424	23416	25373
17	Number of consumers (in lakh)	124.03	133.03	143.57
18.	Number of employees (in lakh)	0.94	0.99	0.94
19.	Consumer/employees ratio	131.95	134.37	152.73
20.	Total expenditure on staff during the year (Rupees in crore)	1268.33	1504.28	1518.59
21.	Percentage of expenditure on staff to total revenue expenditure	20.6	20.8	18.5
22.	Units sold		**(MKWH)**	
(a)	Agriculture	7556	8838	9191
	Percentage share to total units sold	27.1	29.0	27.5
(b)	Industrial	11054	11152	11751
	Percentage share to total units sold	39.7	36.6	35.2
(c)	Commercial	2200	2731	3148
	Percentage share to total units sold	7.9	9.0	9.4
(d)	Domestic	5280	6019	7311
	Percentage share to total units sold	18.9	19.8	21.9
(e)	Others	1772	1694	2017
	Percentage share to total units sold	6.4	5.6	6.0
	TOTAL	**27862**	**30434**	**33418**

Sl. No	Particulars	1998-99	1999-2000	2000-01 (Provisional)
		(Paise per KWH)		
(a)	Revenue (excluding subsidy from Government)	204	213	221
(b)	Expenditure♣	202	232	223
(c)	Profit (+) / Loss (-)	2	(-)19	(-)2
(d)	Average subsidy claimed from Government	39	58	7
(e)	Average interest charges	21	24	24

2. TAMIL NADU WARE HOUSING CORPORATION

	Particulars	1998-99	1999-2000	2000-01 (Provisional)
	Number of stations covered	64	65	68
	Storage capacity created up to the end of the year (tonne in lakh)			
(a)	Owned	5.98	5.98	5.98
(b)	Hired	0.25	0.29	0.97
	TOTAL	**6.23**	**6.27**	**6.95**
	Average capacity utilised during the year (tonne in lakh)	5.17	5.11	6.15
	Percentage of utilization	83	82	88
	Average revenue per metric tonne per year (Rupees)	222.23	271.61	288.83
	Average expenses per metric tonne per year (Rupees)	184.06	202.46	215.12

♣ **Revenue expenditure includes depreciation but excludes interest on long-term loans.**

ANNEXURE-7

(Referred to in Paragraph 1.8)

Statement showing the Department-wise outstanding Inspection Reports (IRs)

Sl. No	Name of Department	Number of PSUs	Number of outstanding Irs	Number of outstanding paragraphs	Years from which paragraphs outstanding
1.	Industry	15	58	263	1993-94
2.	Small Industry	4	15	73	1994-95
3.	Information and Technology	3	8	34	1997-98
4.	Commercial Taxes	1	3	6	1995-96
5.	Information and Tourism	2	10	57	1994-95
6.	Agriculture	2	6	23	1994-95
7.	Public Information	1	3	8	1997-98
8.	Prohibition and Excise	2	3	11	1998-99
9.	Social Welfare	1	4	21	1996-97
10.	Energy	1	2	6	1997-98
11.	Municipal Administration and Water Supply	1	2	7	2000-01
12.	Transport	23	84	298	1993-94
13.	Animal Husbandry	2	10	44	1994-95
14.	Labour and Employment	1	2	5	1997-98
15.	Public	1	5	28	1995-96
16.	Health and Family Welfare	2	7	29	1998-99
17.	Adi Dravidar and Tribal Welfare	1	6	73	1992-93
18.	Backward Classes, Most Backward Classes and Minority Welfare	2	5	10	1996-97
19.	Rural	1	3	11	1995-96
20.	Home	1	1	4	2000-01
21.	Public Works	2	7	38	1995-96
22.	Highways	1	5	22	1995-96
23.	Handloom, Handicrafts, Khadi and Textiles	3	14	63	1994-95
24.	Environment and Forest	3	6	45	1996-97
25.	Food and Consumer Protection	2	9	97	1992-93
26.	Tamil Nadu Electricity Board	1	430	1307	1994-95
	Grand Total	**79**	**708**	**2583**	

ANNEXURE-8

(Referred to in Paragraph 1.8)

Statement showing the Department-wise draft paragraphs/reviews reply to which are awaited

Sl. No	Name of Department	Number of draft paragraphs	Number of reviews	Period of issue
1.	Industry	1	2	July 2000, April and June 2001
2.	Transport	1	1	July 2000
3.	Energy	9	2	July 2000, April , May and June 2001
4.	Public (Ex-servicemen)	1	---	April 2001
5.	Prohibition and Excise	1	---	January 2001
6.	Adi Dravidar and Tribal Welfare	1	---	June 2001
	TOTAL	**14**	**5**	

ANNEXURE-9

(Referred to in Paragraph 1.10)

Statement showing paid-up capital, investment and summarised working results of 619-B companies as per their latest finalised accounts

(Figures in Columns 5 to 17 are Rupees in lakh)

Sl. No.	Name of Company	Status	Year of account	Paid-up capital	Equity by				Loans/Grants by			Total investment by way of equity, loans and grants			Profit (+)/ Loss (-)	Accumulated Profit (+)/ Loss (-)
					State Govt.	State Govt. companies	Central Govt. and its companies	Others	State Govt.	State Govt. companies	Central Govt.	State Govt.	State Govt. companies	Central Govt.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1.	Tamil Nadu Telecommunications Limited	Working	2000-01	2266.50	---	668.40 29.5%	695.10 30.6%	903.00 39.9%	183.92 (loans)	---	---	---	---	---	710.42	317.47
2.	Tidel Park Limited	Working	1999-2000	3350.00	---	600.00 17.9%	---	2750.00 82.1%	---	---	---	---	---	---	---	---
3.	Tamil Nadu Newsprints and Papers Limited	Working	2000-01	6911.74	2444.49 35.4%	236.02 3.4%	---	4231.23 61.2%	---	---	---	---	---	---	7642.77	24544.60

ANNEXURE-10

(Referred to in Paragraph 2A.6.1)

Financial position of Tamil Nadu Cements Corporation Limited for the five years upto 31 March 2001.

(Rupees in lakh)

		1996-97	1997-98	1998-99	1999-2000	2000-01
	LIABILITIES					(Provisional)
(a)	Paid-up capital	1799.13	1799.13	1799.13	1799.13	1799.13
(b)	Reserves and surplus	2322.66	3144.85	2029.73	15.00	15.00
(c)	Borrowings					
(i)	Short term and long term	2545.08	5418.36	7329.52	7537.50	8118.82*
(ii)	Cash credit	107.92	220.73	370.99	384.45	
(d)	Trade dues and other liabilities (including provisions)	8533.64	7167.71	6366.04	6710.14	8604.12
	TOTAL	**15308.43**	**17750.78**	**17895.41**	**16446.22**	**18537.07**
	ASSETS					
(a)	Gross fixed assets	8998.50	9729.94	10833.75	11090.86	11902.65
(b)	LESS: Depreciation	5616.27	5858.73	6125.82	6445.31	6744.00
(c)	Net fixed assets	3382.23	3871.21	4707.93	4645.55	5158.65
(d)	Capital works-in-progress	654.08	260.07	671.50	696.91	NIL
(e)	Other assets/investments	0.03	0.03	0.03	0.03	NIL
(f)	Current assets, loans and advances	11245.53	13608.75	12513.60	10024.76	9361.15
(g)	Intangible assets					
(i)	Miscellaneous expenditure	26.56	10.72	2.35	35.14	23.60
(ii)	Accumulated losses	0.00	0.00	0.00	1043.83	3993.67
	TOTAL	**15308.43**	**17750.78**	**17895.41**	**16446.22**	**18537.07**
	Capital employed	6094.12	10572.32	11526.99	8657.08	5915.68
	Net worth	4095.23	4933.26	3826.51	735.16	(-)2203.14

* **Details of short term, long term and cash credit are awaited.**

Note:

(i) **Capital employed represents net fixed assets PLUS working capital.**

(ii) **Net worth represents paid-up capital PLUS reserve LESS intangible assets.**

ANNEXURE-11

(Referred to in Paragraph 2A.6.2)

Working results of Tamil Nadu Cements Corporation Limited for the five years upto 31 March 2001.

(Rupees in lakh)

		1996-97	1997-98	1998-99	1999-2000	2000-01
A.	**INCOME**					(Provisional)
(i)	Sale of products	19746.16	25165.51	18558.76	16162.23	16661.07
(ii)	Other income	84.88	83.13	122.07	275.28	41.27
(iii)	Increase/Decrease in finished stock	(-)13.88	181.01	639.30	(-)574.53	(-)168.86
	TOTAL	**19817.16**	**25429.65**	**19320.13**	**15862.98**	**16533.48**
	EXPENDITURE					
(i)	Raw materials including purchase of cement	4834.55	8687.96	3653.87	3307.33	3183.68
(ii)	Salaries and wages and other related costs	2174.32	2525.74	2736.75	2875.92	3103.42
(iii)	Stores, spares and consumables	849.06	794.57	948.54	764.01	153.13
(iv)	Power and fuel	6872.92	7753.72	8924.68	6942.72	7874.20
(v)	Repairs and maintenance	259.54	409.61	254.74	179.09	174.24
(vi)	Administrative and selling over heads	2188.05	3036.24	2368.37	2432.96	2723.64
(vii)	Interest	644.04	780.75	1257.54	1548.25	2060.28
(viii)	Depreciation	219.36	218.59	238.85	283.45	298.69
(ix)	Tax	221.94	126.68	NIL	NIL	NIL
	TOTAL	**18263.78**	**24333.86**	**20383.34**	**18333.73**	**19571.28**
	Profit/Loss for the year	1553.38	1095.79	(-)1063.21	(-)2470.75	(-)3037.80
	Prior period adjustments	96.94	75.69	(-)51.91	(-)587.81	0.49
	Net Profit(+)/Loss(-)	1456.44	1020.10	(-)1115.12	(-)3058.56	(-)3037.31
	Investment allowance withdrawn	4.80	125.16	NIL	21.92	NIL
	Net profit/loss	1461.24	1145.26	(-)1115.12	(-)3036.64	(-)3037.31

ANNEXURE-12

(Referred to in Paragraph 2A.7.3.1 and 2A.7.3.2)

Performance of Kilns and Cement mills of Tamil Nadu Cements Corporation Limited during the last five years ended 31 March 2001

	Alangulam					Ariyalur				
	1996-97	1997-98	1998-99	1999-2000	2000-01	1996-97	1997-98	1998-99	1999-2000	2000-01
(A) Performance of Kilns										
Available hours (excluding maintenance hours)	14476	14476	14476	14476	14476	15200	15200	15200	15200	15200
Actual hours	9512	8631	12130	8502	9628	14088	15509	14450	12441	12976
Down time hours	4964	5845	2346	5974	4848	1112	NIL	750	2759	2224
Down time due to controllable factors (hours)	4855	5708	1837	906	1989	967	NIL	497	2658	2107
Rated output (MTs per hour)	26.25	26.25	26.25	26.25	26.25	31.25	31.25	31.25	31.25	31.25
Production loss due to controllable factors (MTs)♠	127444	149835	48221	23782	52211	30219	NIL	15531	83063	65844
Rate per MT (In rupees)	1944	2294	1919	1901	1901	1347	---	1306	1312	1312
Value of production lost due to controllable factors (Rupees in lakh)•	2477.51	3437.21	925.36	452.11	992.53	407.05	---	202.83	1089.79	863.87
(B) Performance of cement mills										
Available hours (excluding	15840	15840	15840	15840	15840	7920	7080	7060	7056	7080

♠ **Total production loss due to controllable factors in Kilns of Alangulam (401493 MTs) and Ariyalur (194657 MTs).**

• **Total value of production lost in Kilns of Alangulam and Ariyalur: Rs.108.48 crore.**

	Alangulam					Ariyalur				
	1996-97	1997-98	1998-99	1999-2000	2000-01	1996-97	1997-98	1998-99	1999-2000	2000-01
maintenance hours)										
Utilised hours	8034	8935	10494	10790	11512	6800	6726	6009	5736	6466
Down time hours	7806	6905	5346	5050	4328	1120	354	1051	1320	614
Down time due to controllable factors (hours)	7730	6710	3559	4814	4084	829	N.A.	631	896	129
Rated output (MTs per hour)	35	35	35	35	35	80	80	80	80	80
Actual output (MTs per hour)	28.19	27.61	28.62	26.47	26.27	68.03	80.09	81.06	77.74	71.07
Production loss due to controllable factors (MTs)♠	270550	234850	124565	168490	142940	66320	N.A.	50480	71680	10320
Rate per MT (In rupees)	2164	2212	2085	2075	2065	2085	---	1996	1778	1795
Value of production lost due to controllable factors (Rupees in lakh)•	5854.70	5194.88	2597.18	3496.17	2951.71	1382.77	---	1007.58	1274.47	185.24

♠ **Total production loss due to controllable factors in cement mills of Alangulam (941395 MTs) and Ariyalur (198800 MTs).**

• **Total value of production lost in cement mills of Alangulam and Ariyalur: Rs.239.45 crore.**

ANNEXURE-13

(Referred to in Paragraph 2A.7.4)

Statements showing cost of production and profitability of Cement Units at Alangulam and Ariyalur

	1996-97	1997-98	1998-99	1999-2000	2000-01
ALANGULAM UNIT (capacity:4 lakh tones)					**(Provisional)**
Variable cost (Rupees perMT)	1664	1999	1654	1628	1665
Sales realisation (Rupees per MT)	2164	2212	2085	2075	2065
Contribution (Rupees per MT)	500	213	431	447	400
Fixed cost (Rupees in lakh)	1824	1936	2156	2370	2102
Break-even production (in MT)	364800	908920#	500232#	530201#	525500#
Actual production (MTs)	226594	246725	300378	285558	302496

 # The break-even production was beyond the installed capacity of 4 lakh tones, indicating the unviable working of the unit.

	1996-97	1997-98	1998-99	1999-2000	2000-01
ARIYALUR UNIT (Capacity:5 lakh tones)					**(Provisional)**
Variable cost (Rupees perMT)	1279	1347	1382	1308	1359
Sales realisation (Rupees per MT)	2085	2129	1996	1778	1795
Contribution (Rupees per MT)	806	782	614	470	436
Fixed cost (Rupees in lakh)	1910	2061	2675	3150	3102
Break-even production (In MT)	236973	263555	435667	670212*	711468*
Actual production (MTs)	462596	538684	487106	445913	459545

*** The break-even production of cement in Ariyalur during 1999-2000 and 2000-01 is not attainable as the same exceeds the installed capacity.**

ANNEXURE-14

{Referred to in Paragraph 2A.7.5 (a)}

Extra expenditure on power consumption

Particulars	1996-97		1997-98		1998-99		1999-2000	
	Alangulam	Ariyalur	Alangulam	Ariyalur	Alangulam	Ariyalur	Alangulam	Ariyalur
Cement production (MTs)	226594	462596	246725	538634	300378	487106	285558	445913
Norm for power consumption (Units/MT)	120	130	120	130	110	130	110	130
Actual consumption (Units/MT)	122.58	140	139.55	132.25	113.17	135.76	113.57	126.71
Excess consumption (Units)	584612	4625960	4823474	1211926	952198	2805731	1019442	---
Rate per unit (Rupees)	3.19	2.88	3.80	3.48	4.03	3.67	4.33	---
Extra expenditure (Rupees in lakh)	18.69	133.23	183.29	42.17	38.37	102.97	44.14	---

ANNEXURE-15

{Referred to in Paragraph 2A.7.5 (b)}

Extra expenditure on coal consumption

	Particulars	Alangulam			Ariyalur
		1996-97	1997-98	1998-99	1996-97
1.	Clinker production	190331	161684	262704	417115
2.	Norm for coal consumption (Kcal)	1500	1500	1500	950
3.	Actual heat used (Kcal)	1824	1769	1707	1038.42
4.	Excess consumption (Kcal)	324	269	207	88.42
5.	Calorific value of coal	4214	4469	4756	4214
6.	Excess consumption of coal (MT) 1X4/5	14634	9732	11434	8752
7.	Average cost of coal (Rupees per MT)	2049	2205	2318	2383
8.	Extra expenditure (Rupees in lakh)	299.85	214.59	265.04	208.56

ANNEXURE-16

(Referred to in Paragraph 2A.8.1)

Statement showing capacity utilisation, production performance and profitability of Asbestos Sheet Unit, Alangulam

A. Installed capacity : 36000 MTs per annum

B. Capacity fixed by the Company : 30000 MTs per annum

		1996-97	1997-98	1998-99	1999-2000	2000-01
I.	**Capacity utilisation**					**(Provisional)**
1.	Budgeted capacity (MTs)	28500	28500	28500	30000	26400
2.	Actual production (MTs)	26478	26132	22214	26942	27341
3.	Percentage of achievement to the capacity					
(i)	Installed	74	73	62	75	76
(ii)	Fixed by the Company	88	87	74	90	91
(iii)	Budgeted	93	92	78	90	104
II.	**Cost of production and profitability**					
(i)	Variable cost (Rupees per MT)	4803	4414	4873	4602	4462
(ii)	Fixed cost (Rupees per MT)	1332	1666	2053	1994	2003
(iii)	Total cost of production (Rupees per MT)	6135	6080	6926	6596	6465
(iv)	Average sales realisation (Rupees per MT)	7512	6899	6390	6348	6390
(v)	Contribution (Rupees per MT)	2709	2485	1517	1746	1928
(vi)	Total fixed cost (Rupees in lakh)	352.82	435.39	456.12	537.21	547.51
(vii)	Break-even production (MTs)	13023	17521	30067	30768	28398
III.	**Down time analysis**					
1.	Available production hours (excluding maintenance)	7245	7617	7488	7320	7272
2.	Down time hours	1232	1888	2391	1147	1270
(a)	Due to controllable factors (hours)	825	864	698	523	715
3.	Production loss due to controllable factors (MTs) (3.8 MTs per hour)	3135	3283	2652	1987	2718
III.	**Profitability**					
	Profit(+)/Loss(-) (Rupees in lakh)	350.23	161.78	(-)76.07	(-)38.35	(-)30.63

ANNEXURE-17

(Referred to in Paragraph 2A.9.1)

Statement showing capacity utilisation, production performance and profitability of Asbestos Pipes Unit, Mayanur

A.	**Installed capacity**	**:**	**36000 MTs per annum**
B.	**Capacity fixed by the Company**	**:**	**30000 MTs per annum**

		1996-97	1997-98	1998-99	1999-2000	2000-01
I.	**Capacity utilisation**					**(Provisional)**
1.	Budgeted capacity (MTs)	14400	18000	18000	18000	20000
2.	Actual production (MTs)	14430	17245	9475	2746	NIL
3.	Percentage of achievement to the capacity					
(i)	Installed	40	48	26	8	NIL
(ii)	Fixed by the Company	48	58	32	9	NIL
(iii)	Budgeted	100	96	53	15	NIL
II.	**Down time analysis**					
1.	Available production hours (excluding maintenance)	7200	7200	7200	7200	7200
2.	Down time hours	1909	1158	3658	6098	7200
(a)	Due to controllable factors (hours)	1194	1019	1796	327	NIL
3.	Production loss due to controllable factors (MTs) (3.5 MTs per hour)	4179	3566	6286	1145	NIL
III.	**Profitability**					
	Profit(+)/Loss(-) (Rupees in lakh)	123.90	232.46	(-)377.32	(-)507.20	(-)574.38

ANNEXURE-18

(Referred to in Paragraph 2A.10.1)

Statement showing capacity utilisation and profitability of Stoneware Pipe Unit, Virdhachalam

Installed capacity: 7200 MTs per annum

		1996-97	1997-98	1998-99	1999-2000	2000-01
I.	**Capacity utilisation**					
1.	Budgeted capacity (MTs)	5700	5100	6000	5400	4800
2.	Actual production (MTs)	4176	4784	4820	3183	1162
3.	Percentage of achievement to the capacity					
(i)	Installed	58	66	67	44	16
(ii)	Budgeted	73	94	80	59	24
II.	**Profitability**					
1.	Sales realisation (Rupees per MT)	2328	3106	3363	3279	2569
2.	Variable cost (Rupees per MT)	1248	1466	1631	1762	1513
3.	Contribution (Rupees per MT)	1080	1640	1732	1517	1056
4.	Fixed cost (Rupees in lakh)	61.64	74.17	86.31	93.65	111.38
	Profit(+)/Loss(-) (Rupees in lakh)	(-)17.29	1.91	(-)16.87	(-)30.84	(-)109.20

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ANNEXURE-19

(Referred to in Paragraph 2B.5)

Financial position of Southern Structurals Limited for the five years upto 31 March 2001.

(Rupees in lakh)

		1996-97	1997-98	1998-99	1999-2000	2000-01#
	LIABILITIES					
(a)	Paid-up capital	3454.30	3454.30	3454.30	3454.30	N.A.
(b)	Reserves and surplus	968.65	896.08	828.94	772.34	N.A.
(c)	Borrowings					N.A.
(i)	Short term and long term	2236.20	2236.20	2236.20	2236.20	N.A.
(ii)	Cash credit	393.12	320.40	461.10	517.53	N.A.
(d)	Trade dues and other liabilities (including provisions)	3240.15	2819.95	3002.42	2165.89	N.A.
	TOTAL	**10292.42**	**9726.93**	**9982.96**	**9146.26**	**N.A.**
	ASSETS					
(a)	Gross fixed assets	2881.57	2875.16	2928.03	2932.62	N.A.
(b)	LESS: Depreciation	1663.97	1754.90	1814.79	1904.87	N.A.
(c)	Net fixed assets	1217.60	1120.26	1113.24	1027.75	N.A.
(d)	Capital works-in-progress	11.06	25.77	14.67	17.69	N.A.
(e)	Other assets/investments	0.30	0.30	0.30	0.30	N.A.
(f)	Current assets, loans and advances	3907.27	3348.17	3010.74	2192.92	N.A.
(g)	Intangible assets					N.A.
(i)	Miscellaneous expenditure (Deferred revenue expenditure)	84.37	56.24	28.12	NIL	N.A.
(ii)	Accumulated losses	5071.82	5176.19	5815.89	5907.60	N.A.
	TOTAL	**10292.42**	**9726.93**	**9982.96**	**9146.26**	**N.A.**
	Capital employed*	1884.74	1648.48	1136.23	1072.47	N.A.
	Net worth@	(-)733.24	(-)882.05	(-)1560.77	(-)1680.96	N.A.

Note:

 # Accounts not finalised.

*** Capital employed represents net fixed assets PLUS working capital.**

@ Net worth represents paid-up capital PLUS reserve LESS intangible assets.

N.A Not Available (as accounts are yet to be finalised).

ANNEXURE-20

(Referred to in Paragraph 2B.5)

Working results of Southern Structurals Limited for the five years upto 31 March 2001.

(Rupees in lakh)

	Particulars	1996-97	1997-98	1998-99	1999-2000	2000-01 (Provisional)
(i)	Income from contracts	1810.91	3547.62	4085.53	2890.68	1094.87
(ii)	Manufacturing expenses	1728.79	3043.75	3755.14	2146.47	1398.88
(iii)	Contribution	82.12	503.87	330.39	744.21	(-)304.01
	Less: Interest	140.73	96.28	252.36	306.80	310.69
	Less: Depreciation	39.39	35.94	36.41	42.38	33.00
	Less: Overheads	534.00	593.76	696.97	724.28	248.31
	Deficit	(-)632.00	(-)222.11	(-)655.35	(-)329.25	(-)896.01
	Add: Miscellaneous income	169.02	266.15	171.81	183.92	66.60
(iv)	Operating profit(+)/ Loss(-)	(-)462.98	44.04	(-)483.54	(-)145.33	(-)829.41
(v)	Provision for doubtful debts	34.85	33.51	43.56	46.95	N.A.
(vi)	Profit(+)/Loss(-) for the year	(-)497.83	10.53	(-)527.10	(-)192.28	(-)829.41
(vii)	Add/Deduct prior period adjustment	(-)59.42	(-)114.88	(-)112.60	100.57	N.A.
(viii)	Loss as per accounts	(-)557.25	(-)104.35	(-)639.70	(-)91.71	(-)829.41
(ix)	Projected profit(+)/ Loss as per rehabilitation scheme	(-)534.54	(-)62.98	282.42	488.28	678.64

N.A: Not available.

ANNEXURE-21

(Referred to in Paragraph 2B.9)

Performance of Works Division

(Rupees in lakh)

Items		1996-97	1997-98	1998-99	1999-2000
Wagons	**Projected in the scheme**	292.31	1579.20	1838.76	1838.76
	Actual	321.41	1256.48	1834.02	1231.12
Structurals	**Projected in the scheme**	806.66	879.16	946.17	1132.19
	Actual	362.79	300.42	182.99	611.35
Mining Equipments	**Projected in the scheme**	147.33	56.91	64.42	66.47
	Actual	761.08	413.62	633.18	201.08
TOTAL	**Projected in the scheme**	1246.30	2515.27	2849.35	3037.42
	Actual	1445.28	1970.52	2650.19	2043.55
Percentage of actual to projection		115.96	78.3	93.01	67.28

ANNEXURE-22

(Referred to in Paragraph 3A.6.2)

Failure rate of Distribution Transformers

Region	1995-96			1996-97			1997-98			1998-99			1999-2000		
	No. of trans-formers in service	Number failed	Rate of failure	No. of trans-formers in service	Number failed	Rate of failure	No. of trans-formers in service	Number failed	Rate of failure	No. of trans-formers in service	Number failed	Rate of failure	No. of trans-formers in service	Number failed	Rate of failure
Villupuram	17305	2275	13.15	17842	2480	13.90	18933	2714	14.33	19469	2714	13.94	20568	2992	14.54
Trichy	16723	1666	9.96	17533	1771	10.10	18676	1951	10.45	19713	2365	11.99	19929	2725	13.67
Vellore	13727	1197	8.72	14310	1505	10.52	14872	1661	11.17	14960	1816	12.14	15791	1732	10.96
Chennai	8521	827	9.71	9020	850	9.42	9491	1050	11.06	10205	915	8.97	10883	1141	10.48
Tirunelveli	10449	829	7.93	10928	947	8.67	11267	1127	10.00	11765	1114	9.47	12597	1238	9.83
Madurai	11815	883	7.47	12361	926	7.49	12855	1018	7.92	13562	1098	8.10	14126	1232	8.72
Salem	16014	1148	7.17	16353	1084	6.63	17097	1365	7.98	17590	1388	7.89	18980	1438	7.57
Coimbatore	12109	764	6.31	12658	452	3.57	11639	928	7.97	12038	986	6.95	14555	1012	6.95
Total	106663	9589	8.99	111005	10015	9.02	114830	11814	10.29	119302	12396	10.39	127429	13510	10.60

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Printed at Government Central Press, Chennai 600 079