CHAPTER I

PERFORMANCE AUDIT

This chapter contains three performance audit reports *viz*., Functioning of Anna University, Chennai, Functioning of Industrial Training Institutes and Modernisation of Police Force, together with two Information Technology audit reports on Computerisation in Chennai Metropolitan Water Supply and Sewerage Board and Preparation of Electors' Photo Identity Card and updation of Photo Electoral Roll.

HIGHER EDUCATION DEPARTMENT

1.1 Functioning of Anna University, Chennai

Highlights

Technical education plays a vital role in the socio-economic development of a State. Graduate and post-graduate courses in engineering and technology have made rapid strides in Tamil Nadu in terms of student intake in the colleges. Anna University, Chennai, with its genesis as a School of Survey way back in 1794, became a college of Civil Engineering in 1862. With the introduction of Mechanical Engineering in 1894, it became the first institution in the country to award degrees in Mechanical Engineering and grew into a premier university providing engineering, technical and management education in the State. A performance audit of the functioning of Anna University, Chennai disclosed inadequacies in planning, deficiencies in financial management, policy violations in admissions, lowering of standards of laboratories, libraries, faculty etc., to facilitate affiliation to number of colleges and inadequate research programmes during 2005-10.

- **Consolidated accounts for the receipts and payments of the university as a whole were not prepared. Instead, they were prepared in a compartmentalised manner which was not conducive for exercising control over its finances.**

(Paragraph 1.1.7.2)

- **While the Government's policy encouraged affordable higher education, the university increased the self-financing courses.**

(Paragraph 1.1.8.2(ii))

- **Reducing the qualifying marks for granting affiliation to courses run by self-financing colleges from 85 to 50 paved way for grant of**

provisional affiliation to 509 courses in 111 colleges which were hitherto ineligible for affiliation.

(Paragraph 1.1.8.3(i))

- **The university had a faculty-student ratio of 1:38 as against the norm of 1:15 for each course.**

(Paragraph 1.1.9.1)

- **The objective of partnering with industries through research was not achieved as the number of research and consultancy projects taken up for private sector industries was very low.**

(Paragraph 1.1.10.1)

- **The 'Knowledge Data Centre', proposed in 2003 to provide web-based technological resources to students in the State was delayed by more than six years and the expenditure of ₹ 6.16 crore incurred thereon was unfruitful.**

(Paragraph 1.1.10.2)

1.1.1 Introduction

The Government established Anna University as a unitary type[1] of university in September 1978 by amalgamating four[2] technical education institutions in the city of Chennai. The State Government upgraded (2001) the university into an affiliated type[3] vide the Anna University (Amendment) Act, 2001 with jurisdiction over the entire State of Tamil Nadu. The Act was amended in 2006 to restrict its jurisdiction to the districts of Chennai, Kancheepuram, Thiruvallur, Thiruvannamalai, Vellore and Villupuram. The university again became a unitary type one from the academic year 2010-11.

As of 2010, 149 colleges are affiliated to Anna University, Chennai apart from the four university/constituent colleges in Chennai and one each at Villupuram, Tindivanam and Arani. The university offers under-graduate (UG), post-graduate (PG) and PhD programmes in almost all the engineering and technology disciplines including applied sciences, M. Phil programmes under science and humanities and management programmes.

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1 University without affiliated colleges.

2 College of Engineering, Guindy, Madras Institute of Technology, Chrompet, Alagappa Chettiar College of Technology, Guindy and the School of Architecture and Planning of the university of Madras.

3 University providing affiliation to colleges.

The objectives of the university are:

(i) to provide facilities and offer opportunities for higher education in engineering, technology and allied sciences;

(ii) to devise and implement a programme of education that is relevant to the current needs of the society;

(iii) to promote research and disseminate and advance the knowledge thereon for the betterment of society and

(iv) to serve as a centre for fostering co-operation between the academics, industrial community and research community.

1.1.2 Organisational structure

The Governor of the State is the Chancellor of the university and the Minister for Higher Education is the Pro-Chancellor. The Vice-Chancellor of the university is appointed by the Chancellor for a period of three years. The Syndicate is the apex body which determines and regulates all policy matters of the university. The Registrar, appointed by the Syndicate, is in charge of administration. In addition, there are Deans/Heads for the eight faculties/30 departments, a Finance Officer and a Controller of Examinations. The university has 46 autonomous centres with financial and functional autonomy of varying nature. Each centre has an Executive Committee with the Vice-Chancellor as the Chairman.

1.1.3 Audit objectives

The objectives of the performance audit were to assess whether:

(i) a proper planning system existed to provide facilities and opportunities for higher education in engineering and technology and allied sciences and to devise and implement a programme of education that is relevant to the current needs of the society;

(ii) the preparation of budgets and annual accounts was in accordance with laid down procedures and the funds were utilised economically, efficiently and effectively;

(iii) policies relating to admission, affiliation, examination and distance education were framed in accordance with the relevant Acts, Rules and Regulations and the activities were carried out effectively;

(iv) creation and development of human resources and infrastructural facilities were as per the prescribed norms;

(v) research projects were taken up and their progress was monitored effectively and

(vi) an effective system for monitoring and internal control existed in the university.

1.1.4 Audit criteria

The audit findings were benchmarked against the following criteria.

(i) The Anna University Act, 1978 as amended in 2006 and 2010 and the Rules and Regulations made thereunder.

(ii) Norms for faculty and facilities of the All India Council for Technical Education (AICTE), the University Grants Commission (UGC) and the Distance Education Council of Government of India (GOI).

(iii) Provisions of codes, manuals and various instructions/circulars issued by GOI, Government of Tamil Nadu and the university and

(iv) Rules/guidelines framed by the Syndicate and other bodies of the university.

1.1.5 Audit coverage and methodology

The performance audit of the university was taken up under Section 14 (2) of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971 read with Government order dated 30 April 1993. Apart from scrutiny of records of the university administration and 12 autonomous centres of the university, two university/constituent engineering colleges, one Government engineering college and 14 affiliated self financing colleges were selected based on the simple random sampling method for detailed study as given in **Appendix 1.1.**

The performance audit covered the period from 2005-06 to 2009-10. The audit objectives were discussed with the Principal Secretary to the Government, Higher Education Department and the Registrar of Anna University, Chennai in an entry conference held on 2 February 2010 and the audit findings were discussed with the Principal Secretary to Government, Higher Education Department in an exit conference held on 15 November 2010.

Audit Findings

1.1.6 Planning process

The university did not prepare comprehensive long-term/short-term Plans

1.1.6.1 Non-formulation of comprehensive Plans

The university prepared a vision document (Vision 2020) in 2004 to strive towards becoming a world class institution by providing up to date knowledge to the students, by having state of the art physical facilities and laboratory equipment, by updating the faculty on topics of current interest and by providing individualised attention. The vision document also envisaged the university to be a preferred partner to the industry and community for contribution towards their economic and social development by providing

high quality manpower through excellence in teaching, research and consultancy.

Audit noticed that the university, however, did not prepare any Perspective or Annual plans outlining the year-wise developmental activities to be carried out and financial outlays therefor, to achieve the goals set in the vision document.

The Registrar of the university stated (January 2010) that plan proposals of various departments/autonomous centres were sent to State Government and agencies and Ministries of GOI. Audit observed that the Plan proposals of the university did not form part of any comprehensive Plan and were limited to the purpose of seeking funds to carry out development activities on a year to year basis.

Further, Audit noticed that though the university achieved some of the goals set in the Vision 2020 statement in areas such as establishment of centres for technology development, faculty development, intellectual property rights, university-industry collaboration and entrepreneurship, it was still to achieve the following goals **(Table 1)** which were targeted to be achieved by March 2010.

Table 1: Non-achievement of goals set

Goal set in vision document	Target date for attaining the goal
To establish a publishing centre	December 2005
To launch interactive e-learning	December 2006
To obtain international accreditation	December 2008
To establish 10 Twinning programmes	December 2008

(Source: Vision document)

During the exit conference the Principal Secretary directed the Registrar to initiate appropriate action for the launching of interactive e-learning and for obtaining international accreditation as contemplated in the vision document.

1.1.7 Financial management

The finances of the university and its autonomous centres are managed separately and separate accounts are maintained. Details of receipts and expenditure of the university and the autonomous centres for the period 2005-09 are given in **Table 2.**

Table 2: Receipts and expenditure of the university and the autonomous centres

(₹ in crore)

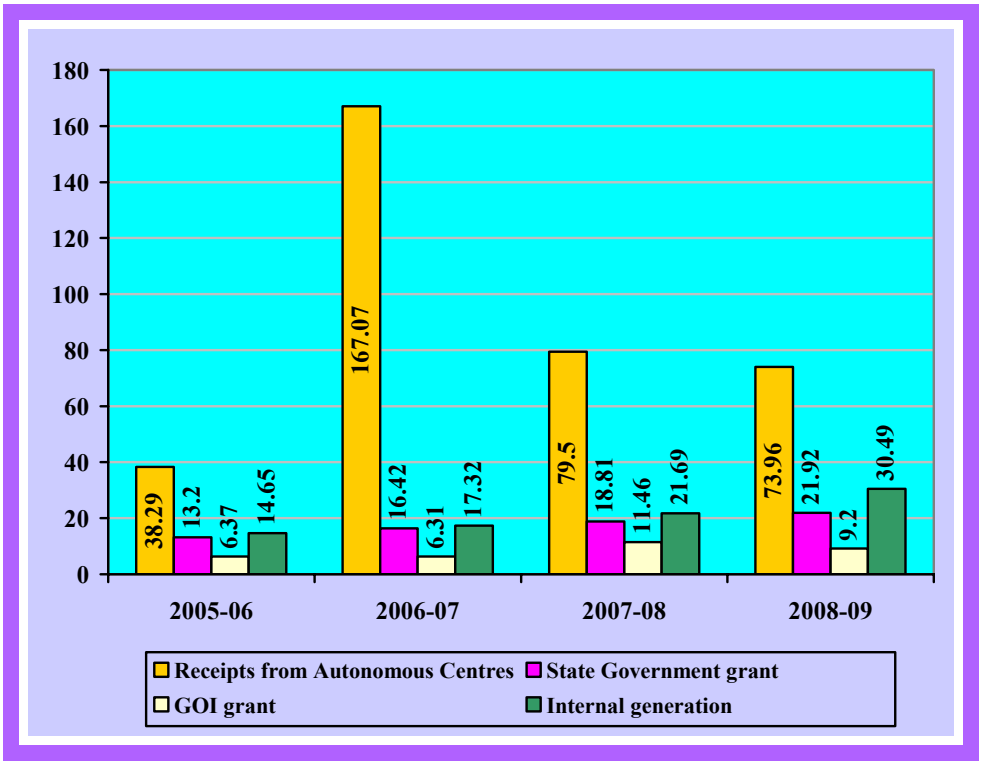
Year	Receipts		Expenditure	
	University Receipts	Autonomous Centres	University Expenditure	Autonomous Centres
2005-06	125.90	242.94	101.68	160.13
2006-07	246.61	203.25	86.39	245.94
2007-08	183.37	280.81	116.93	219.75
2008-09 (Unaudited)	197.32	262.64	117.45	218.90

(Source: Compiled by Audit from Annual Accounts)

Fees from students of constituent colleges, receipts from autonomous centres towards institutional charges, pension fund etc., grants from UGC and the Department of Science and Technology of GOI and grants from State Government are the major sources of receipts for the university. Salaries, maintenance expenditure, capital expenditure and staff pension are the major classes of expenditure.

The trends of major sources of receipts during 2005-09 are depicted in **Chart 1.**

Chart 1: University receipts under major sources (₹ in crore)



➢ The Anna University Act stipulated that all receipts of the university were to be credited into a General Fund. Consequent to the establishment of autonomous centres over the years and entrustment of even routine university functions such as conduct of examinations,

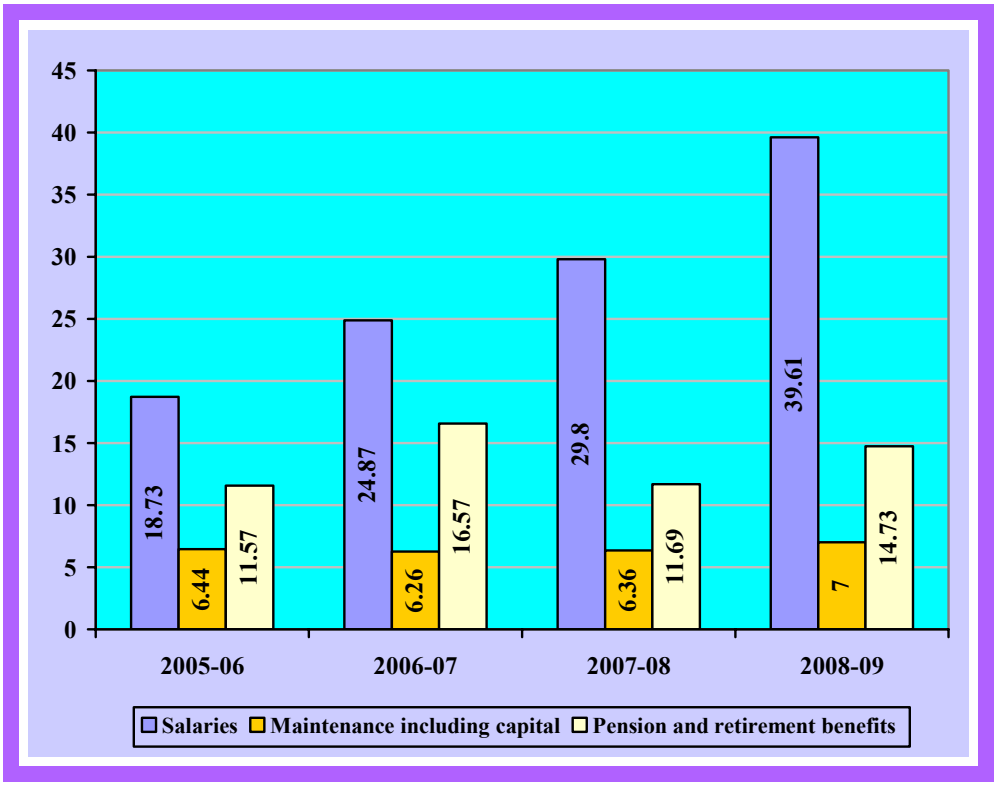
grant of affiliations etc. to such centres, university receipts were being realised by these centres. The autonomous centres transferred their surplus funds in an ad hoc manner to the university account and the centres dealing with administrative functions of the university held ` 68 crore as short/long term deposits with nationalized banks as of March 2008.

- The contribution of the autonomous centres to the General Fund of the university during 2005-09 varied from ₹ 38.29 crore in 2005-06 to ₹ 167.07 crore during 2006-07. The abnormal fluctuation was due to transfer of surplus funds from them on *ad hoc* basis to the General Fund.

- The autonomous centres dealing with affiliations and affiliate college examinations contributed 23 to 54 *per cent* of the total revenue receipts of the university during 2005-09. Drying up of these resources during 2010-13, on the university becoming a unitary type from 2010-11, may lead to financial problem for the university unless suitable measures are initiated to augment revenue generation.

The trends in major categories of expenditure of the university are depicted in **Chart 2**.

Chart 2: Trend in major categories of expenditure (₹ in crore)



(Source: Audited/ unaudited Annual Accounts)

- As may be seen from the above chart, salaries, maintenance expenditure and pension payments increased by 111 *per cent* during 2005-09. The internal revenue generation matched the trend in salaries with an increase of 108 *per cent* during the same period. However, the grants from GOI and State Government grew only by 45 *per cent* and 66 *per cent* respectively, indicating the need to concentrate on revenue generation.

1.1.7.1 Budget

The university prepares budgets separately for its various funds like the General Fund, Student Welfare Fund, Staff Welfare Fund, etc. and funds for each of the Autonomous Centre. The Budget Estimates, Revised Estimates and actuals of university funds during 2005-09 were as given in **Table 3.**

Table 3: Budget Estimates and actual expenditure

(₹ in crore)

Year	Receipts			Expenditure		
	Budget Estimates	Revised Estimates	Actuals	Budget Estimates	Revised Estimates	Actuals
2005-06	74.28	160.86 (116.56)	125.90 (- 21.73)	90.15	142.22 (57.76)	101.68 (- 28.51)
2006-07	114.64	273.60 (138.66)	246.61 (- 9.86)	93.49	105.17 (12.49)	86.39 (- 17.86)
2007-08	143.31	252.27 (76.03)	183.37 (- 27.31)	181.64	113.51 (- 37.51)	116.93 (3.01)
2008-09	141.79	221.81 (56.44)	197.32 (- 11.04)	202.21	215.39 (6.52)	117.45 (- 45.47)

(Source: Audited/Unaudited Annual Accounts)

(Figures in brackets under Revised Estimates represent percentage of variations from the Budget Estimates and the figures in brackets under actuals represent percentage of variations from Revised Estimates)

Abnormal variations, ranging from 56 to 139 *per cent* were noticed between the Budget Estimates and Revised Estimates for receipts. Similarly, the actual receipts varied from the Revised Estimates by (-)10 to (-) 27 *per cent* and the expenditure varied from the Revised Estimates by 3 to (-) 45 *per cent*.

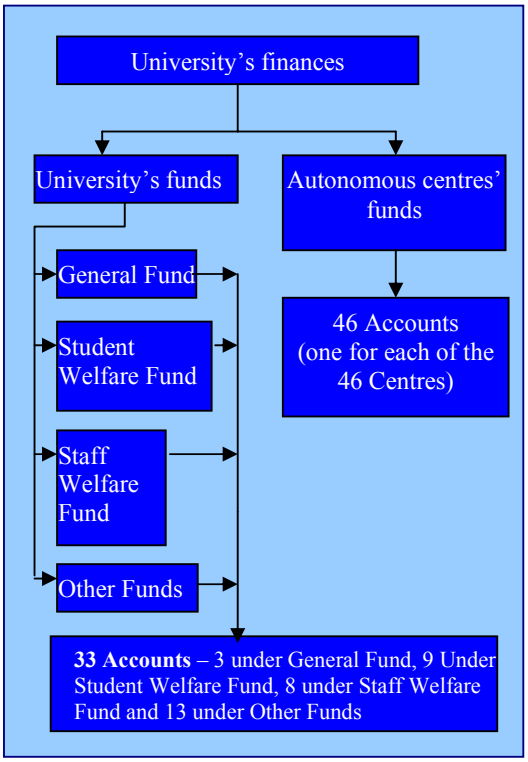
In the exit conference (November 2010), the Principal Secretary instructed the Registrar of the university to ensure that the variations in the budgeting should be minimum in future.

1.1.7.2 Compilation of annual accounts

As per the provisions of the Finance and Accounts Manual, 1999, the financial transactions of the university are categorized under two heads, *viz*. Receipts and Payments. Receipts include all contributions/ grants from State/ Central Governments/agencies, fees, donations, gifts, recoveries, and payment includes all recurring and non-recurring expenditure. The Finance Officer, appointed by the Syndicate, is to consolidate the classified abstract of receipts and payments monthly and annually for the purpose of audit, etc.

The accounts of the university, as shown in **Chart 3** were primarily divided into (a) university funds and (b) funds of autonomous centres. The university funds were further divided into (1) General Fund, (2) Staff Welfare Fund, (3) Student Welfare Fund and (4) Other Funds. These Funds were accounted for under a total of 33 accounts such as Salary Account, Contingencies Account, Pension Account etc. As regards autonomous centres, each of the 46 autonomous centres maintained separate accounts. As such, a total of 79 (33+46) separate accounts were compiled every year.

Chart 3: University's Finances



While framing (November 2000) the guidelines for the functioning of the autonomous centres, the university instructed the centres to prepare and place their annual accounts to the Finance/Executive Committees of the centres concerned for approval. No specific direction was given to the centres to submit their annual accounts to the Finance Officer for inclusion in the monthly/annual consolidated abstract of receipts and payments of the university. In the absence of such directions, the accounts of the university were compiled in a compartmentalised manner in 79 separate accounts. The Director of Local Fund Audit also commented (September 2008) upon the non-preparation of the consolidated classified abstract of receipts and payments. The Principal Secretary, while admitting the audit observations in the exit conference, directed the university to incorporate new amendment in the Finance and Account Manual 1999 to account for all the receipts including those of the autonomous centres in the consolidated abstract of receipts and payments of the university.

1.1.7.3 Delay in finalisation of accounts

The Finance and Accounts Manual of the university prescribed that the university should finalise its Annual Accounts within three months from the close of the financial year and the audited Annual Accounts should be placed before the Legislature within one year. The university, however, placed its Annual Accounts in the Legislature with delays ranging from 10 to 15 months during 2005-10. Annual Accounts from 2008-09 were still to be placed in the Legislature, pending certification by Local Fund Audit as of July 2010.

1.1.7.4 Under-utilisation of earmarked funds

Capital Programme Fund

The university created (October 2002) a Capital Programme Fund (CPF) for the purpose of construction of buildings and other infrastructure of international standards in the university campus. The Fund was to be constituted by transferring a fixed percentage of the surplus money of various autonomous centres.

The details of receipts and payments under the Fund during 2002-09 were as given in **Table 4**.

Table 4: CPF transactions

(₹ in crore)

Year	Opening Balance	Receipts		Total availability	Payments	Closing Balance
		Funds from Centres	Interest received			
2002-03	..	2.50	..	2.50	..	2.50
2003-04	2.50	13.42	0.38	16.30	1.03	15.27
2004-05	15.27	..	0.71	15.98	0.47	15.51
2005-06	15.51	..	0.62	16.13	0.01	16.12
2006-07	16.12	133.45	5.55	155.12	0.25	154.87
2007-08	154.87	7.51	14.55	176.93	4.32	172.61
2008-09	172.61	1.00	14.71	188.32	22.17	166.15
Total		**194.40**			**28.25**	

(Source : Audited/Unaudited Annual Accounts)

The total amount credited to CPF during 2002-09 was ₹ 194.40 crore. During the period, the university utilised only a sum of ₹ 5.45 crore (three *per cent*) towards capital works and diverted ₹ 22.80 crore (11 *per cent*) to the General Fund to meet revenue expenditure.

1.1.7.5 University Grant Commission (UGC) grants

The University Grant Commission allocated (May 2003) a general development grant of ₹ 7.61 crore to the university for the Tenth Plan period (2002-07). The funds allocated by the UGC for various development activities such as construction of buildings, purchase of equipment, books, appointment of additional staff etc., were to be released in instalments on submission of suitable proposals and utilisation certificates for earlier releases.

Against the allocation of ₹ 7.61 crore, UGC released only ₹ 6.10 crore during the Plan period and the entire release was utilised by the university with a two-year extension approved by the UGC. The short release of ₹ 1.51 crore related mainly to buildings (₹ 93 lakh) and salaries for additional staff recruited (₹ 58 lakh).

As against the allocation of ₹ 1.07 crore for construction of buildings, UGC released only a sum of ₹ 13.95 lakh. Audit scrutiny disclosed that proposals in full shape were not submitted by the university for availing of the earmarked allocation. The university did not furnish any reason for non-submission of proposals in full shape and non-commencement of construction works before March 2007.

As regards the allocation of ₹ 1.60 crore for staff salaries, UGC released only a sum of ₹ 1.02 crore as the appointments were not made by the university as per UGC norms[4], mode and time of appointment, etc.

The Principal Secretary to Government stated (November 2010) that due care was being taken for availing of Eleventh Plan grants from UGC. The fact remained that the university had failed to avail of its allocated funds under the Tenth Plan.

1.1.7.6 Block grant from the State Government

The General Fund of the university comprises all income from fees, grants, donations etc. Based on the deficit in the General Fund, worked out by Local Fund Audit (LFA), during 1996-97, State Government fixed the block grant to the university as ₹ 11.66 crore per annum on the basis of the deficit in the General Fund during the preceding year and the university received ₹ 34.98 crore as block grants during 2005-08. Audit noticed that during 2005-08, institutional charges received from autonomous centres were not taken into account for the net deficit of the General Fund account of the university.

During 2005-08, if the institutional charges from autonomous centres were taken into account, the university would not have any deficit in its General Fund as given in **Table 5.**

Table 5: Excess drawal of block grant from State Government

(₹ in crore)

Year	Deficit (-) / surplus (+) as worked out by LFA	Institutional charges not taken into account as receipts	Actual financial position Deficit (-) / surplus (+)
2005-06	(-) 22.26	30.79	(+) 8.53
2006-07	(-) 11.78	17.61	(+) 5.83
2007-08	(-) 4.65	29.16	(+) 24.51

(Source: Audited Annual Accounts)

As the Government had linked the block grants to the deficit in the General Funds, the releases should have been adjusted on the basis of the actual deficits. The Government, however, released the block grants without considering the actual surplus in the General Funds during 2005-08, leading to receipt of ineligible block grants to the tune of ₹ 34.98 crore.

While admitting the audit observation on excess drawal of block grant from the State Government, the Principal Secretary to Government, at the exit conference, directed (November 2010) the Local Fund Audit to offer its remarks.

1.1.7.7 Non-remittance of accumulated surplus

The Government nominated (February 2004) the university as the agency of the State Government to conduct the Tamil Nadu Common Entrance Test

[4] Candidate should have qualified in the National Eligibility Test (NET) and appointment should have been on a regular basis.

(TANCET) and for single window consulting for the Tamil Nadu Common Admission (TANCA) to PG courses from the academic year 2004-05. It permitted the university to fix separate fees for TANCET and TANCA and allowed the university to utilise the receipts by way of these fees for meeting the expenditure on conduct of the TANCET and TANCA. The receipts in excess of expenditure were to be remitted into the Government account. The university, however, in violation of the Government order, did not remit the TANCET and TANCA receipts in excess of expenditure and the university held an accumulated balance of ₹ 2.28 crore as of March 2010.

The Principal Secretary to Government in the exit conference (November 2010) directed the university to remit the accumulated surplus of TANCA/TANCET, under the relevant head of account.

1.1.7.8 Improper maintenance of Endowment Fund

Endowments are created using funds donated by philanthropists, business houses, Government bodies etc. The interests earned on the endowments are to be utilised for specific purposes such as giving awards and prizes to students in recognition of their academic performance. As of July 2010, 203 endowments[5] were maintained by the university. The corpus of these endowments varied from a few thousand rupees to a maximum of ₹ 60 lakh. Interests earned on investment of the endowments and expenditure incurred there from during 2005-09 are given in **Table 6.**

Table 6: Improper maintenance of endowment fund

(₹ in lakh)

Year	Interest earned	Expenditure incurred
2005-06	16.86	4.39 (26)
2006-07	21.48	1.88 (8)
2007-08	17.15	5.08 (29)
2008-09 (Unaudited)	32.76	13.00 (39)

(Figures in brackets indicate the percentage of expenditure to interest receipts)

(Source: Annual Accounts)

Percentage of utilisation of endowments during 2005-09 ranged from 8 to 39 of the interest receipts

(i) Details regarding the actual corpus fund of endowment and the purpose of creating the endowment were not available on record for several cases, indicating the poor status of documentation and institutional memory of the university.

(ii) Separate accounts showing receipts and payments for each endowment were not maintained by the university. As a result, interests accrued on investment of funds of various endowments were clubbed together and invested.

(iii) The university did not utilise the endowments effectively. The percentage of utilisation during 2005-09 ranged from 8 to 39 of the interest receipts.

[5] Excluding two endowments created by Government.

(iv) As the corpus of a large number of endowments was very low, they had lost their relevance. The university, however, had not reviewed and taken any decision on continuance or clubbing of such endowments despite vesting of such powers under the rules governing these endowments.

The Principal Secretary, while admitting the audit observation at the exit conference, stated that a committee had been constituted to finalise the list of endowments and recommend action in this regard.

1.1.8 Academic activities

Audit findings relating to admission, academic, affiliation, distance education and examination are discussed below:

1.1.8.1 Admissions

Government nominated (February 2004) the university as its agency to conduct admissions in single window for engineering courses offered in the university/Government and affiliated colleges. Admission for UG and PG courses were to be made on the basis of merit except in respect of quotas for Non-Resident Indians (NRI) and sponsored candidates of industries.

The details of the number of students admitted in the university/Government/ affiliated engineering colleges during 2005-10 are given in **Table 7**.

Table 7: Admissions in engineering institutions

Year	Number of students admitted			
	University	Government	Affiliated Colleges	Total
2005-06	4,237	174	**	4,411
2006-07	3,906	176	**	4,082
2007-08	4,296	181	35,062	39,539

Year	Number of students admitted			
	University	Government	Affiliated Colleges	Total
2008-09	5,192	178	46,862	52,232
2009-10	5,149	294	42,716	48,159

** Data not available as its jurisdiction was for the entire State and subsequently restricted to only six districts with effect from 2007-08

Consortium quota

In order to encourage industry related academic programmes, students sponsored by industries are admitted under the consortium quota. For admission under the consortium quota, industries are to contribute a prescribed amount and join hands with various departments of the university through Memoranda of Understanding (MoU) as consortium partners.

The MoU with the consortium partners envisaged:

(i) involvement of consortium industries in setting curriculum and in organising seminars, conferences, researches, industry visits etc.,

(ii) staff exchange programme between university and industry and

(iii) admission to one student sponsored by the industry in the relevant branch of study.

The amount prescribed for joining as a consortium member varied from ₹ 12 lakh to ₹ 15 lakh depending on the department. The details of consortium fees collected from industries and the number of sponsored candidates admitted in the university colleges during 2005-06 to 2009-10 are given in **Table 8**.

Table 8: Year-wise consortium fee from industries

Year	Number of MoUs signed	Consortium fees received from industries (₹ in crore)	No. of sponsored candidates admitted
2005-06	18	1.72	21
2006-07	12	1.65	12
2007-08	53	7.36	55
2008-09	49	6.01	45
2009-10	45	6.01	45
Total		**22.75**	

(Source : Data furnished by the university)

Consortium Quota admissions served the only purpose of mobilising funds

Audit scrutiny of records disclosed that in most cases, the consortium industries were not involved in any of the activities contemplated in the MoU. As such, the MoU only served the purpose of allowing admission to sponsored candidates on payment of ₹ 12 to 15 lakh per course.

The Principal Secretary assured (November 2010) that Government would review the non-compliance of MoU conditions for admissions under the consortium quota.

1.1.8.2 Courses

(i) Planning for courses

The activities of the Centre for Academic Courses are regulated by the Academic Council which functions with nominated members. The Centre functions with eight faculties and each faculty is supported by a Board of Studies. The main function of the Board is to frame the regulations, curricula and the syllabi for various UG and PG courses and get them approved by the Academic Council and the Syndicate.

One of the objectives of the university is to devise and conduct courses in engineering and technology that are relevant to the current needs of the society. It was noticed that some of the most sought after UG courses like B.E (Marine Engineering), B.E (Metallurgical Engineering), B.E (Polymer technology) etc., offered by several private colleges and deemed universities were not offered by the constituent colleges of the university. Considering the fast changes in the domain of science and technology, it is necessary that the university should plan the courses based on current needs and technological developments.

The Registrar of the university stated (October 2010), while admitting the audit observations, that the university would decide offering of such popular courses conducted by certain affiliated/deemed universities as and when the academic body of the university decided in favour of them.

The Principal Secretary to Government stated (November 2010) that employment opportunities for the B.E - Metallurgical Engineering course was very low and that the university did not have adequate infrastructure facilities as per the norms of Director General of Shipping, Government of India for running the course on B.E. -Marine Engineering. Thus, the fact remained that the university was still to introduce most sought for courses even after 30 years of its existence.

(ii) Increasing trend of self-supporting courses

More and more self-financing courses went against the Government's policy of affordable higher education

Offering affordable higher education is a declared policy of the Government. With this in mind, State Government had converted all self-supporting courses run by Government Engineering Colleges into regular courses. The university, however, conducted 32 UG and 48 PG courses on self-supporting basis during 2009-10 in its constituent colleges. It was also noticed that the number of self-supporting courses were increasing during 2005-10 as given in **Table 9.**

Table 9: Year-wise increase of self-supporting courses

Year	Number of self-supporting courses		
	Under Graduate	Post Graduate	Total
2005-06	26	37	63
2006-07	30	41	71
2007-08	32	42	74
2008-09	33	45	78
2009-10	32	48	80

(Source : Annual Reports)

The fee structure under the self-supporting course was nearly double that of the fee structure of regular courses. Conducting more and more courses under the self-supporting mode went against the policy of affordable higher education.

The Principal Secretary stated (November 2010) that the Government's instructions on affordable fee structure would be applicable only to the Government institutions and not to the State universities. The reply is not acceptable as the university being a State university, had to implement the State Government's policies.

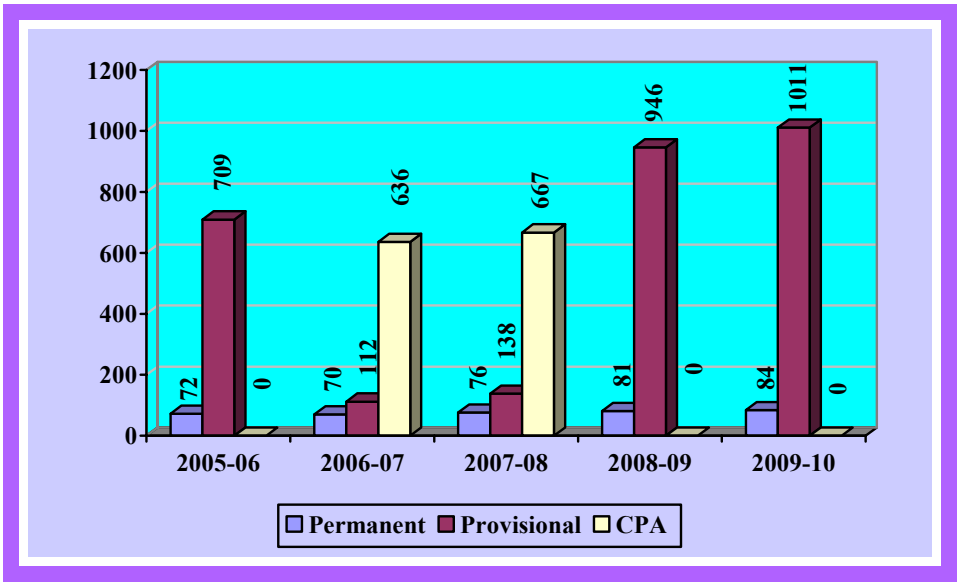
(iii) Non-accreditation of courses

Accreditation for technical education courses is given by the National Board of Accreditation (NBA) of AICTE to ensure that the norms/standards and other quality parameters specified by AICTE are met. However, seven out of 36 UG courses (19 *per cent*) and 47 out of 57 PG courses (81 *per cent*) were not accredited by NBA in the constituent colleges of the university as of October 2009.

1.1.8.3 Affiliation

The AICTE is the authority for granting approval for commencing new engineering and management courses in colleges and the university grants affiliation. As per the guidelines framed (April 2002) by the university, a team of academics inspects the institutions seeking affiliation and awards marks on the basis of four parameters *viz.,* faculty members, laboratory, library and general facilities such as classrooms, campus amenities, hostels etc. The institutions which score the prescribed minimum marks for the courses run by them are awarded provisional affiliations for those courses with one year validity and permanent affiliations for courses after three years of qualification for provisional affiliation with prescribed marks. Conditional Provisional Affiliations (CPA) are awarded in cases where the courses do not qualify for grant of provisional affiliation. The trends of the affiliation status of the courses run by affiliated colleges during 2005-10 are given in **Chart 4.**

Chart 4: Year-wise number of courses under different classes of affiliations



(Source: Records of standing committee on affiliation)

Scrutiny of records connected with affiliations revealed relaxation of criteria by university for affiliation and indefinite continuance of CPA as discussed in the succeeding paragraphs.

(i) Dilution of criteria for provisional affiliation

Till 2008-09, the university adopted a minimum score of 85 marks for grant of provisional affiliation and 90 marks for grant of permanent affiliation for courses run by affiliated colleges. In July 2008, the Syndicate decided to reduce the minimum score from 85 to 50 without giving any reasons therefor. The reduction of the minimum score facilitated grant of provisional affiliation to 509 courses in 111 colleges during 2009-10, which were hitherto ineligible for such affiliations. Further, minimum marks were not prescribed for each of the four parameters *viz.,* faculty, laboratory, library and general facilities for granting affiliation.

The relaxation of norms for affiliation and non-fixing of minimum marks for each parameter is likely to affect the quality of education offered by the affiliated colleges.

(ii) Grant of conditional provisional affiliation

Conditions for affiliation were not enforced scrupulously by the university

As per the statutes for affiliation, the university can grant either permanent affiliation or provisional affiliation. However, based on the recommendation of the Standing Committee on Affiliations, the Syndicate resolved (September 2006) to grant conditional provisional affiliation (CPA) to courses which did not qualify even for grant of provisional affiliation with a condition that the deficiencies noticed during inspection by the team from the university are rectified within a period of one month. However, the university failed to ensure rectification of deficiencies as proved by the fact that 96 colleges continued to run 448 programmes with CPA for more than one year (**Appendix 1.2**) during 2006-09. Thus, the quality of technical education in the State was compromised by granting CPA for more than one year during 2006-

09. Accepting the audit observations on the serious lapses, the Principal Secretary to Government, directed (November 2010) the Registrar to strictly follow the prescribed norms for affiliation, without any relaxation.

(iii) Grant of affiliation in violation of AICTE norm

As per AICTE's regulations, its approval is mandatory for starting new courses in engineering and technology and also for increase or decrease in intake in the existing approved courses in colleges in the country. Universities are to grant affiliations only to courses approved by AICTE with specified intake capacity.

The university, however, approved admission of 42 students in excess of the existing sanctioned intake for two UG Programmes *viz*., B.E - Electrical and Electronics Engineering and B.Tech - Information Technology, in one self-financing engineering college[6] during the year 2008-09 without the mandatory approval of AICTE. The Registrar stated (October 2010) that as the admission for the year 2008-09 was already completed through single window, the college was permitted to run the courses with the excess strength.

Similarly, the university granted affiliation to a B.E. course in Civil Engineering and two PG courses *viz*., M.E. (Applied Electricals) and M.E. (Manufacturing Engineering) run by the Thanthai Periyar Government Institute of Technology, Vellore without the mandatory approval of AICTE from 2004-05 and 2002-03 onwards respectively. The Principal of the college stated (June 2010) that approval of AICTE had been sought and their approval was awaited.

Approval for admission of students in excess of sanctioned intake and affiliating unapproved courses amounted to violation of the AICTE norms framed for ensuring the quality of technical education.

The Principal Secretary assured (November 2010) to review the connected records for getting approval of AICTE for the courses (one UG and two PG courses) in the Thanthai Periyar Government Institute of Technology, Vellore.

1.1.8.4 Distance Education

The Distance Education Council (DEC) is the apex body established by GOI under the Indira Gandhi National Open University Act, 1985, for the purpose of promotion of open universities and the distance education system in the country. The university started the Centre for Distance Education (CDE) in June 2006 for offering PG courses such as MBA, MCA and MSc (IT) under the distance education mode.

Scrutiny of records relating to the distance education for 2005-10 revealed the following:

[6] PMR Institute of Technology, Adayalampattu.

Conducting courses without the approval of the Distance Education Council put the career options of the students at risk

(i) As per the DEC guidelines, institutions which intend to offer education through the distance education mode need approval from DEC. However, Audit noticed that the university did not obtain the mandatory approval of the DEC for its MBA, MCA and MSc (IT) courses even as of March 2010. Though the Centre was formed in June 2006 and classes commenced in March 2007, the university approached the DEC only in July 2009 for the grant of post-facto approval. DEC's orders/approval in this regard, were awaited (March 2010). Offering courses without DEC approval could affect the career options of students as students passing courses without DEC approval were not qualified for taking up Central Government jobs.

(ii) The university had tied up with various colleges in different parts of the State and outside the State to run study centres to serve as liaison offices and to arrange contact/practical classes. The university made a payment of ₹ 2,500 per student subject to a minimum of ₹ 50,000 per semester per course to the study centres to carry out its assigned functions. The study centres were to engage suitable manpower to provide stipulated facilities for the benefit of the students. The total disbursements to study centres during 2007-10 was ₹ 10.55 crore. The guidelines for study centres stipulated submission of audited accounts every semester. However, the agreements entered between the study centres and the CDE did not specify rendering of accounts. The lapse in the agreement resulted in non-submission of accounts by the study centres. This resulted in non-ensuring of the manpower employed and facilities created by the Study Centres through the expenditure reported in the accounts. The Registrar stated (October 2010) that a clause for submission of audited statement of accounts would be included in the agreement in future.

The Principal Secretary to Government stated (November 2010) that the approval of the DEC for conducting of courses in the distance mode was awaited and that the suitable provision for rendering of accounts by the study centres had since been included in the agreements.

1.1.8.5 Examinations

The Controller of Examinations (COE) appointed by the Syndicate, conducts university examinations of all the engineering colleges affiliated to the university through the network of 10 zonal centres and declares results. The Additional COE assists the COE in carrying out examination related activities for four constituent colleges/university departments.

Question papers, along with their keys prepared by subject experts, are reviewed and approved by the Question Paper Passing Board, constituted by the COE. All the answer scripts collected from the examination centres through a representative of the university, are dummy numbered and shuffled before being taken to central valuation centres arranged by the zonal officers. Around 27 lakh answer scripts are valued per examination.

The candidates who appear in the university examinations are permitted to apply for revaluation, copy of answer scripts and review of revaluation on payment of specified fees. The details of answer scripts submitted for revaluation by the affiliated college students during 2005-09 and category-wise results were as given in **Table 10.**

Table 10: Results of revaluations

Particulars	Month of examination						
	April 2006	November 2006	April 2007	November 2007	April 2008	November 2008	April 2009
	(Answer sheets)						
Total number	24,82,471	25,40,975	29,91,478	29,01,966	30,03,038	31,23,906	28,12,157
Number revaluated	71,173 (2.87)	81,868 (3.22)	1,19,195 ((3.98)	1,39,162 (4.80)	1,48,754 (4.95)	1,51,916 (4.86)	1,57,081 (5.59)
Fail to Pass category on revaluation	18,596 (26.13)	21,062 (25.73)	26,966 (22.62)	30,417 (21.86)	34,305 (23.06)	36,349 (23.93)	36,876 (23.48)
Increase in marks on revaluation - already passed candidates	1,505	2,097	2,234	3,430	3,133	5,042	6,119
Increase in marks on revaluation – failed candidates	12,788	16,909	31,895	37,087	40,223	39,382	40,466
Change on revaluation	32,889 (46.21)	40,068 (48.94)	61,095 (51.26)	70,934 (50.97)	77,661 (52.21)	80,773 (53.17)	83,461 (53.13)

(Source : Records of the Centre for Examinations)

Figures in brackets indicate percentage

Percentage of students applying for revaluation increased from 2.87 in April 2006 to 5.59 in April 2009

The percentage of number of students applying for revaluation increased from 2.87 in April 2006 to 5.59 in April 2009. The percentage of answer scripts wherein the marks got changed on revaluation increased from 46.21 to 53.17 during 2006-09. Similarly, 'Review' of revaluation also brought about substantial changes in the marks as given in **Table 11.**

Table 11: Results of 'Review' of answer scripts

Particulars	Month of examination				
	November 2007	April 2008	November 2008	April 2009	November 2009
Total answer scripts for 'Review'	623	865	489	507	928
Fail to Pass category – Numbers (percentage)	377 (60.51)	362 (41.85)	247 (50.51)	213 (42.01)	505 (54.42)
Increase in marks - Numbers	26	22	25	30	62
Percentage of scripts with change in marks on 'Review'	74.96	59.42	68.51	58.78	72.52

(Source : Records of the Centre for Examinations)

The increasing trend in the percentage of revaluation applications and the percentage of scripts involving changes in marks on revaluation and 'Review' exposed weaknesses in the valuation system.

While admitting the audit observation, the Principal Secretary directed (November 2010) the university to review the valuation system.

1.1.9 Human Resources and Infrastructure

1.1.9.1 Vacancy in faculty positions

Details of sanctioned strength and the number of existing faculty members during the period 2006-10 in the university were as given in **Table 12**.

Table 12: Vacancy position of faculty members

Cadre	As on 01.04.2006		As on 01.04.2007		As on 01.04.2008		As on 01.04.2009		As on 01.04.2010	
	SS	ES	SS	ES	SS	ES	SS	ES	SS	ES
Professor	95	91 (95)	100	95 (95)	106	91 (86)	108	86 (80)	108	96 (89)
Asst. Professor/ Reader	166	144 (87)	169	121 (72)	179	121 (67.6)	185	119 (64)	183	145 (79)
Lecturer	305	278 (91)	266	240 (90)	333	253 (75.9)	348	257 (74)	348	300 (86)
Total	566	513(90.6)	535	456(85.2)	618	465(75.2)	641	462(72.1)	639	541(84.6)

(Source : Budget documents)

SS-Sanctioned strength; ES-Existing strength

(Figures in brackets represent percentage of sanctioned strength)

The number of vacancies of faculty members during the years 2006-07 to 2009-10 ranged from 10 to 25 *per cent*.

The faculty-student ratio of the university was 1:38 as against AICTE's prescription of 1:15

The AICTE stipulates a faculty-student ratio of 1:15 for each course. However, Audit noticed that the faculty-student ratio was in the range of 1:16 to 1:60 in 49 out of 71 courses offered in the 14 test-checked affiliated colleges during 2009-10. It was further noticed that the total availability of faculty members in respect of all the courses offered in the university constituent colleges was 490 for the total students strength of 18,728, which works out to a faculty-student ratio of 1:38.

A poor faculty-student ratio is bound to have its impact on the quality of the education offered. The university stated (October 2010) that vacancies of professors could not be filled up due to lack of response to posts advertised. Audit, however observed that vacancies were more pronounced in the cadre of Lecturers and Assistant Professors. Non-filling up of feeder posts would ultimately cause non-availability of suitable persons for higher positions.

The Principal Secretary to Government stated (November 2010) that necessary action was being taken to fill up the vacancies of faculty members.

1.1.9.2 Lack of infrastructural facilities in sample colleges

As per the Statutes and Regulations for Affiliation (2004) of the university, every college seeking affiliation should have the required facilities e.g. laboratories, library and general facilities. Grant of affiliation to an academic programme in a college is considered based on the stipulated total score for all the parameters.

Scrutiny of inspection reports of affiliated colleges for the year 2005-06 to 2009-10 revealed the following:

(i) in eight[7] out of the 14 sample affiliated colleges, laboratory facilities for 21 UG courses were highly inadequate and

(ii) in three[8] out of the 14 sample affiliated colleges, journals/books in libraries for 14 UG courses were deficient by more than 50 *per cent*.

These colleges were given provisional affiliation despite the award of low marks in a specific category. This was due to non-fixing of minimum marks for each category. The Registrar replied (October 2010) that minimum marks for each parameter were prescribed from the year 2010-11 in order to improve the academic standards.

1.1.9.3 Non-establishment of full fledged laboratory

The university proposed (December 2007) six laboratories for the two-year M.Tech. course in Nano Technology under the sponsorship of the Department of Science and Technology (DST) of GOI. DST, however, approved (January 2008) only four laboratories and sanctioned (March 2008) ₹ 4.50 crore for running the course for a period of five years. The first instalment of ₹ 2.50 crore released (March 2008) included ₹ 2.12 crore for procurement of critical imported equipment for the Nano Technology laboratory. The university, however, utilised only a sum of ₹ 21.13 lakh on local procurement on equipment. The import of critical equipment did not materialise even as of March 2010. Non-procurement of the required equipment resulted in non-establishment of full fledged laboratories. As a result, students were denied the opportunity for practicals in the university and were directed to do their practicals in the laboratories of the Indian Institute of Technology, Chennai and Madras University.

The university replied (October 2010) that tenders had been floated to procure the equipment.

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[7] (i) J.A. Institute of Engineering and Technology, Koyambedu, (ii) Adhi College of Engineering and Technology, Pazhaiyaseevaram, (iii) G.K.M. College of Engineering and Technology, Ayyankoilpattu, (iv) Kanchi Pallavan Engineering College, Kolivakkam, Iyyengarkulam, (v) Panimalar Engineering College, (vi) Bhajarang Engineering College, Veppampattu, (vii) Sakthi Engineering College, Thiruninravur (Near Avadi) and (viii) A.R. Engineering College, Vadakachipalayam.

[8] (i) Adhi College of Engineering and Technology, Pazhaiyaseevaram, (ii) J.A. Institute of Engineering and Technology, Koyambedu and (iii) Kanchi Pallavan Engineering College, Kolivakkam, Iyyengarkulam.

1.1.9.4 Conduct of course without laboratory facilities

During 2006-10, 563 students of BE Mechanical Engineering passed their semester examinations without exposure to practicals in the steam laboratory

The curriculum and syllabi for the B.E., Mechanical Engineering course prescribed practical papers on 'Thermal Engineering'. These practicals were to be done in a steam laboratory, equipped with a steam boiler. Audit noticed that the steam laboratory was non-functional and the Syndicate decided (February 2006) to demolish it and establish a new laboratory. The Mechanical Engineering Department, however failed to follow up the Syndicate resolution and establish a new laboratory in place of the non-functional dilapidated steam laboratory. As a result, 563 students who completed their courses during 2006-10 were not exposed to the steam laboratory and were denied practical training in the steam laboratory.

1.1.9.5 Hostel facilities

The university runs hostels for boys and girls in three of its campuses. While these hostels had the capacity to accommodate 2,435 boys and 1,139 girls, the actual numbers of boys and girls admitted in these hostels were 3,037 (125 *per cent*) and 1,277 (112 *per cent*) during 2010. The occupancy rate of these hostels varied from 99 *per cent* in the boys' hostel in the College of Engineering campus to 239 *per cent* in the boys' hostel in the MIT campus, indicating the inability of the university to provide decent hostel facilities to its students.

It was noticed that the university constructed (December 2009) one hostel building for girls and two buildings (April 2010) for boys with the capacity to accommodate 56 and 160 students respectively. Further, construction of two hostel buildings for boys with the capacity of 128 students was in progress (August 2010). Though, the Vision 2020 of the university was to strive towards a world class institution, the university failed to provide adequate hostel facilities for students.

1.1.10 Research Activities

The Centre for Technology Development and Transfer (CTDT) acts as a single window for partnership with industries and establishments for sponsored research, consultancy and training programmes of the university. Taking up research projects helps students to get exposure to the latest developments in the field of science and technology and to disseminate the knowledge for betterment of the society. It is also a source of revenue to the university by way of institutional charges on the cost of projects entrusted by various agencies.

1.1.10.1 Research Projects

The details of sponsored research and consultancy projects undertaken, completed and in progress are given in **Table 13.**

Table 13: Pendency in research projects

Year	No. of projects undertaken	Project cost (₹ in crore)	No. of projects in progress beyond the scheduled date for completion	Cost of projects pending/ in progress as of March 2010 (₹ in crore)
2006-07	36	16.32	21	10.13
2007-08	35	14.85	7	4.46
2008-09	45	10.61	8	2.99
2009-10	61	25.18	0	0
Total	**177**	**66.96**	**36**	**17.58**

(Source: Centre for Technology Development and Transfer records)

- Out of 177 projects undertaken on an outlay of ₹ 66.96 crore during 2006-10, 36 projects costing ₹ 17.58 crore were incomplete beyond their scheduled date for completion.

Instances of partnering with industry in taking up sponsored research and consultancy projects for the private sector were very low

- The university could not attract projects in large numbers from the private sector. During 2005-10, 174 out of the 177 projects had come from Government and its agencies. The objective of partnering with industry was not achieved due to the very low level of projects taken up for the private sector.

1.1.10.2 Delay in establishment of Knowledge Data Centre

Knowledge Data Centre was still to achieve its full functioning status due to non- linking of all educational institutions

A tripartite MoU was signed in 2003 between State Government, the university and a private computer company to set up a Knowledge Data Centre (KDC) in the university campus. The KDC was to serve as a technology resource centre for the student community of the State. It was proposed to connect all educational institutions in the State under a single network. After the MoU, the project did not make much headway due to the indecisiveness on the modalities and disagreement over the price quoted by the private MoU partner for the computer hardware and software, leading to signing of a revised MoU in August 2007 with the same firm. The revised project was to be implemented at a total cost of ₹ 7.08 crore, to be completed by March 2009. The project was proposed to be funded by grants of ₹ 2.50 crore and ₹ 2.44 crore from GOI and State Government respectively and the balance was to be met by the university. After prolonged delays even after the revised MoU, the university placed its purchase order on the private company in August 2008 to establish the KDC on a turn key basis. The open tender system was not followed as it was considered unsuitable.

The private MoU partner supplied the computer hardware and software during September to December 2008 and a payment of ₹ 6.16 crore[9] was made to the firm. However, the KDC was still to start functioning due to delay in identification of space to house the facility with consequent delays in civil and electrical works.

The university replied (October 2010) that the computers had been installed and KDC was functioning. The fact, however, was that the original proposal

[9] Includes carriage of ₹ 6.92 lakh and customs duty of ₹ 54.36 lakh.

of 2003 to connect all educational institutions in the State under a single network had not taken shape even as of March 2010 despite incurring an expenditure of ₹ 6.16 crore thereon due to lack of planning and indecisiveness on the part of the university.

1.1.10.3 Patents

The Centre for Intellectual Property Rights (CIPR) functions in the campus to create awareness on IPRs such as patents, trademarks, industrial designs and copyrights among final year students, faculty members etc., by organizing seminars, workshops and conferences. Patenting inventions is a part of research activity so as to ensure preservation of the intellectual property rights on such inventions. During 2006-10, the faculty members of the university and students of the affiliated colleges filed for patents for 50 of their 'reported' inventions. The university stated (October 2010) that the applications filed were under different stages of processing. The Patents Office, however, had not granted patents for any of this 'reported' inventions indicating their unsuitability for award of patent. Thus, the university which admitted a major chunk of the State's best students entering engineering education did not perform well in terms of new patentable inventions.

The Principal Secretary directed (November 2010) the Registrar to take note of the audit observations on research activities seriously and furnish a detailed reply early.

1.1.11 Internal control and monitoring mechanism

1.1.11.1 Internal control

(i) Shortfall in physical verification of Stores and Stock

The Finance and Accounts Manual, 1999 of the university envisages annual verification of stores and stock. The details regarding the number of functional units of the university wherein physical verification was conducted and shortfalls during the period 2005-06 to 2008-09 are given in **Table 14**.

Table 14: Year-wise shortfall in physical verification of stores and stock

Year	Number of functional units	No. of units where physical verification was conducted	Shortfall in units (in percentage)
2005-06	72	41	31 (43)
2006-07	80	1	79 (99)
2007-08	95	15	80 (84)
2008-09	97	63	34 (35)
Total	**344**	**120**	

(Source : Compiled by Audit from Physical verification Inspection Reports)

The physical verification was to be conducted by the staff of the university. Shortfall in coverage of units ranged from 35 to 99 *per cent* during 2005-09. Reasons for non-completion of physical verification in 224 units during

2005-09 and details of action taken against the officials concerned were not available on record. The Registrar replied that action was being taken to complete the physical verification.

It was further noticed that the physical verification of library books conducted during March to September 2009 was incomplete and the report thereon was not available.

(ii) Pendency in redressal of grievances

The Centre for Student Affairs of the university looks after the grievances/complaints pertaining to affiliated colleges on issues such as collection of fees in excess of stipulation and lack of infrastructure etc., received from students/parents/others.

Test check of 86 out of 695 random complaints/grievances pertaining to collection of excess fees and lack of infrastructure during 2009-10 revealed that only 10 out of the 86 (12 *per cent*) were settled/disposed off. The university stated (October 2010) that the grievance petitions were being sent to the Director of Technical Education (DOTE) for redressal of grievances. However, the fact that only 12 *per cent* of the grievance petitions were acted upon indicated the need for better coordination with DOTE.

(iii) Delay in settlement of local fund audit paras

Director of Local Fund Audit (LFA) is the statutory auditor of the university. The audit objections of LFA pending settlement at the end of each year (2004-05 to 2007-08) is summarized in **Table 15**.

Table 15: Year-wise pending audit objections

Year	No. of objections	Amount involved (₹ in crore)
2004-05	5,708	2.08
2005-06	3,380	1.53
2006-07	3,427	1.49
2007-08	3,607	1.86

(Source: Audit Reports of LFA)

The 3,607 audit objections pending settlement related to the period from 1980-81 to 2007-08. Long pendency of large number of audit objections is a matter of concern and needs to be addressed.

1.1.11.2 Monitoring mechanism

Non-accreditation of the university

The National Assessment and Accreditation Committee (NAAC) grants accreditation for universities and colleges. The NAAC granted accreditation to the university with a Five Star[10] status for a period of five years from 2002. The accreditation lapsed in 2007. The university failed to renew the institutional accreditation after 2007. Failure to apply for and also to renew accreditation denied an opportunity to evaluate the facilities and services offered to students by an external agency with reference to set benchmarks. The Registrar replied (October 2010) that a committee was constituted for initiating the process for reaccreditations.

1.1.12 Conclusion

The university did not prepare Perspective/Annual Plans to achieve the goals set in its Vision 2020. Retention of huge funds by autonomous centres and lack of transparency in the Annual Accounts were causes for concern. The university failed to utilise the accumulated earmarked funds for fulfilling the felt needs for laboratories and hostels due to lack of proper planning. Endowment funds were not utilised effectively to promote academic excellence through fitting awards for meritorious students. Relaxing the minimum score required for granting affiliations and the high growth in the number of courses run continuously on provisional affiliations went against the mandate given to the university to ensure the quality of technical education in the State. Conducting distance education courses without the approval of the Distance Education Council limited the career options available to the students as they were not qualified to take up Central Government jobs. The university was still to exploit the huge potential for sponsored research and consultancy projects. Commissioning of the Knowledge Data Centre to serve as a technology resource centre for the student community of the State was delayed.

1.1.13 Recommendations

- Long-term and short-term Plans with measurable goals and financial linkages should be evolved and developmental programmes should be aligned with the Plans.
- The need for autonomous centres to retain huge funds and to transfer funds on *ad hoc* basis to the General Fund should be reviewed.

[10] 'Five star' was the highest rating in the accreditation ranking system followed by NAAC in 2002.

- The university should prepare consolidated accounts of its receipts and payments.

- The university should pay more attention to sponsored research projects and consultations.

LABOUR AND EMPLOYMENT DEPARTMENT

1.2 Functioning of Industrial Training Institutes

Highlights

The main objective of Industrial Training Institutes (ITIs) is to ensure a steady flow of skilled workers in different trades for the industry. ITIs impart industrial training in different trades mainly to the less privileged, poor and downtrodden school-leaving youth so that they acquire technical skills for gainful employment. Performance audit of the functioning of ITIs revealed non-setting up of ITIs in all blocks of the State, lack of infrastructure facilities such as adequate classrooms, power supply and hostels, and shortfall in availability of tools and equipment in test-checked ITIs, unaffiliated trades in ITIs, increase in dropouts among trainees, poor placement of ITI passed candidates under the Apprenticeship Training Scheme in industries and manpower shortage in ITIs.

- **Government's plan (1996) to establish ITIs in all the blocks of the State either in the Government sector or the private sector was still to materialise. As of March 2010, 68 out of 385 blocks in the State did not have any ITI.**

(Paragraph 1.2.6.3)

- **The test-checked ITIs lacked basic infrastructure facilities such as adequate class rooms, power supply and hostels.**

(Paragraphs 1.2.8.1(iv), 1.2.8.1(v) and 1.2.8.1(vii))

- **In the test-checked ITIs, shortfall in availability of tools and equipment was in the range of 11 to 86 *per cent* with reference to the standard list of the trades.**

(Paragraph 1.2.8.1(viii))

- **In three test-checked ITIs, six trades introduced during 2006-08 were still to be affiliated to the National Council of Vocational Training due to non-provision of adequate tools and equipment and staff.**

(Paragraph 1.2.8.2(i))

- **Though admission in ITIs increased during 2005-09, the percentage of vacant seats during the same period increased by 12 *per cent.* The number of dropouts among students admitted during 2004-07 also increased by four *per cent.***

(Paragraph 1.2.8.3(i))

- **Non-enhancement of the rate of training grant by the State Government resulted in inadequate supply of raw materials and consumables to trainees in ITIs.**

(Paragraph 1.2.8.3(v))

- **As against ₹ 16.01 crore funds available under the World Bank assisted Centre of Excellence scheme, the department spent only ₹ 9.23 crore during 2006-10 resulting in non-creation of the required infrastructure in 17 ITIs. Consequently, the trades introduced in those ITIs were still to be affiliated to the National Council of Vocational Training.**

(Paragraph 1.2.8.3(vii))

- **The department's lack of co-ordination with the Chief Inspector of Factories in identifying new industries resulted in poor placement records in providing apprenticeship training to ITI passed candidates.**

(Paragraph 1.2.9.1)

1.2.1 Introduction

Industry is always in need of skilled manpower for its production and growth. In order to provide a steady flow of skilled workers in different trades to the industry, Government of India (GOI) introduced (1950) a scheme called the Craftsmen Training Scheme (CTS). Under CTS, Industrial Training Institutes were established in various States/Union Territories to upgrade the skills of craftsmen. The administration of ITIs was transferred to State Governments in 1956. The main objectives of ITIs were to ensure a steady flow of skilled workers to the industry to meet the manpower requirements in different trades; introduce new courses in emerging areas and create self sustaining courses; impart training to the less privileged, downtrodden and early school leavers to acquire technical skills for gainful employment; provide sophisticated training opportunities to women in the field of electronics and information technology for gainful employment and establish a close interaction with the industries on issues relating to exchange of technical knowledge and experience for the mutual benefit of the institutes and the industry.

1.2.2 Organisational structure

In Tamil Nadu, there were 60 ITIs with a total intake capacity of 21,322 seats as of March 2010. Out of 60 ITIs, 12 are exclusively for women and two are exclusively for Scheduled Castes/Scheduled Tribes (SC/ST). Besides, one State level equipment maintenance workshop and six regional equipment maintenance cells look after the maintenance of the equipment in the ITIs. The ITIs function under the control of the Commissioner of Employment and Training (CET). The CET is assisted by two Joint Directors at the Directorate level and five Regional Joint Directors (RJD) at the regional level. The Principal Secretary to Government, Labour and Employment Department is

responsible for policy-making and monitoring of the activities of the Department of Employment and Training. The National Council of Vocational Training (NCVT), an advisory body set up by GOI prescribes standards and curricula for craftsmen training. The NCVT also prescribed standards in respect of syllabi and equipment, scale of accommodation, duration of courses and method of training. Trade tests are conducted on all India basis by the NCVT and successful trainees are awarded the National Trade Certificates in the trades concerned under the seal and authority of NCVT.

Besides, a State Council of Vocational Training (SCVT) affiliated to NCVT functions as a State agency to advise the State Government in carrying out the training policy laid down by NCVT and to coordinate the Vocational Training Programme throughout the State.

1.2.3 Audit objectives

The objectives of the performance audit were to assess whether:

- proper plans existed and were implemented to achieve the objectives of the ITIs;
- adequate financial support was provided by the Government for effective functioning of ITIs and the funds were properly utilised;
- high quality training was imparted to the trainees;
- required infrastructure was available in ITIs;
- adequate and qualified manpower was available in ITIs;
- a proper system to ensure placement of trainees was available and
- an effective monitoring system to ensure the functioning of ITIs was in place.

1.2.4 Audit criteria

The following criteria were used to benchmark the audit findings:

- Training manual for Industrial Training Institutes and Centres issued by the Government of India (GOI);
- GOI/State Government orders on imparting industrial training to trainees;
- Norms prescribed by the National Council of Vocational Training and
- The Apprentices Act, 1961.

1.2.5 Audit coverage, methodology and sampling

The performance audit was conducted (January to May 2010) covering the period from 2005-06 to 2009-10 by test check of records in 16 out of 60 ITIs (25 *per cent*), the State Level Equipment Maintenance Workshop at Chennai, two out of six Regional Equipment Maintenance Cells, four out of five offices of Regional Joint Directorates, three out of 11 Related Instruction Centres[11] and one out of two Basic Training Centres, as detailed in **Appendix 1.3**. Besides, records relating to the functioning of ITIs at the Secretariat and at the Directorate of Employment and Training were also checked.

Eight districts[12] (25 *per cent*) were selected out of a total of 32 districts in the State based on the stratified random sampling method. The districts were divided into different strata based on the number of ITIs available in each of them and samples were picked up from each stratum.

The audit objectives and audit criteria were discussed with the Principal Secretary to Government, Labour and Employment Department during an entry conference held in January 2010. The findings were discussed with the Principal Secretary in an exit conference in June 2010.

1.2.6 Planning

1.2.6.1 Tenth Five Year Plan (2002-2007)

Against 25 trades planned for introduction in ITIs, only 15 trades were introduced

Industrial Training Institutes help the State in producing the required skilled manpower, which forms the backbone of industry. During the Tenth Plan period, in the context of liberalization, it was planned to extend the area of training beyond engineering into the services sectors[13]. During this period, it was also planned to provide infrastructure facilities such as classrooms, hostels and compound walls and introduce 25 new trades in ITIs at a total cost of ₹ 21.17 crore, as detailed in **Appendix 1.4**. Besides, it was also planned to provide vertical mobility for the students of ITIs to join polytechnics.

Audit noticed that though the department spent ₹ 26.43 crore as against the outlay of ₹ 21.17 crore during the Plan period, there were shortfalls in both the introduction of trades and provision of infrastructure in ITIs. As against introduction of 25 trades planned in 25 ITIs, only 15 trades were introduced. Besides, four major items of work planned to be executed *viz.,* (i) own buildings (four ITIs[14]), (ii) additional classrooms (20 ITIs), (iii) construction of hostels (six ITIs[15]) and (iv) compound walls (16 ITIs) at a cost of ₹ 8.28 crore in the identified ITIs were not implemented. Further, the vertical mobility planned for students of ITIs to join polytechnics was still to be introduced by the Government.

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11 A centre established to implement Apprenticeship Training Programme to ITI passed candidates.

12 Chennai, Coimbatore, Cuddalore, Kancheepuram, Krishnagiri, Thiruvallur, Villupuram, and Virudhunagar.

13 Communication, Construction and Transport.

14 Cuddalore (Women), Nagercoil (Women), Thirukuvalai and Thiruvanmiyur.

15 Coimbatore (Women), Dharmapuri, Madurai (Women), Pudukottai, Ramanathapuram and Salem (Women).

1.2.6.2 Preparation of Action plan

Action Plan to be prepared for implementation of the Eleventh Plan still not prepared

During the Eleventh Five Year Plan (2007-2012), the department planned to encourage establishment of ITIs in all areas of the State, besides promoting training and skill development in sectors like automobile, textile, information technology, information technology enabled services (ITES), leather technology etc., and introduction of modern trades in the ITIs. One of the strategies of the department to achieve the objectives of the Eleventh Plan was preparation of an Action Plan for comprehensive training and skill development in co-ordination with industrial associations catering to the present and future needs of the industry. The department, however, was still to prepare such an Action Plan to achieve the objectives of the Eleventh Plan.

During the exit conference, the Principal Secretary stated that a State Level Mission for skill development had been formed and a comprehensive Action Plan was to be prepared.

1.2.6.3 Uneven distribution of ITIs

Sixty eight out of the 385 blocks in the State did not have ITIs

The department observed that ITIs were not evenly established in the State. To address the issue, the Government planned (1996) to provide at least one ITI either in Government or in the private sector in each block of the State by 2000. Though the Government planned to address the issue of uneven distribution of ITIs in different regions during the Ninth and Tenth Plan periods, no noticeable progress had been made in this regard so far. As of March 2010, 68 out of 385 blocks in the State did not have an ITI, either in the Government or in the private sector.

1.2.7 Financial Management

1.2.7.1 Allocation and expenditure

The year-wise budgetary allocation for administration of ITIs, actual expenditure and savings/excess are given in **Table 1**.

Table 1: Year-wise actual expenditure and savings/excess

(₹ in crore)

Year	Budgetary allocation	Actual expenditure	Savings (+)/ Excess (-)
2005-06	52.38	47.72	4.66
2006-07	57.45	57.60	(-) 0.15
2007-08	82.76	59.16	23.60
2008-09	88.92	80.28	8.64
2009-10	113.43	140.95	(-) 27.52

(Source: Departmental records)

The budgetary allocation for the administration of ITIs increased from ₹ 52.38 crore in 2005-06 to ₹ 113.43 crore in 2009-10. The increase in allocation was mainly due to implementation of a Centrally sponsored schemes *viz*. Centre of Excellence (2007-08) and the Sixth Pay Commission report. The actual annual expenditure, however, was about ₹ 50 crore during 2005-08 and it was ₹ 80.28 crore in 2008-09. The savings during 2007-09 were mainly due to under-utilisation of funds allotted for the 'Centre of Excellence' scheme and the 'Modular Employable Skill' scheme. However,

the expenditure rose to ₹ 140.95 crore in 2009-10, due to increased expenditure under the 'Centre of Excellence' scheme.

1.2.7.2 Rush of expenditure

Around 45 *per cent* of the funds allocated to the Directorate were spent on the last day of the financial year

Financial rules stipulate that expenditure should be evenly distributed throughout the year and rush of expenditure in the closing month of the financial year should be avoided. It was, however, noticed in audit that the CET, at the Directorate level, annually spent around 45 *per cent* of the total expenditure during the year on the last day of the financial year during 2005-09 and 15 *per cent* in 2009-10, as given in **Table 2**.

Table 2: Rush of expenditure in the Directorate

(₹ in crore)

Year	Total expenditure	Expenditure on 31 March (percentage in brackets)
2005-06	6.92	3.15 (46)
2006-07	9.95	4.11 (41)
2007-08	9.16	4.11 (45)
2008-09	10.76	5.36 (50)
2009-10	9.08	1.63 (15)

(Source: Departmental records)

The department, in reply, stated (November 2010) that getting revalidation orders for procurement of equipment/civil works in certain cases delayed the incurring of expenditure and the department did not purposely postpone the expenditure to the last day of the financial year. The department's reply is not acceptable as about 50 *per cent* of the allocated funds were spent persistently on the last day of the financial year during 2005-09.

1.2.7.3 Watching of advance payments

Advances made for material supplies amounting to ₹ 5.27 crore remain unadjusted

As per Article 99 of the Tamil Nadu Financial Code, advance payments made for the supply of material should be adjusted on receipt of material. Audit, however, noticed that advance payments amounting to ₹ 5.27 crore made to the Electronics Corporation of Tamil Nadu (ELCOT), the Tamil Nadu Khadi and Village Industries Board (TNKVIB), the Directorate General of Supplies and Disposals (DGS&D) as well as private suppliers during 2004-10 were still to be adjusted as of March 2010 even though materials were received by the department. The period of non-adjustment of the advances ranged between four months to six years as detailed in **Appendix 1.5**. In reply, the department stated that necessary steps would be taken for adjusting the outstanding advance payments.

1.2.7.4 Non-claiming of unspent funds

The department paid an advance of ₹ 3.71 crore to ELCOT during 2003-07 for supply of computers for providing training in ITIs, against which ELCOT had so far supplied computers of the value of ₹ 3.13 crore. The balance unspent amount of ₹ 0.58 crore was lying idle with ELCOT for seven years. The department had not taken any effective action either to procure computers or to get back the unspent amount from ELCOT. The department further made an advance payment of ₹ 55.44 lakh during 2007-09 for the supply of computers without taking into account the unutilised amount available with

ELCOT. In reply, the department stated (November 2010) that action was being taken to get necessary orders from the Government for the utilisation/remitting the balance amount lying with ELCOT.

1.2.7.5 Non-reconciliation of receipts

Departmental receipts not reconciled with treasury

The major receipts of the department (Training Wing) are examination fees collected from the trainees of ITIs/Industrial Training Centres[16] (ITCs) and inspection fees paid by the private ITCs. The reconciliation of the receipts of the department in districts with the treasuries is entrusted to one ITI in each district by the concerned RJD. Audit, however, noticed that nine ITIs[17] nominated for reconciliation of receipts in the test-checked districts had not reconciled the receipts with the treasuries due to non-receipt of inputs such as details of amounts remitted to the treasury and dates of remittances from other units. The RJDs also failed to provide the details of remittances to the nominated ITIs for reconciliation with the treasuries. Consequently, in the absence of reconciliation of departmental receipts with the treasuries, realisation of departmental receipts was not watched and ensured. Further in the absence of reconciliation, the risk of omission to detect fake challans, if any, could not be ruled out.

1.2.8 Implementation

1.2.8.1 Infrastructure deficiencies

The NCVT prescribed specific norms for providing basic infrastructure such as classrooms and workshops. To impart training in ITIs, the space for conducting various trades in ITIs is to be provided as per NCVT norms.

Test check of records in the sample ITIs and at the Directorate, however, revealed lack of infrastructure facilities in ITIs as described in the succeeding paragraphs.

[16] Institutes run in Private sector.

[17] Ambattur, Chengalpattu, Chennai (North), Coimbatore, Cuddalore, Guindy, Hosur, Ulundurpettai and Virudhunagar.

(i) Building adequacy

Five out of 60 ITIs did not have their own buildings

Five[18] out of 60 ITIs did not have their own buildings as of March 2010. Of these five ITIs, four were functioning in rented buildings and the remaining one, i.e. the ITI for women at Cuddalore was functioning in the building of the ITI (General), Cuddalore since 1990. Even though the department sought funds every year for construction of buildings for ITIs, Government had not provided funds for them. The department stated (November 2010) that new buildings are under construction for ITI (Women), Cuddalore and ITI, Thirukkuvalai. Further, in respect of ITI, Thiruvanmiyur, which was functioning in the building belonging to Industries Department, the process of transferring the building to Labour and Employment Department had been initiated.

(ii) Renovation of ITIs

Most of the ITIs were constructed during the early 60s and 70s and required extensive repair works including replacement of power wiring, electrical, fixtures and fittings. The department assessed (2005-06) the cost of repair works as ₹ 13.34 crore and sought funds to carry them out. Government, however, sanctioned (2005-10) only a total of ₹ 2.25 crore, which resulted in partial renovation of the ITIs.

The department stated (November 2010) that a fresh proposal would be submitted to the Government to renovate all the buildings of ITIs as a special drive.

(iii) Opening of new ITIs

To impart a trade in ITIs, affiliation is to be obtained for the trade from NCVT. To get affiliation from NCVT, required tools and equipment for the trade are to be provided in the ITI. During July 2007, the State Government ordered the opening of new ITIs at Andimadam and Perambalur. The department procured the required tools and equipment for commencing the trades, during February 2008 to November 2009. Audit noticed that candidates were admitted and the ITIs started functioning from August 2007 (Andimadam) and August 2008 (Perambalur) without the required tools and equipment for imparting training on trades.

The department, without ensuring the availability of the required tools and equipment, arranged for the conducting of pre-inspection by the Regional Joint Director (RJD), Tiruchirappalli in March 2008 and by the standing committee members in August and October 2008. The required certificate for affiliation of the trade was given by the standing committee in August 2008 (Andimadam) and October 2008 (Perambalur) and affiliation was granted by Director General of Employment and Training (DGET), even though procurement of tools and equipment continued till November 2009. The department stated (November 2010) that affiliation was granted based on the

[18] Cuddalore (Women), Karur (Women), Namakkal (Women), Thirukkuvalai and Thiruvanmiyur.

supply orders placed for procurement of tools and equipment. The reply is not acceptable as commencing the trade without the required tools and equipment and obtaining affiliation would affect imparting of high quality industrial training to the trainees.

(iv) Classroom adequacy

Classrooms were not constructed due to non-sanction of funds by the Government

According to NCVT norms, the number of classrooms required for an ITI depends upon the number of trades imparted and units operated in that ITI. Based on these norms, the department proposed (2005-06) to construct three classrooms each in 26 ITIs[19] and five classrooms each in 11 ITIs[20] at a cost of ₹ 2.99 crore, which was still to materialise as the Government had not sanctioned any funds for this purpose during 2005-10.

Picture No.1: Conducting of training for different trades in the same class room in ITI, Cuddalore (Women)

Shortage of classrooms was in the range of two to 18 in the test-checked ITIs

In eight out of the 16 test-checked ITIs, there was shortage of classrooms ranging between two and 18 as detailed in **Table 3**. In the absence of classrooms, the classes were conducted in workshops which did not have desks for the trainees.

Table 3: Shortage of classrooms in test-checked ITIs

Sl. No.	Name of the ITI	Required number of classrooms	Number of classrooms available	Shortage
1	Guindy	24	17	7
2	Coimbatore	40	34	6
3	Chengalpattu	26	15	11
4	Chennai (N)	27	9	18
5	Hosur	27	19	8
6	Thiruvanmiyur	3	1	2
7	Cuddalore (General & Women)	In the absence of classrooms, the classes were conducted under a tree		
8	Cuddalore (Women)			

(Source: Departmental records)

The department stated (November 2010) that as the training involved instruction courses and demonstrations, most of the theory classes were conducted in workshops where adequate space was available and classrooms were used only for mathematics and drawing classes. It was also stated that classrooms would be constructed in the ITIs as per the requirements.

[19] Ariyalur, Arakonam, Chennai (North), Chekanurani, Coonoor, Dharapuram, Dharmapuri, Erode, Karaikudi, Mettur dam, Mudukulathur, Nagapattinam, Nagercoil, Nagercoil (West), Paramakudi, Pudukottai, Ramanathapuram, Sankarapuram, Theni, Thanjavur, Thiruchendur, Tiruppur, Thiruvannamalai, Thoothukudi, Ulundurpettai and Virudhunagar.

[20] Ambattur, Chengalpattu, Coimbatore, Cuddalore, Guindy, Hosur, Madurai, Pettai, Salem, Tiruchirappalli and Vellore.

Non-provision of adequate classrooms would affect the providing of proper training in ITIs.

(v) Availability of power supply

Shortage of power supply in test-checked ITIs ranged from 44 to 550 KVA

NCVT had prescribed power supply requirements based upon the power requirements for each trade. Audit, however, noticed shortages of power supply ranging between 44 KVA (Ulundurpettai) to 550 KVA (Hosur) in 11 out of the 16 test-checked ITIs as detailed in **Table 4.**

Table 4: Shortage of Power Supply

(In KVA)

Name of the ITI	Total requirement of power supply	Power supply actually available	Shortage of power supply
Coimbatore	413	100	313
Cuddalore & Cuddalore (W)*	265	63	202
Ambattur & Ambattur (W)*	330	70	260
Chengalpattu	249	63	186
Chennai (N)	190	63	127
Guindy	180	63	117
Hosur	610	60	550
Ulundurpettai	107	63	44
Virudhunagar	109	63	46

(Source: Departmental records)

* Both the ITIs are in the same complex

NCVT also prescribed provision of backup diesel generating sets to keep training activities continuing at the time of load-shedding/power-cuts. Audit however, noticed that no such diesel generating sets were provided in the test-checked ITIs. Further, in the test-checked ITI at Coimbatore, the Electrical Inspector of the Labour Department, during his inspection, found (November 2008) that the electrical installations for certain trades and machines were deficient and unauthorised. Audit observed that the department was still to rectify the deficiencies in electrical installations, thereby compromising the safety of trainees, particularly trainees who had to handle electrical installations under the welder and mechanical trades.

(vi) Availability of basic amenities

Non-availability of water supply, play ground, adequate toilet facilities and compound wall in the test-checked ITIs

In the test-checked ITIs, basic amenities for trainees such as potable water supply, playgrounds and adequate toilet facilities were not available as of March 2010 as given in **Table 5**.

Table 5: Non-availability of basic amenities

Sl.No.	Basic amenities	Test-checked ITIs where adequate facilities were not available		
1.	Potable water supply	Ambattur, Chengalpattu, Chidambaram, Cuddalore, Cuddalore (W), Hosur, Thiruvanmiyur, Virudhunagar and Ulundurpettai		
2.	Playground	Ambattur (W), Chennai (North) and Thiruvanmiyur		
3.	Toilet facilities	**ITI**	**Number of students**	**Number of toilets available**
		Ulundurpettai	229	5
		Chengalpattu	791	6
		Chennai North	892	8
		Cuddalore (W)	183	2
		Guindy	206	14
		Coimbatore	531	17
		Virudhunagar	352	5
		Chidambaram	126	4
		Hosur	597	7

(Source: Departmental records)

Further, DGET had prescribed the provision of compound walls in all ITIs to protect their infrastructure and equipment. Audit, however, noticed the absence of compound walls in 11[21] out of 13 of the test-checked ITIs.

(vii) Hostel facilities

Hostel facilities available only in 29 out of 60 ITIs

The DGET Training Manual provides that hostel facilities may be made available for 50 *per cent* of the trainees in each ITI. Hostel facilities were available only in 29 ITIs out of the 60 ITIs. In order to augment hostel facilities and facilitate the trainees who found it difficult to reach home after attending classes in ITIs, the department proposed (2006-07) construction of seven new hostels at a cost of ₹ 3.20 crore. The Government, however, was still to approve the proposal so far. In the test-checked ITIs, hostel facilities were available only in eight[22] out of 16 ITIs. Audit also noticed that none of the hostels in ITIs had been provided with boarding facilities and the hostels in the test-checked ITIs lacked facilities such as toilet/drinking water as detailed in **Table 6**. Absence of hostels and non-provision of basic amenities in hostels made the ITIs less attractive and could defeat the very basic objective of serving the less privileged and downtrodden people for whom they were mainly established.

[21] Ambattur, Ambattur (Women), Chengalpattu, Chidambaram, Coimbatore, Cuddalore (Women), Guindy, Hosur, Thiruvanmiyur, Ulundurpettai and Virudhunagar.

[22] Ambattur, Chidambaram, Chennai (North), Coimbatore, Cuddalore, Guindy, Hosur and Virudhunagar.

Table 6: Lack of facilities in ITI hostels

Name of the ITI	Status of Hostel building	Drinking water facility	Bathroom/Toilet facility
Coimbatore and Guindy	Not in usable condition	Available	Available
Chennai (North)	As the hostel was in dilapidated condition, 10 rooms could not be utilised as against the 58 available rooms.	Not available	Available
Cuddalore	Hostel was in dilapidated condition.	Not available.	Not available
Virudhunagar	In good condition	Not available	Not available
Chidambaram and Hosur	Major repair works such as flooring, bath/toilets and wiring are required.	Not available.	Available

(Source: Departmental records)

The Principal Secretary replied (June 2010) that steps are being taken to improve the basic facilities in hostels.

(viii) Shortage of tools and equipment

Shortage of tools and equipment in test-checked ITIs ranged between 11 and 86 *per cent*

The ITIs are required to maintain tools and equipment as per the standard lists[23] of tools and equipment of the trades concerned, as prescribed by NCVT. As per NCVT norms, for each trade, a total of 16 plus one set of tools were to be provided to the trainees. In the 16 test-checked ITIs, audit noticed shortfalls in the availability of tools and equipment ranging between 11 and 86 *per cent* with reference to the standard list of tools and equipment for the trades which are detailed in **Appendix 1.6**. The conducting of industrial training without the required tools and equipment in ITIs would hamper the scope of the trainees in acquiring necessary trade skills and gainful employment. During the exit conference, the Principal Secretary cited financial constraints as the reason for shortage of tools and equipments.

Six test-checked ITIs did not have CNC machines essential for training in turner trade

Computed Numerically Controlled (CNC) machines are essential for imparting training in respect of the turner trade[24]. NCVT, while prescribing the syllabus for the turner trade, allowed the ITIs either to have their own CNC machine for training or to have a memorandum of understanding (MoU) with nearby factories to utilise their facilities. However, the test-checked ITIs at Virudhunagar, Guindy, Chengalpattu, Cuddalore and Ulundurpettai neither had their own CNC machine nor had entered into any such MoU with factories, to use their facilities as of March 2010.

In one of the test-checked ITIs, *viz*., ITI, Chennai (North), CNC turning machine lathe and a CNC train master worth ₹ 16 lakh remained unutilised for the past 10 years as they were under repairs. The department stated (November 2010) that the machines had not been repaired for want of funds.

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23 A list containing the names of the tools and equipment considered as the basic minimum requirement for the trade.

24 A trade where the trainees are trained to use lathe, a special tool, to make shapes out of wood or metal.

Further, the department stated (November 2010) that as the manufacturing industry of the CNC was closed, the repairing of the machine became a major problem and action was being taken to repair the machine. However, Audit noticed that even though two firms came forward (2006 and 2008) to repair the machines, the department failed to utilise their offers. Consequently, the trainees were deprived of getting industrial training on these machines.

1.2.8.2 Trades and affiliation

(i) Unaffiliated trades

Six trades in three test-checked ITIs were still to be affiliated by NCVT

As per NCVT norms, an ITI seeking affiliation for starting a new trade had to ensure the availability of the necessary infrastructure and instructors. Audit, however, noticed that in three of the test-checked ITIs, six new trades were unaffiliated with NCVT for want of required facilities as given in **Table 7**.

Table 7: Unaffiliated trades in the test-checked ITIs

Sl. No.	ITI	Year of commencement	Trade	Nature of facilities not yet provided
1.	Chennai(North)	2006	Painter	Tools and equipment
2.	Chennai(North)	2007	Lift Mechanic	Tools and equipment
3.	Ambattur	2007	Data Entry Operator	Electrical fittings
4.	Chengalpattu	2008	Driver cum mechanic	Tools and equipment, staff, building
5.		2008	Auto electrical and electronics	Tools and equipment, staff, building
6.		2008	Two-wheeler mechanic	Tools and equipment, staff, building

(Source: Departmental records)

The trainees who had completed the courses successfully were not issued NCVT certificates, as the new trades were not affiliated by NCVT. Only provisional trade certificates were issued by the State Council of Vocational Training to the trainees stating therein that the National Trade Certificate will be issued by NCVT. Already, nearly 20,000 trainees who had successfully completed the courses during 1996-2003 were still to receive their trade certificates from NCVT. Non-issue of NCVT certificate to trainees who had completed their training would affect their prospects of getting better jobs.

The department stated (November 2010) that affiliation of these trades was under progress.

(ii) Introduction of new trades

Only 12 new trades were introduced in ITIs during 2005-10 as against 50 new trades introduced by NCVT

During 2003-07, NCVT approved and introduced 50 new trades to meet the needs of the industry in new areas. The department, however, introduced only 12 trades (seven engineering and five non-engineering trades) during 2005-10 in ITIs in the State. The list of trades which were not introduced in ITIs in the State is given in **Appendix 1.7**. The department did not conduct any survey to identify the areas in which new trades were to be introduced. Non-assessment of the industrial needs for introduction of new trades deprived the benefit of undergoing training under new trades to the poor and downtrodden school-leaving youth.

The department, in reply, stated (November 2010) that though NCVT had introduced 50 new trades, all of these were not suitable to any particular State and the selection of trades was decided based on surveys conducted by external agencies like the Confederation of Indian Industries. Further, the department stated that a fresh survey was going to be conducted to identify the necessary skill areas for introduction of new trades in which trained manpower was needed.

(iii) Denial of benefit to tribal youths

Welder trade not introduced in Sankarapuram ITI (ST) despite availability of funds

To introduce a trade in ITI, necessary infrastructure and tools and equipment are required to be provided as per NCVT norms. Under the Centrally sponsored scheme, 'Tribal Sub Plan', The Tamil Nadu Adi Dravidar Housing and Development Corporation (TAHDCO) allocated ₹ 59.87 lakh[25] for the introduction of the welder trade[26] in ITI, Sankarapuram (ST). The Commissioner of Employment and Training (CET) received the funds in February 2009 from TAHDCO. Audit, however, noticed that even after the lapse of one year, the CET was still to procure the required tools and equipment for the commencement of training. The CET had so far procured materials worth ₹ 2.50 lakh only. Further, CET's proposal (July 2009) to Government to sanction one Junior Training Officer and one Assistant Training Officer posts for the trade was also still to be approved by the Government. In the absence of the required tools and equipment and staff, the department was unable to obtain NCVT's affiliation for the trade. Consequently, the welder trade was still to be introduced in the ITI, despite availability of funds. Thus, the delay in providing the required facilities to commence the trade, despite availability of funds, resulted in denial of tribal youths in Sankarapuram Block getting training under the welder trade.

The department, in reply, stated (November 2010) that action for procurement of tools and equipment and sanction of posts was being taken to start the welder trade in ITI, Sankarapuram.

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[25] Civil works: ₹ 19.22 lakh, Equipment: ₹ 35 lakh, Furniture: ₹ 1 lakh, Staff Salary: ₹ 4.20 lakh, Raw Materials: ₹ 0.20 lakh and Stipend: ₹ 0.25 lakh.

[26] The trade offering training to join two pieces of metal by the use of heat or pressure or both and with or without added metal.

1.2.8.3 Administration of ITIs

(i) Trends in admission and dropout

Admission to ITIs is made yearly on the basis of merit. The duration of engineering trades varies from one year to three year, whereas the duration of non-engineering trades is one year. The minimum education qualification for admission to the ITIs is from 8th Standard to Higher Secondary (Plus two) according to the trades. Students between the age of 14 and 40 are admitted in ITIs and there is no upper age limit for girls admitted in ITIs.

The sanctioned strength, admission and vacant seats in ITIs during 2005-09 are given in **Table 8**.

Table 8 : Admission of trainees in ITIs

Admission during	Sanctioned strength including supernumerary[27] sanction	Filled-up seats	Vacant seats	Percentage of vacancy
August 2005	13,578	12,731	847	6.23
August 2006	13,214	12,134	1,080	8.17
August 2007	15,321	13,059	2,262	14.76
August 2008	16,922	13,878	3,044	17.99
August 2009	17,938	14,665	3,273	18.25

(Source: Departmental records)

Number of vacant seats in ITIs stood at 3,273 in 2009 compared to 847 in 2005

Though an increasing trend was noticed in admissions in ITIs during 2005-09, the actual increase in admission (1,934) was less compared to the increase in the total number of sanctioned seats (4,360) during the same period, leaving an increase in vacancy of 2,426. Further, during the same period, the number of vacant seats in ITIs increased from 847 in 2005 to 3,273 in 2009, registering a 12 *per cent* increase in vacant seats as seen from the table. In the 16 test-checked ITIs, the percentage of vacant seats increased from eight *per cent* in 2005 to 17 *per cent* in 2009 as given in **Table 9.**

Table 9: Vacant seats in test-checked ITIs

Year	No. of seats available for intake	Number of seats filled	Percentage of seats filled	Percentage of vacant seats
2005-06	4,143	3,820	92	8
2006-07	3,693	3,433	93	7
2007-08	4,001	3,428	86	14
2008-09	4,017	3,347	83	17
2009-10	4,375	3,809	87	13

(Source : Departmental records)

Further, data analysis of the number of candidates who were admitted and who appeared for examination in ITIs during 2004-07 indicated an increasing trend in dropouts as detailed in the **Table 10**.

[27] Seats sanctioned with the object of fully utilising the sanctioned seats at each institute, as prescribed by DGET.

Table 10: Candidates admitted and dropouts

Year	No. of candidates admitted	Number of regular candidates appeared for first time in examination*	Number of dropouts	Percentage of dropouts
2004-05	12,731	10,197	2,534	20
2005-06	12,134	9,759	2,375	20
2006-07	13,059	9,888	3,171	24
2007-08	13,878	To appear for exam		
2008-09	14,665			

(Source: Departmental records)

* Number of dropout candidates was worked out with reference to the number of candidates admitted in ITIs in a particular year and the number of candidates who appeared for the examination two years later, as most of the courses were of a two year duration.

The department stated (November 2010) that the practical exposure of the trainees during their period of training enabled them to get jobs in the industries on daily basis and hence they did not attend the examination. Further, some trainees did not complete the course as they later got admission into Polytechnic colleges wherein they got diplomas which gave better job opportunities.

(ii) Award of stipends

Stipends not paid to all the trainees, as instructed by DGET

According to the DGET Manual, a stipend of ₹ 100 per month per trainee was to be awarded to all the trainees. In addition to this, GOI had instructed ITIs to pay merit scholarships of ₹ 125 per trainee to 40 *per cent* of the total number of trainees. The State Government, however, had sanctioned stipends only to SC students at ₹ 150 per month, ST students at ₹ 175 per month and ₹ 50 per month to one third of the total trainees, whose parent's annual income was ₹ 16,100 and below. In 15 of the 16 test-checked ITIs, it was noticed that 23,396 trainees out of 33,237 trainees did not receive stipends during 2005-10. Non-payment of stipends to trainees of ITIs made the institutions less attractive among the less privileged, poor and school-leaving youth for whom they had been established.

The department stated (November 2010) that a proposal would be sent to Government to sanction stipends to all the candidates admitted in ITIs.

(iii) Medical examination for trainees

As per Paragraph 12 of the DGET Manual, trainees were to be medically examined at the time of admission and thereafter, once in a year. Trainees found medically unfit were to be discharged from the ITIs or to be allotted trades according to their health standards. In six[28] out of 16 test-checked ITIs, however, Audit noticed that no such medical tests were conducted at the time of admission. In another four of the test-checked ITIs[29], no medical test was conducted for second year trainees.

[28] Chennai (North), Guindy, Guindy (Women), Hosur, Thiruvanmiyur and Sankarapuram.

[29] Ambattur (West), Chengalpattu, Chidambaram and Virudhunagar.

The department stated (November 2010) that RJDs had been instructed to have a constant vigil over this practice and to send a consolidated report to the CET every year.

(iv) Functioning of libraries in ITIs

According to the DGET Manual, ₹ 5 per trainee was to be allotted for the purchase of books and trade-oriented magazines for the libraries in ITIs. However, none of the 13[30] out of 16 test-checked ITIs had purchased any books during 2005-10, thereby depriving the trainees of opportunities to update their knowledge.

(v) Supply of raw materials and consumables to trainees

Sanction of training grant not in conformity with rates prescribed by DGET

According to the DGET Manual, a training grant is allowed to each institute to cover the cost of raw materials, consumables, stationery etc. GOI increased (June 2008) the amount of training grant from ₹ 200 to ₹ 400 per month per trainee for the engineering trades and from ₹ 150 to ₹ 300 for the non-engineering trades per month, per trainee. However, the State Government continued to allocate funds at only ₹ 60 per engineering trainee per month and at ₹ 50 per month per non-engineering trainee, despite the increase in the cost of raw materials etc. A proposal sent by CET in March 2009 was still to be approved by Government. It was noticed in the test-checked ITIs that raw materials and consumables were not available to the required extent for the trades. This resulted in reduced practical training to the trainees.

The department stated (November 2010) that all the ITIs were procuring raw materials as per their need and there was no short supply of raw materials. The reply is not acceptable as Principals of all the test-checked ITIs had stated that there was short supply of raw materials due to lack of funds.

(vi) Maintenance of records

An amount of ₹ 100 from each trainee was to be collected as caution deposit on admission. The caution deposit was to be refunded to the trainee on completion of training after adjusting any dues from the trainee on account of loss, if any, caused by the trainee to the institution. Audit, however, noticed that none of the test-checked ITIs had maintained a separate cash book for the amounts collected and refunded to the trainees. In the absence of such records, Audit could not ensure whether all the trainees received back their caution deposits on completion of training.

The department stated (November 2010) that all the Principals of ITIs would be instructed to maintain a separate cash book for the amounts collected and disbursed towards caution deposit.

(vii) Centre of Excellence scheme

GOI launched (2005-06) a scheme of upgrading 500 existing ITIs all over India in five years into 'Centres of Excellence'. The main thrust of the

[30] Ambattur, Ambattur (Women), Chengalpattu, Chennai (North), Chidambaram Coimbatore, Cuddalore (Women), Guindy, Guindy (Women), Hosur, Thiruvanmiyur, Ulundurpettai and Virudhunagar.

scheme was to improve infrastructure and equipment facilities, to modernise the syllabus and open new trades in the ITIs. The expenditure on the implementation of the scheme was to be shared between GOI and the State in the ratio of 75:25. During 2005-10, 22 ITIs in the State were identified for upgradation into 'Centres of Excellence'. The scheme was implemented with GOI assistance (domestic funding) during 2005-06 at an outlay of ₹ 1.60 crore for each ITI. During 2006-10, the scheme was implemented in 17 ITIs with World Bank assistance with an outlay of ₹ 3.50 crore for each ITI. As per the Institutional Development Plan[31] (IDP) approved by GOI for the ITIs, the State Government could incur an expenditure of ₹ 59.50 crore for 17 ITIs and was entitled to get 75 *per cent* of the expenditure reimbursed from GOI. However, as against the entitled outlay of ₹ 59.50 crore for 17 ITIs, the GOI/State Government had sanctioned ₹ 16.01 crore during 2006-10, of which the department had spent only ₹ 9.23 crore (58 *per cent*) as of March 2010, as detailed in **Table 11**.

Table 11: Financial achievement under Centre of Excellence under World Bank assistance

(₹ in crore)

Year	Number of ITIs covered	GOI share released	State share released	Total funds available	Total expenditure incurred
2006-07	5	6.68	4.00	16.01	9.23
2007-08	6	1.38			
2008-09	3	1.66 0.51			
2009-10	3	1.78			
Total	**17**	**12.01**	**4.00**	**16.01**	**9.23**

(Source: Departmental records)

Thus, due to less spending, the department had failed to avail of the entitled funds from GOI for improving the infrastructural facilities in ITIs.

Seventeen trades introduced under World Bank aided Centre of Excellence were not affiliated to NCVT for want of required infrastructure

A State Project Implementation Unit (SPIU) to implement and monitor the World Bank-aided Centre of Excellence scheme was established only in September 2008 even though the scheme was being implemented from 2006-07. Consequently, under-utilisation of funds coupled with delays in setting up of the SPIU resulted in non-creation of the required infrastructure facilities including tools and equipment in the identified 17 ITIs. Further, though the department had spent the entire allocation of ₹ 8 crore for the five identified ITIs[32] in the year 2005-06 under domestic funds, the required tools and equipment had not been provided in four[33] out of five identified ITIs. As the required infrastructure was not created, none of the trades introduced in 21 ITIs except automobile trade in Ambattur ITI had been affiliated to NCVT. The list of ITIs and the trades which were still to be affiliated to NCVT is given in **Appendix 1.8**.

The Government stated (November 2010) that under the World Bank assisted programme, approval for procurement in respect of goods and civil works has to be obtained from DGET/World Bank before carrying out the activities. Government further stated that as the approval of the World Bank was

31 Detailed proposal sent to GOI, for establishment of Centre of Excellence.
32 Ambattur, Coimbatore, Hosur, Salem and Tiruchirappalli.
33 Coimbatore, Hosur, Salem and Tiruchirappalli.

obtained only in July 2009 for procurement of goods and civil works, tenders were floated only in 2009-10, resulting in poor utilisation of funds under 'Centres of Excellence'.

The reply is not acceptable, as, had the Government established the State Project Implementation Unit without delay of more than 18 months, the approval for procurement of goods and civil works from the World Bank could have been obtained much earlier and the delay in implementation of the scheme could have been avoided.

1.2.9 Post ITI - Follow up measures

1.2.9.1 Apprenticeship training scheme

The ITIs produce semi-skilled workers. In order to improve their skills and expose them to industrial environment, the trainees who successfully complete their training are sponsored to industrial establishments and are given apprenticeship training under the Apprentices Act, 1961. The period of apprenticeship training varies from six months to four years depending upon the trade. The Apprenticeship scheme is implemented in the State through 11 Government Related Instruction Centres (RICs)[34] and three out of the 60 ITIs. As of March 2010, 16,127 successful trainees were undergoing apprenticeship training in 2,345 industrial establishments.

Only 22 *per cent* of the candidates registered for apprenticeship with the department were placed as apprentices in factories during 2005-09

As per the provisions of the Apprentices Act, 1961, it is obligatory on the part of an employer to train a certain number of apprentices assigned by the State Apprenticeship Advisor in designated trades. Scrutiny of records in the four test-checked RICs[35] revealed that out of 37,103 candidates registered for apprenticeship training, only 8,065 (22 *per cent*) had been placed as apprentices during 2005-09 in the industries. The RIC-wise break-up particulars are furnished in **Table 12** and depicted in **Chart 1**.

Table 12: Placement of trainees as apprentices

Year	Ambattur			Guindy			Tiruchirappalli			Coimbatore		
	(A)	(B)	(C)	(A)	(B)	(C)	(A)	(B)	(C)	(A)	(B)	(C)
2005	2,173	374	17	2,287	702	31	1,949	628	33	846	662	78
2006	1,839	262	14	2,155	480	22	3,997	511	12	906	706	78
2007	1,330	129	10	786	168	21	1,046	532	50	969	563	58
2008	1,867	233	12	859	56	7	7,874	583	7	900	494	55
2009	793	25	3	1,167	14	1	2,702	611	22	716	332	46
Total	8,002	1,023	11	7,196	1,420	16	17,568	2,865	16	4,337	2,757	64

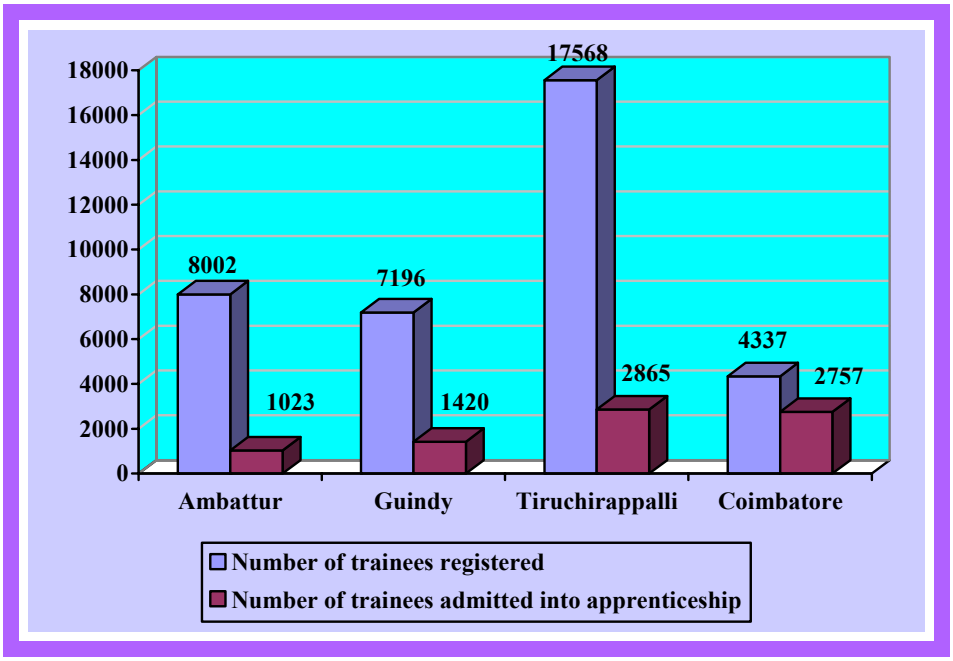
(Source: Departmental records)

(A) No. of trainees registered **(B)** No. of trainees admitted into apprenticeship **(C)** Percentage of placement as apprentices

[34] Ambattur, Chennai (North), Coimbatore, Cuddalore, Guindy, Hosur, Madurai, Pettai, Salem, Tiruchirappalli and Vellore.

[35] Ambattur, Coimbatore, Guindy and Tiruchirappalli.

Chart 1: Provision of Apprenticeship training during 2005-09



Further, the CET, in co-ordination with Chief Inspector of Factories (CIF) of the State, has to identify the industries and also seats in each identified industry to provide apprenticeship training to trainees, on successful completion of their training in ITIs. Audit, however, noticed that out of 12,849 factories in the State, only 903 were identified for providing apprenticeship training in the four regions[36] of the State by RICs.

The department had the power under the Apprentices Act to take penal action against industries which failed to provide apprenticeship training to the ITI passed candidates under the Apprentices Act. However, no effective action was taken during 2005-10 by the department against these industries.

Even in the identified factories, both in the Government and private sectors, RICs did not utilise all the identified seats for providing apprenticeship training to ITI passed out candidates, as detailed in **Table 13** and **Table 14.**

Table 13: Utilisation of identified seats for providing apprenticeship training (Government Sector)

Year	Ambattur RIC			Coimbatore RIC			Tiruchirappalli RIC		
	No. of seats identified	No. of seats utilised	Percentage of seats utilised	No. of seats identified	No. of seats utilised	Percentage of seats utilised	No. of seats identified	No. of seats utilised	Percentage of seats utilised
2005-06	247	140	57	250	211	84	777	490	63
2006-07	247	140	57	250	235	94	700	365	52
2007-08	353	27	8	400	250	63	477	240	57
2008-09	353	79	22	400	84	21	527	306	58

(Source: Half-yearly Report ending 31 December every year)

[36] Chennai, Coimbatore, Thiruvallur and Tiruchirappalli

Table 14: Utilisation of identified seats for providing apprenticeship training (Private Sector)

Year	Ambattur RIC			Coimbatore RIC			Tiruchirappalli RIC		
	No. of seats identified	No. of seats utilised	Percen-tage of seats utilised	No. of seats identified	No. of seats utilised	Percen-tage of seats utilised	No. of seats identified	No. of seats utilised	Percen-tage of seats utilised
2005-06	3,852	1,976	51	2,600	835	21	353	370	103
2006-07	4,405	3,239	74	2,850	671	24	440	335	76
2007-08	4,907	3,146	64	2,900	759	28	721	235	32
2008-09	5,174	2,837	55	2,900	630	22	858	396	46

(Source: Half Yearly Report ending 31 December every year)

Thus, lack of co-ordination with the CIF and failure to take penal action against industries which failed to provide apprenticeship training to ITI passed candidates, resulted in poor placement records in providing apprenticeship training to ITI passed candidates.

The department stated (November 2010) that a list of all industries including new industries, as of May 2010 was obtained from the Chief Inspector of Factories and necessary instructions had been given to the Assistant Directors of RICs to improve the utilisation of identified seats.

1.2.9.2 Ex-trainees Follow-up

As per the DGET manual, ITIs have to maintain 'Record cards' of ex-trainees as a follow-up measure to ensure that the ITI trainees on successful completion of the training have been able to secure employment. If employed, the name of the employer should be given, failing which, the whereabouts of unemployed trainees should be shown in the record cards. The trainees should also be asked to report periodically till they get employed. Audit, however, noticed that none of the test-checked ITIs maintained such record cards in respect of ex-trainees, thereby failing to follow-up the employment status of ex-trainees and ensure their employment.

1.2.9.3 Employability of ITI trainees

The objective of establishment of ITIs was to impart industrial training to school-leaving youth so that they could acquire technical skills for gainful employment. ITIs in the State produce nearly 7,000 skilled persons every year by imparting industrial training in various trades.

An audit survey[37] disclosed that only eight *per cent* of the ITI candidates registered in the Employment Exchanges in the State were employed as detailed in **Table 15.**

[37] A survey done through collection of responses to questionnaires on their employment sent to trainees, who had completed their courses in the test-checked ITIs during 2005-06

Table 15: Result of survey on employment

Details	Number of trainees
Number of persons to whom *proformae* were sent	300
Number of persons who responded	59
Number of ITI passed candidates registered with Employment Exchanges	49
Number of persons got employment through Employment exchanges	4 (8 *per cent*)

(Source: Particulars collected by audit through survey)

1.2.10 Human resources management

1.2.10.1 Manpower

DGET had prescribed a specific scale of technical staff admissible for ITIs. The number of posts admissible for an ITI depends upon the seating capacity of the institute and the number of units[38] in various trades imparted in that ITI. The State Government sanctioned technical posts for ITIs, based on the above.

Vacancies in the technical cadre were in the range of 11 to 58 *per cent*

Audit noticed that vacancies in the technical cadre as against sanctioned posts were in the range of 11 to 58 *per cent* as of March 2010 as given in **Table 16**.

Table 16: Vacancy position in technical cadre

Sl. No.	Name of the posts	Sanctioned	Number of posts filled-up	Vacancy in numbers (percentage)
1.	Deputy Director / Principal	11	6	5 (46)
2.	Principal/Vice Principal/ Assistant Director	78	33	45 (58)
3.	Technical Officer	184	127	57 (31)
4.	Assistant Technical Officer	826	736	90 (11)
5.	Junior Technical Officer	782	490	292 (37)
	Total	**1,881**	**1,392**	**489 (26)**

(Source: Departmental records)

The trade-wise vacancy position in the test-checked ITIs is given in **Appendix 1.9.** Also, in respect of 23 trades in 11 of the test-checked 16 ITIs, not even a single staff member was available for the trade concerned as of March 2010 **(Appendix 1.10).**

It was also observed in the test-checked ITIs that, due to absence of the required staff, two or more units were combined and training was imparted. Further, space for classrooms and workshops were prescribed by DGET so as to accommodate a specific number of trainees in a unit. Combining of one or more units for want of staff and conducting classes in classrooms and

[38] Unit: A batch of 16 trainees in each trade.

workshops which were designed to accommodate only a specific number of trainees, could lead to erosion of standards in imparting industrial training to the trainees. In reply, the Government stated that technical posts were not filled up due to a court case, which had been cleared now and steps were being taken to fill the vacancies.

1.2.10.2 Staff training at ITI, Ambattur

Only 228 staff of ITIs were trained as against 540 planned during 2007-10

The department has been conducting staff training programmes (STP) at ITI, Ambattur since 1980. Under this programme, specific training in teaching techniques *viz*., use of audio-visual aids, classroom management etc., is given to Junior Training Officers/Assistant Training Officers for a period of two weeks. Audit noticed that, during 2007-10, only 228 persons were trained as against 540 persons planned to be trained as detailed in **Table 17**.

Table 17: STP training details

Year	Planned (Batches/ trainees)	Nominated by CET (Batches/ trainees)	Actual no. of trainees attended (Batches/trainees)	Remarks
2007	8 (160)	4 (65)	4 (53)	No trainees were sponsored for four batches by the CET. Further, in respect of three batches, trainees belonging to trades proposed by STP were not allotted training.
2008	8 (160)	5 (63)	5 (52)	No trainees were sponsored for three batches by the CET. Further, trainees belonging to trades proposed by STP were not allotted training.
2009	8 (160)	6 (83)	6 (66)	No trainees were sponsored for two batches by the CET. Further, trainees belonging to trades proposed by STP were not allotted training.
2010	3 (60)	3 (70)	3 (57)	Staff Training Programme was planned only for 20 trainees per batch. But CET sponsored 35 trainees for the first batch and 10 trainees for the second batch and 25 trainees for the third batch.
Total	**540**	**281**	**228**	

(Source: Departmental records)

The department attributed the low number of persons being sent for such training programmes to existence of huge vacancies in various technical cadres. Thus, the majority of staff in ITIs were deprived of training which could help in sharpening their teaching skills.

1.2.11 Monitoring

1.2.11.1 Inspection of ITIs

Non-conducting of inspections by CET and RJDs

According to the DGET Manual, inspecting officers of the State Directorate of Training should inspect the ITIs in their charge as frequently as possible and give advice on the training. The RJDs should also conduct inspections twice in a year in ITIs. Audit, however, noticed that no such inspection was carried

out either by the Directorate staff or by the RJDs in the test-checked ITIs during 2005-10 except by RJD, Tirunelveli in Virudhunagar ITI in January 2008. Vacancies in the technical cadre were cited as the reason for non-conducting of the required inspections in 2008-09.

1.2.11.2 Physical verification of stock

Stock verification not done in test-checked ITIs

Physical verification of tools and equipment in the ITIs was to be conducted by Principals of the ITIs (cent *per cent*) and RJDs (25 *per cent*) every year. However, such physical verification was not done in two of the test-checked ITIs[39] by the Principals and in eight test-checked ITIs[40] by the RJDs during 2008 and 2009. Vacancies in the posts of Principals of ITIs were attributed by the department, for the shortfall in stock verification. The department stated (November 2010) that necessary instructions had been given to RJDs and Principals of ITIs in this regard.

1.2.11.3 Internal audit

Shortfall in conduct of internal audit during 2005-10 and huge pendency of audit paragraphs

All the field units under the control of the department including ITIs were to be audited by the Internal Audit Party of the State Directorate once in a year. However, it was noticed that as against eight Assistants sanctioned for the Internal Audit Wing, only three Assistants were employed, as of July 2010. As a result, huge pendencies in conducting internal audit of ITIs arose as of July 2010 as given in **Table 18**.

Table 18 : Pendencies in conducting internal audit

Year	Number of units to be audited	Actually audited	Pendency (percentage in brackets)
2005-06	84	84	Nil
2006-07	84	10	74 (88)
2007-08	84	10	74 (88)
2008-09	84	1	83 (99)
2009-10	84	Nil	84 (100)

(Source : Departmental records)

Further, 5,036 internal audits paragraphs generally pertaining to non-verification of stores, non-recoupment of permanent advances, non-maintenance of subsidiary cash books relating to the period 1984-2009 were outstanding as of July 2010.

Huge pendencies in conducting internal audit and the large number of unsettled audit paragraphs indicated the CET's failure to employ internal audit as an effective management tool in rectifying the shortcomings in the administration of ITIs.

[39] Coimbatore and Cuddalore.

[40] Ambattur, Chengalpattu, Chennai (North), Chidambaram. Guindy, Guindy (Women), Hosur and Thiruvanmiyur.

1.2.12 Conclusion

Government was still to provide ITIs in all the blocks of the State. Test-checked ITIs lacked infrastructure facilities such as adequate classrooms, power supply and hostels due to non-provision of required funds by the Government. Similarly, due to inadequate financial support by the Government, adequate tools and equipment and raw materials for trainees, were not available in the test-checked ITIs. Due to lack of infrastructure facilities and manpower shortage, 27 trades in 24 ITIs were still to be affiliated to NCVT. Trainees passing out of such non-affiliated trades were still to receive trade certificates and hence, were in a disadvantageous position in getting better job opportunities. Lack of coordination with the Chief Inspector of Factories in identifying new industries resulted in inadequate placements of ITI passed candidates under the apprenticeship training scheme in industries. The increasing trend of vacant seats and dropouts in ITIs was a matter of concern.

1.2.13 Recommendations

- A plan to establish ITIs in all the blocks of the State in a time-bound manner needs to be prepared.
- Effective utilisation of funds allocated for GOI Scheme "Upgradation of ITI as Centre of Excellence" should be ensured.
- Availability of adequate tools and equipment and raw materials for trainees in ITIs should be ensured so as to provide qualitative training to trainees.
- Adequate infrastructure facilities and manpower should be provided in ITIs so as to get affiliation from the National Council of Vocational Training for all the trades.
- Improved coordination is required between the Commissioner of Employment and Training and Chief Inspector of Factories for better placement of ITI passed candidates under the Apprenticeship training scheme in industries.
- Inspection of ITIs should be conducted periodically as envisaged in the DGET manual.

HOME DEPARTMENT

1.3 Modernisation of Police Force

Highlights

Government of India introduced (1969) the Modernisation of Police Force scheme for modernising the police force to enable them to effectively face the emerging challenges to internal security. The main focus of the scheme was to construct new buildings for police stations, improve the mobility of the police force and provide residential accommodation for police personnel. A performance audit of the scheme revealed non-preparation of Annual Action Plans on need basis and under-utilisation of funds sanctioned for construction of residential and non-residential buildings. There was no increase in fleet strength as vehicles were purchased in replacement of condemned ones rather than augmenting fleet strength.

- **Annual Action Plans were not prepared on need basis. Equipment costing ₹ 2.52 crore was procured in deviation of the Annual Action Plans during 2006-09.**

(Paragraph 1.3.6)

- **Non-sanctioning and delay in execution of works resulted in under-utilisation of funds sanctioned for the scheme. Funds amounting to ₹ 191.56 crore out of ₹ 1024.49 crore released by the Central and State Governments during 2000-10, remained unutilised as of March 2010 under the scheme.**

(Paragraphs 1.3.7 and 1.3.8.1)

- **As against the plan to construct new buildings for 804 police stations during 2006-11, only 191 new buildings were sanctioned by Government during 2006-10. Of these, only 85 were completed and put to use.**

(Paragraph 1.3.8.2)

- **As against 12,000 residential quarters to be constructed during 2006-10, only 2,686 were constructed.**

(Paragraph 1.3.8.5)

- **The objective of increasing the mobility of the police force was defeated as vehicles were purchased to replace the condemned ones rather than to increase the fleet strength.**

(Paragraph 1.3.9)

- **In 38 test-checked police stations, no motor cycle was available as of March 2010 and 18 police stations did not have even a single vehicle.**

(Paragraph 1.3.9.1)

- **As against 20,742 pieces of communication equipment such as Very High Frequency mobile sets, Very High Frequency hand held sets, High Frequency sets to be procured during 2006-11, only 5,492 pieces of equipment were purchased.**

(Paragraph 1.3.11.1)

1.3.1 Introduction

The scheme 'Modernisation of Police Force' was launched in 1969 by the Government of India (GOI) for modernising the police force to effectively face the emerging challenges to internal security. The basic objective of the scheme was to rectify the deficiencies in the operational requirements of the State police force and to achieve planned development and modernisation. A revised scheme involving substantial Central assistance was launched by GOI in 2001 for a 10-year period starting from 2000-01. The components covered under the scheme were (a) construction (residential as well as non-residential), (b) mobility, (c) weaponry, (d) equipment and (e) communication system including computerisation.

1.3.2 Organisational set up

At the Government level, the Principal Secretary, Home Department is responsible for implementation of the scheme. At the departmental level, three Directors General of Police (DGP) *viz*., Law and Order, Training and Tamil Nadu Uniformed Service Recruitment Board are responsible for implementation of the scheme. At the district level, Superintendents of Police (SP) are responsible for implementation of the scheme. The Forensic Science Department (FSD) and State Crime Record Bureau (SCRB) are also involved in the implementation of the scheme. Construction of residential and non-residential buildings was executed by Tamil Nadu Police Housing Corporation (TNPHC). A State Level Empowered Committee constituted under the chairmanship of the Chief Secretary is responsible for finalising the Annual Action Plans (AAP) and monitoring the implementation of the scheme.

1.3.3 Audit objectives

The objectives of the performance audit were to assess whether:

- Annual Action Plans were in accordance with the Perspective Plans;
- funds provided for the scheme were utilised for the intended purposes;

- all the components of the scheme were implemented economically and efficiently;
- equipment purchased and assets created were utilised and maintained properly and the intended benefits were achieved and
- implementation of the scheme was monitored effectively.

1.3.4 Audit criteria

Audit findings were benchmarked against the following criteria:

- Norms/Guidelines of the Bureau of Police Research and Development (BPRD) and Ministry of Home Affairs (MHA) of GOI;
- Perspective Plan and Annual Action Plans approved by MHA;
- Decisions of the State Level Empowered Committee and High Powered Committee of MHA/GOI and
- Fund release orders of GOI/State Government and instructions issued therein.

1.3.5 Scope and methodology of Audit

The performance audit of the scheme covering the period 2005-10 was conducted between February to April 2009 and April to May 2010. Scheme implementation records in the offices of the Director General of Police, SCRB, FSD, TNPHC, SP offices in nine[41] out of 38 police districts and 121 police stations in nine out of 38 police districts were test-checked during the course of the audit. A list of police stations test-checked is given in **Appendix 1.11**. The audit objectives and criteria were discussed with the Principal Secretary to Government, Home Department during an entry conference held in April 2009. The findings were discussed with the Principal Secretary in an exit conference held in September 2010.

Audit findings

1.3.6 Deviation from approved Annual Action Plan

Annual Action Plans were not prepared on need basis

As per the GOI guidelines, the State Government was to submit to the Ministry of Home Affairs (MHA), a five-year Perspective Plan for modernisation of the police force starting from 2000-01. Based on the Perspective Plan, the State Government was to prepare Annual Action Plans (AAP) to implement various components of the scheme. The AAPs were to be got approved by the High Powered Committee (HPC) of MHA. GOI

[41] Chennai City, Chennai Suburban, Coimbatore City, Coimbatore Rural, Cuddalore, The Nilgiris, Thiruvallur, Vellore and Virudhunagar.

allocates funds to the State based on the AAPs. Audit noticed that the State Government had proposed specific requirements of equipment in the AAPs, and got them approved by the HPC of MHA. However, the department had purchased some other alternative equipment such as video/audio recorders, DVD handicams, LCD TVs, laser printers, photo copier etc., costing ₹ 2.52 crore during 2006-09 in deviation of the approved AAPs. Government, in reply, stated (September 2010) that eligible equipment under the scheme were only purchased as alternative items for strengthening the Intelligence and Coastal Security Group. This indicated that the AAPs were prepared not on the basis of actual requirements.

1.3.7 Financial management

Under-utilisation of funds

Under the scheme, 60 *per cent* of the outlay approved in the AAPs was to be funded by GOI upto 2004-05. The balance 40 *per cent* was to be borne by the State Government. The GOI share was increased to 75 *per cent* from 2005-06. GOI released funds for construction activity directly to the Tamil Nadu Police Housing Corporation (TNPHC) which executed civil works for police organisations in the State. However, TNPHC remitted the funds into the Government account from 2007-08 onwards and the State Government released the same through their budget. The details of funds received and expenditure incurred during 2000-10 were as given in **Table 1**.

Table 1: Year-wise funds released and expenditure

(₹ in crore)

Year	Central Share	State Share	Total	Expendi-ture	Expenditure for weaponry, POLNET etc.	Expenditure by TNPHC	Total expendi-ture	Balance (4-8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2000-01	76.50	76.50	153.00	4.24	1.18	5.76	11.18	141.82
2001-02	68.10	68.10	136.20	72.07	..	..	72.07	64.13
2002-03	68.10	68.10	136.20	37.15	1.88	172.32	211.35	(-) 75.15
2003-04	52.47	36.67	89.14	42.30	..	38.70	81.00	8.14
2004-05	56.76	37.84	94.60	35.72	9.18	48.21	93.11	1.49
2005-06	65.46	21.82	87.28	50.33	..	44.05	94.38	(-) 7.1
2006-07	59.40	19.80	79.20	24.24	0.38	39.04	63.66	15.54
2007-08	75.75	25.25	101.00	53.35	..	50.78	104.13	(-) 3.13
2008-09	49.98	17.00	66.98	41.39	2.15	20.23	63.77	3.21
2009-10	60.67	20.22	80.89	38.28	..	..	38.28	42.61
Total	**633.19**	**391.30**	**1,024.49**	**399.07**	**14.77**	**419.09**	**832.93**	**191.56**

(Source: Appropriation Accounts and Data extracted from the records of Director General of Police)

Column 5 – represents expenditure under the head 2055-00-115-AA

Column 6 – the Central share allocation for weaponry from 2000-01 to 2008-09

As seen from the above, the total expenditure on Modernisation of Police Force (MPF) scheme since its revamping of the scheme in 2001 was ₹ 832.93 crore against the total sanction of ₹ 1024.49 crore leaving an unutilised balance amount of ₹ 191.56 crore available with the State Government/ TNPHC as of March 2010.

Government stated (September 2010) that the percentage of utilisation of MPF funds upto 2007-08 was cent *per cent* and the percentages of utilisation of funds in 2008-09 and 2009-10 were 94.92 and 40.44 respectively. Government also stated that the balance amount would be utilised on the implementation of the scheme. The reply is not acceptable as unutilised funds available with Government as of 2007-08 was ₹ 145.74 crore as shown in Table 1 though the entire funds upto 2007-08 had been released.

1.3.8 Buildings

1.3.8.1 Residential and non-residential

The scheme laid special emphasis on construction of residential, administrative and other buildings such as police stations with a view to provide a better working environment to the police personnel.

The year-wise allocation, release of funds and expenditure under the scheme on construction of all buildings during 2005-10 were as given in **Table 2**.

Table 2: Year-wise allocation and release of funds

(₹ in crore)

Year	Allocation (funds released by GOI)	Funds released by the State Government	Balance with State Government	Expenditure	Balance with TNPHC
2005-06	44.29	44.16	0.13	44.05	0.11
2006-07	41.54	41.54	Nil	39.04	2.50
2007-08	57.56	55.75	1.81	50.78	4.97
2008-09	34.08	15.26	18.82	20.23	(-) 4.97
2009-10	37.24	Nil	37.24	Nil	Nil
Total	**214.71**	**156.71**	**58.00**	**154.10**	**2.61**

(Source: Data extracted from TNPHC)

The Perspective Plan for 2006-11 projected an outlay of ₹ 930.87 crore for constructing various types of buildings. Against this outlay, GOI allocated only ₹ 170 crore (18 *per cent*) during 2006-10 to the State. Even against the lower allocation, the State Government spent only 71 *per cent* of the funds received under the scheme. Less allocation coupled with under-utilisation of funds resulted in non-commencement/completion of 849 (90 *per cent*) out of the 939 buildings planned to be constructed as detailed in **Table 3**.

Table 3: Non-commencement/completion of police buildings

Sl. No.	Name of the building	Required to be constructed during 2006-2011	Works sanctioned and taken up during 2006-2010	Works completed as of 31 March 2010	Works yet to be sanctioned by the Government as of 31 March 2010
1.	Police station	804	191	85	613 (76)
2.	Sub Divisional Office	98	Nil	Nil	98 (100)
3.	District police office	7	6	2	1 (14)
4.	Range Office	8	2	Nil	6 (75)
5.	Commissionerate	3	1	Nil	2 (67)
6.	Armed reserve complex	12	2	1	10 (83)
7.	Battalion	7	3	2	4 (57)
	Total	**939**	**205**	**90**	**734 (78)**

(Source: Data extracted from the records of Director General of Police and TNPHC).

(Figures in brackets represent percentage of works yet to be sanctioned).

Government attributed (August 2009/September 2010) the delays to the poor response of contractors for tender calls. Further, during the exit conference, the Principal Secretary to Government, Home Department, stated (September 2010) that due to reduced allocation of funds by GOI, the number of works as planned in the Perspective Plan could not be taken up for execution. The reply of the Government is not acceptable as sanctioned funds were not utilised in full and 90 out of 205 works sanctioned were still to be completed.

1.3.8.2 Buildings for Police Stations

Buildings were sanctioned for police stations without ensuring availability of land

In order to provide a good working atmosphere in the police stations, construction of 804 police stations was proposed in the Perspective Plan 2006-11. This included buildings for 318 police stations functioning in rented buildings and 486 housed in old buildings as of 2006. As against 804 police stations to be constructed, buildings for only 191 police stations (20 *per cent*) were sanctioned during 2006-10. Of these, only 85 police stations were constructed by TNPHC and handed over to the department as of March 2010. Out of the remaining 106 police stations, work in respect of 18 police stations was not taken up as of March 2010 for reasons such as want of planning permission by Chennai Metropolitan Development Authority (CMDA) and non-availability of land. Government stated (September 2010) that the works proposed in the Perspective Plan could not be taken up due to reduced allocation of funds by GOI.

The reply of the Government is not acceptable as only 85 police station buildings out of 191 buildings sanctioned had been completed which represented only 45 *per cent* of the buildings sanctioned for which funds had been received. Government also stated that land was not readily available in many places for taking up construction of new buildings for the police stations. However, Audit noticed that 46 police stations **(Appendix 1.12)** with

adequate land in 21 out of 38 police districts were not selected for construction of new buildings.

1.3.8.3 Delay in commencement of work

Audit noticed that 47 out of 205 works sanctioned **(Appendix 1.13)** at a cost of ₹ 26.53 lakh under MPF during 2006-10 were still to be taken up for construction as of 31 March 2010 despite availability of funds. The works were to be executed by TNPHC. Government attributed the delay to non-completion of feasibility studies, delay in obtaining No Objection Certificates from the Coastal Regulatory Authority and Railway Department, delay in getting planning permission from CMDA/ National Highways Authority (NHA) for not taking up the works etc.

Further, Audit also noticed that two[42] works costing ₹ 2.88 crore sanctioned during 2003-05 were still to be commenced (March 2010) despite availability of funds. These works were to be executed by TNPHC. The designs proposed by TNPHC for these two works were approved by the Government in September 2006. Between September 2006 and June 2010, TNPHC called for repeated tenders 16 times as the response was either nil or very poor. As of July 2010, TNPHC had finalised contracts for these works at a cost of ₹ 3.21 crore, as against the original estimate of ₹ 2.88 crore but the works were still to be commenced. The delay in approval of the design and contract for these two works resulted in escalation in the cost of construction of these works amounting to ₹ 33 lakh.

1.3.8.4 Police quarters under MPF

The year-wise allocation and expenditure under the housing component in the MPF scheme as of March 2010 is given in **Table 4**.

Table 4: Year-wise details of allocation and expenditure under Housing component

(₹ in crore)

Sl. No.	Year	Allocation	Number of units		Expenditure	Balance
			LS	US		
1.	2005-06	30.16	1,060	77	30.16	Nil
2.	2006-07	25.63	930	50	25.63	Nil
3.	2007-08	30.39	461	290	30.39	Nil
4.	2008-09	18.22	185	85	18.02	0.20
5.	2009-10 *	Nil	Nil	Nil	Nil	Nil
	Total	**104.40**	**2,636**	**502**	**104.20**	**0.20**

(Source: Data extracted from TNPHC)

* Funds were not allotted under the housing component in 2009-10

LS: Lower Sub-ordinates US: Upper Sub-ordinates

The number of quarters proposed, completed and to be completed under the MPF scheme during the period from 2005-06 to 2009-10 are shown in **Table 5**.

Table 5: Year-wise details of construction of residential quarters

[42] Construction of two training centre-cum-barracks in Chennai.

Sl. No.	Year	Number of units planned for construction			Number of units completed			Balance units to be completed		
		LS	US	Total	LS	US	Total	LS	US	Total
1.	2005-06	1,530	100	1,630	1,586	148	1,734	Nil	Nil	Nil
2.	2006-07	930	50	980	535	39	574	395	11	406
3.	2007-08	360	240	600	211	88	299	149	152	301
4.	2008-09	286	135	421	Nil	5	5	286	130	416
5.	2009-10 *	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Total	**3,106**	**525**	**3,631**	**2,332**	**280**	**2,612**	**830**	**293**	**1,123**

(Source :Data extracted from TNPHC) * No funds allotted for housing component in 2009-10.

As against a total of 3,631 quarters to be constructed under MPF during 2005-10, only 2,612 were constructed. Government failed to give specific reasons for the shortfall in construction of quarters.

1.3.8.5 Construction of residential quarters

In consonance with National Police Commission's recommendation to provide cent *per cent* residential accommodation to police personnel, Government sanctions construction of police quarters under the MPF scheme as well as under a State Plan scheme. Funds allocated under MPF are meant mainly for construction of quarters for Lower Subordinates (LS) and Upper Subordinates (US). The construction is undertaken through TNPHC. The number of units planned, completed and balance to be completed as of 31 March 2010, both under the MPF and the State schemes, were as given in **Table 6**.

Table 6: Year-wise details of construction of residential quarters

Sl. No.	Year	Number of units sanctioned for construction			Number of units completed as of March 2010			Balance units to be completed		
		LS	US	Others*	LS	US	Others*	LS	US	Others*
1.	2005-06	3,538	448	14	3,260	424	13	278	24	1
2.	2006-07	2,834	141	25	1,897	136	23	937	5	2
3.	2007-08	1,845	148	7	547	77	1	1,298	71	6
4.	2008-09	1,897	96	7	Nil	5	Nil	1,897	91	7
5.	2009-10	1,497	476	27	Nil	Nil	Nil	1,497	476	27
	Total	**11,611**	**1,309**	**80**	**5,704**	**642**	**37**	**5,907**	**667**	**43**

(Source :Data extracted from TNPHC)

* Superintendent of Police and Deputy Superintendent of Police

As against 12,000 police quarters targeted, actual completion during 2006-10 was only 2,686

As seen from the above, the number of housing units sanctioned came down gradually over the years. One of the major objectives of providing houses to police personnel under the scheme remained unachieved. In the Perspective Plan 2006-11, Government proposed to build 3,000 quarters every year, so as to meet 59.35 *per cent* of the housing requirement of the police personnel at end of the Plan period. However, the number of units sanctioned for construction during the period 2006-07 to 2009-10 was only 9,000 quarters as against 12,000 targeted at the rate of 3,000 per annum. The number of units actually completed during 2006-10 was only 2,686. The total number of police quarters available as on 31 March 2010 was 48,183 as against the police strength of 1.04 lakh as of January 2010. Hence, housing satisfaction as on

31 March 2010 was only 46.40 *per cent* for the police personnel as against

59.35 *per cent* proposed in the Perspective Plan 2006-11. Government, in reply, stated (September 2010) that action was being initiated to complete the works. Thus, one of the major objective of providing housing to police personnel remained unachieved.

1.3.8.6 Non-utilisation of quarters constructed

Test check of records in Chennai Sub-urban and Thiruvallur Districts revealed that 46 out of 82 quarters constructed at two places remained vacant since July 2008 due to reasons such as non-availability of water, electricity and industrial pollution as given in Table 7.

Table 7: Unoccupied police quarters

Sl. No.	Police districts	Place	Number of police quarters			Period of vacancy	Reason
			Available	Occupied	Vacant		
1.	Chennai (Sub-urban)	Manali new town	67	26	41	Since July 2008	Industrial pollution
2.	Thiruvallur	Thirupalaivanam	15	10	5	--	Lack of water/ electricity

(Source : Data extracted from District police offices)

Non-occupation of police quarters despite large scale shortage at the State level indicated wrong location and inadequate maintenance of quarters. The records produced to Audit did not indicate any concerted effort to bring these quarters to use.

1.3.9 Mobility

One of the major thrust areas of the MPF scheme was to increase the mobility of the police force in order to enable them to effectively face the challenges and quick response to crime by increasing the fleet strength of the police force. As per the MPF scheme guidelines purchase of new vehicles in replacement of old/condemned vehicles was inadmissible.

The year-wise allocation and expenditure as of March 2010 under the component 'mobility' were as given in **Table 8**.

Table 8: Year-wise allocation and expenditure under component mobility

(₹ in crore)

Sl.No.	Year	Allocation	Expenditure
1.	2005-06	18.38	18.38
2.	2006-07	18.31	18.31
3.	2007-08	17.24	17.24
4.	2008-09	13.50	13.50
5.	2009-10	18.40	16.31
	Total	**85.83**	**83.74**

(Source: Director General of Police)

Though the department spent the entire allocated amount for purchase of vehicles, the overall fleet strength did not increase during 2006-10. The details of vehicles in the department as at the beginning and the end of 2006-10 were as given in **Table 9**.

Table 9: Purchase of vehicles in Police Department

Sl. No.	Type of vehicle	Opening Balance as on 1.4.2006	Requirement as per perspective plan 2006-11	Total requirement as per Perspective Plan	Actual Purchase during 2006-07 to 2009-10	Condemned during 2006-07 to 2009-10	Availability as on 31.3.2010
1.	Buses	155	370	525	41	43	153
2.	Mini buses	419	97	516	46	106	359
3.	Lorries	498	486	984	50	60	488
4.	Jeeps	3,484	1,294	4,778	549	1,022	3,011
5.	Vans	970	Nil	970	104	181	893
6.	Motor cycles	4,107	872	4,979	1,407	1,948	3,566
7.	Cars	337	4	341	106	149	294
8.	Other vehicles *	277	37	314	31	5	303
	Total	**10,247**	**3,160**	**13,407**	**2,334**	**3,514**	**9,067**

(Source : Data extracted from Director General of Police)

* Other vehicles include vehicles such as ambulance, wreckers etc.

Despite purchase of 2,334 vehicles during the period 2006-10, the net availability of vehicles with the department stood reduced from 10,247 in 2006 to 9,067 in 2010. Audit noticed that the Government had sanctioned (2006-09) purchase of 392 vehicles in replacement of existing ones at a cost of ₹ 24.23 crore and the remaining purchases were considered as fresh additions to the fleet strength. However, the table above indicated that the number of old vehicles condemned outnumbered the new procurements, thus defeating the objective of increasing the mobility of the police force.

Government used MPF funds to replace condemned vehicles rather than to procure new vehicles.

The Government, in reply, stated (September 2010) that the Perspective Plan was prepared in 2006 and now sanctions for procurement of vehicles were made based on actual needs and within the allocation accorded by the GOI towards procurement of vehicles.

The reply is not acceptable as the funds provided under MPF have to be utilised only for augmentation of the vehicle strength of the department so as to improve its mobility. The High Powered Committee while approving the Annual Action Plan for the year 2006-07 under MPF in June 2006, also reiterated that expenditure on account of replacement had to be a normal item of expenditure provided for by every State budget**.** Thus, the procurement of the vehicles in replacement of the condemned vehicles defeated the very purpose of increasing the fleet strength of the police force.

1.3.9.1 Deployment of vehicles in Police station

As per the guidelines of MHA, the MPF scheme would concentrate on providing field vehicles required for basic policing as per Bureau of Police Research and Development (BPRD) norms. Audit however, noticed that 18 out of 121 police stations in the nine test-checked districts did not have even a single vehicle and 38 out of 121 police stations did not have any motor cycle as of March 2010 as detailed in **Appendix 1.14**. Further, shortage of vehicles compared to BPRD norms was also noticed in the test-checked police stations as detailed in **Appendix 1.15**.

Government in reply stated (September 2010) that some of the police stations had shortfalls of vehicles and instructions were issued to unit officers to provide vehicles to field officers to discharge their duties.

Thus, non-provision of vehicles as per BPRD norms defeated the objective of modernisation of the police force**.** As mobility had a direct relation to the effective functioning, non-deployment of required vehicles would affect the effective functioning of police personnel.

1.3.10 Weaponry

Procurement of weapons

The MPF scheme provides funds for replacement of outdated and unserviceable weapons with sophisticated weapons.

The year-wise funds allocation and expenditure during 2005-10 were as given in **Table 10**.

Table 10: Year-wise allocation of funds and expenditure

(₹ in crore)

Sl.No.	Year	Allocation	Expenditure
1.	2005-06	2.55	2.55
2.	2006-07	0.45	0.45
3.	2007-08	Nil	Nil
4.	2008-09	4.17	4.17
5.	2009-10	5.95	2.52
	Total	**13.12**	**9.69**

(Source: Data extracted from Director General of Police)

Audit, however, noticed that there was a shortfall in procurement in respect of two kinds of weapons as of March 2010 as detailed in **Table 11**.

Table 11: Shortfall in procurement of weapons

(In number of units)

Sl. No.	Weapon	Requirement as per perspective plan (2006-11)	Sanctioned during 2006-10	Shortfall in procurement
1.	9mm pistol	3,110	312	2,798 (90)
2.	Teargas guns	4,373	Nil	4,373 (100)

(Source : Data extracted from the records Director General of Police)

(Figures in brackets represent the percentage of shortfall in procurement)

Government, in reply, stated (September 2010) that the funds allocated were insufficient to meet the requirement fully as planned in the Perspective Plan and hence could not procure all weapons. The reply is not acceptable as the funds sanctioned already remained unutilised and available with the State Government as shown in **Table 1**. The unutilised funds could have been

utilised for procuring arms after getting the approval of High Powered Committee of MHA of GOI.

1.3.11 Equipment

1.3.11.1 Allocation and expenditure

The Perspective Plan 2006-11 envisaged procurement of various types of equipment including communication equipment such as VHF Static sets, VHF mobile sets etc. The funds allocated and expenditure incurred during 2005-10 towards purchase of equipment including communication equipment under MPF are given in **Table 12**.

Table 12: Year-wise amounts allocated for purchase of equipment

(₹ in lakh)

Sl. No.	Year	Allocation	Expenditure
1.	2005-06	12.22	12.22
2.	2006-07	11.91	11.91
3.	2007-08	13.23	13.23
4.	2008-09	13.47	13.47
5.	2009-10	21.75	1.26
	Total	**72.58**	**52.09**

(Source: Data extracted from the records of Director General of Police)

Audit noticed shortfall in procurement of equipment as given in **Table 13**.

Table 13: Shortage of equipment

Sl. No.	Name of the communication equipment	Requirement	Available as of 2006	Due for condemnation by 2010	To be procured	Actual procurement during 2006-10	Shortfall in procurement
1.	VHF Static sets	3,648	3,523	3,523	3,648	1,361	2,287
2.	VHF Mobile sets	3,901	2,334	2,314	3,881	1,039	2,842
3.	VHF Hand held sets	13,864	8,859	7,659	12,664	2,980	9,684
4.	HF sets used for long distance communication	276	146	144	274	2	272
5.	VHF Repeater sets	291	206	190	275	110	165
	Total	**21,980**	**15,068**	**13,830**	**20,742**	**5,492**	**15,250**

(Source: Data extracted from the records of Director General of Police)

Procurement of communication equipment did not progress as planned

As seen from the above, as against the proposal to procure 20,742 units of different types of communication equipment during 2005-11, only 5,492 were procured during 2006-10. Poor performance despite availability of funds indicated the inability of the department to conclude procurement on time.

1.3.11.2 Delay in procurement of equipment

As part of the MPF scheme, GOI sanctioned ₹ 2 crore in 2003-04 for procurement of monitoring equipment (integrated communication and digital data monitoring system) for the Intelligence Wing of the department. The department initiated the process of procurement of the equipment through the Electronics Corporation of Tamil Nadu (ELCOT) a State Government undertaking and the amount was released during December 2007.

As of March 2010, ELCOT was still to supply the required equipment. Audit noticed that ELCOT's order (May 2006) to procure the equipment from one private agency was challenged by an unsuccessful bidder in Madras High Court. The writ petition was dismissed in November 2008. As of March 2010, ELCOT had decided to go in for fresh tenders to procure the equipment with new technology. The DGP replied (June 2010) to an audit enquiry that ELCOT was asked to convene a technical committee meeting for finalisation of technical bid. Audit noticed that even though the High Court dismissed the writ petition in November 2008, the department was still to finalise the purchase of equipment even after a lapse of 19 months as of June 2010. The funds remained unutilised and were available with ELCOT. Thus, the programme which was planned as early as in 2003-04, was still to commence despite the availability of funds.

1.3.11.3 Computerisation

The Common Integrated Police Application (CIPA) was introduced (2003-05) by GOI with a view to record data regarding crime and criminals by computerising police stations in the State with online connectivity with each other together with access/transfer of data on crime and criminals to/from each other. Under CIPA, 575 police stations were planned to be computerised in the State in two phases and ₹ 2.54 crore were sanctioned under MPF. Audit noticed that though hardware installation was completed under Phase I (137 police stations), only 45 police stations were integrated with the State level server at a cost of ₹ 1.15 crore. Under Phase II, computers were still to be supplied and installed in 438 police stations. The Government, in reply, stated (September 2010) that GOI had decided to switch over to another system known as Crime & Criminal Tracking Network and Systems (CCTNS) and the implementation of CCTNS was in progress. Thus, even after six years, due to non-integration of all the police stations, the intended objective of providing online connectivity for data transfer was still to be achieved despite spending ₹ 1.15 crore.

1.3.11.4 Equipment under repair

Government purchased (May 2009) 42 breath analysers with printers for the Highways patrol teams at a cost of ₹ 20.20 lakh. Test check of records of highway patrol teams in Chennai Sub-urban, Cuddalore, Thiruvallur and Virudhunagar districts revealed that the breath analysers supplied to them were not used as they were not in working condition i.e., printouts were not generated. In certain cases, they showed negative results though the person had alcohol content in his blood.

Further, test check of police stations disclosed that equipment such as photo-copiers and fax machines purchased out of MPF funds were not being maintained properly. The list of police stations where such machines were not in working condition as of March 2010 was as given in **Appendix 1.16**.

Government, in reply, stated (September 2010) that suitable instructions had been issued to unit officers to rectify the defective breath analysers immediately. The department stated that sufficient funds required for carrying out the repairs of these photocopiers and fax machines had been projected to the Government to allot the same to unit offices concerned during the current financial year.

1.3.11.5 Incurring of recurring expenditure under MPF

As per MPF guidelines, recurring charges were not admissible under any component of the scheme. However, in violation of the guidelines, ₹ 25.20 lakh towards leased line charges[43] was paid in January 2009 under the MPF scheme to a firm selected for installation and maintenance of 20 closed circuit television systems in various junctions of Chennai city.

Government's reply (August 2009) that entering into an annual maintenance contract at the time of procurement was cheaper was unacceptable as MPF funds could not be utilised for maintenance purposes.

1.3.11.6 Electronic beat system

The beat system in vogue in police stations for prevention and detection of crimes involve constables from jurisdictional police stations visiting conspicuous locations and maintaining a record of incidences noticed during the beat.

The Electronic Beat system launched in Chennai City to closely monitor the beat work in police stations was non-functional

The State Government ordered (January 2005) implementation of an electronic beat (eBeat) system in Chennai city to replace the existing manual beat system at a cost of ₹ 30 lakh. The eBeat system was based on Radio Frequency Identification Technology (RIDF), wherein eBeat tag readers were provided to the beat constables and tags were installed in the beat locations. The eBeat system ensured proper monitoring of beat work of police stations. Equipment for the e Beat system was supplied to 60 police stations in Chennai City between February and December 2007. Audit noticed that in all the 11 test-checked police stations in Chennai City where the eBeat system was supplied, the system was not in working condition for the past one year, though an annual maintenance contract was entered into with the firm which supplied the system. The department procured (August 2008) another 200 eBeat systems for Chennai city at a cost of ₹ 97.97 lakh. However, as of March 2010, the equipment was still to be installed in police stations and remained idle in the DGP's office. Consequently, the existing manual beat system continued to be in use.

[43] Leased line charges means charges payable to Bharat Sanchar Nigam Limited for providing connectivity between the cameras installed in junction of city and control room.

Government replied (September 2010) that suitable instructions had been issued to the Commissioner of Police (COP), Chennai Police to address the firm concerned to attend to maintenance of the equipment as per Annual Maintenance Contract immediately. Government also stated that 200 eBeat systems procured for Chennai city had been distributed (June 2010) to the police stations.

1.3.11.7 Communication

POLNET

With a view to cope with deficiencies in the existing communication system and to meet emerging requirements, GOI decided (October 2002) to establish a dedicated satellite based integrated Police Communication Network (POLNET) for Police and Para military forces. It aimed at installation of 29 Very Small Aperture Terminal (VSAT) and 1,090 Multi Access Radio Telephony (MART) in Tamil Nadu to integrate police communication by linking all police stations and dialing system, with voice/fax/data transmission capabilities. The computer network was to be interlinked with National Crime Record Bureau computers at various district headquarters. It envisaged linking the national capital with all State capitals and further extending the connectivity down to the district headquarters/police station level.

A mention of the non-implementation of POLNET had been made in paragraph 4.3.2 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 2007. The State Government sanctioned (August 2005) ₹ 2.98 crore for the project, including a provision for accessories such as batteries, battery chargers, air conditioners and power socket with cable. The required accessories were supplied between March 2006 and November 2006 at a cost of ₹ 1.08 crore.

As of September 2010, 29 VSATs, and 626 MART Remote Switching Units (RSU) had been installed and the remaining installation was in progress in three districts by M/s Bharat Electronics Limited, Ghaziabad in liaison with Directorate of Co-ordination Police Wireless, New Delhi. In all the test-checked districts, it was noticed that the equipment was either not installed or there were problems in the exchange, as a result of which they could not be put into use.

Government, in reply, stated (September 2010) that GOI had been addressed for allotment of 67 VSATs, 641 MART RSUs and 17 single channel VSAT equipment in February 2005 for achieving cent *per cent* connectivity. However, the allotments were not made by GOI.

Thus, the objective of linking all police stations, district police office and State headquarters with the central police network has not been achieved even after spending ₹ 1.56 crore as of September 2010.

1.3.12 Forensic department

The Forensic Science Laboratory was providing technical and scientific assistance to the Police Department by analysing samples received/collected from crime sites. There were 10 laboratories (one main laboratory at Chennai and nine regional laboratories) in the State. Besides, 33 mobile forensic science laboratories were also functioning as of March 2010. As part of the MPF scheme, GOI allotted ₹ 16.08 crore during 2005-10. Against ₹ 16.08 crore allotted for the purchase of equipment for the Forensic Department and the Finger Print Bureau ₹ 15.82 crore only was spent till March 2010.

Scrutiny of records in the Forensic Laboratory, Chennai revealed that there were delays in installation of forensic equipment ranging from one to 17 months due to abnormal delays in execution of pre-installation requirements (**Appendix 1.17**). Further, 24 out of 29 sophisticated pieces of equipment available in the Forensic Laboratory, Chennai were not covered by any annual maintenance contract (AMC). Against the estimated requirement of ₹ 40 lakh per annum for proper maintenance of the equipment, Government allocated only ₹ 9 lakh to ₹ 14.50 lakh per year during 2005-10.

Government, in reply, stated (September 2010) that a proposal for sanction of ₹ 50 lakh per year for AMC for the equipment in Forensic Science Department is under the consideration of the Government and orders would be issued shortly. The Government further stated that efforts were being made to maintain the equipment in good condition**.**

1.3.13 Conclusion

Annual Action Plans were prepared without assessing actual needs leading to deviations from approved plans. Sanction of buildings for police stations without ensuring availability of land resulted in lesser achievement in construction of buildings for police stations. The number of police quarters constructed was way behind the Plan target, despite availability of funds. Funds provided for purchase of vehicles to increase the fleet strength were utilised instead for replacing condemned vehicles leading to stagnation in mobility. Procedural delays caused low achievements under the scheme component for procurement of equipment. The department was slow in introducing new technologies to enhance operational efficiency.

1.3.14 Recommendations

- Annual Action Plans should be drawn up based on assessment of actual requirements.
- Government should consider separate allocation of funds from the State budget for replacement of vehicles instead of using MPF funds.
- Sufficient funds should be provided for maintenance of equipment purchased under the scheme.

- The pace of construction of residential units should be accelerated to ensure completion of the buildings in a time-bound manner.

MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT

CHENNAI METROPOLITAN WATER SUPPLY AND SEWERAGE BOARD

1.4 Computerisation in Chennai Metropolitan Water Supply and Sewerage Board

Highlights

The Chennai Metropolitan Water Supply and Sewerage Board, whose activities were already computerised, launched an Enterprise Resource Planning System to integrate all its functions. The Enterprise Resource Planning system was implemented in April 2004 at a total cost of ₹ 9.63 crore. Due to inadequate planning, the 'New Connection System' was left out of the scope of the Enterprise Resource Planning and the on-line Complaints Monitoring System remained non-functional. Implementation of Enterprise Resource Planning was incomplete as Final Accounts of the Board, was continued to be compiled through the earlier Unix/Cobol system. Neither was the Inventory management system fully taken over by the Enterprise Resource Planning System. Thus, the investment on Enterprise Resource Planning was yet to yield the desired results even after 5 years. In Billing and Collection system, short assessments and losses to the tune of ₹ 42.69 crore persisted, despite an audit exercise in 2003 pointing out similar deficiencies which yielded ₹ 22.95 crore to the Board.

- **Registering of 'New Water Connections' was not done through the Enterprise Resource Planning and 'Complaints Monitoring System' was not made online due to deficient planning.**

(Paragraphs 1.4.7.1 and 1.4.7.2)

- **Even after five years since the implementation of Enterprise Resource Planning, the accounts of the Board were not compiled through the Enterprise Resource Planning and manual dependence continued in respect of inventory accounting and collection accounting.**

(Paragraph 1.4.8)

- **Incorrect classification of 7,222 properties resulted in short assessment of water charges to the tune of ₹ 7.67 crore.**

(Paragraph 1.4.9.3)

- **Non-collection of water tax in respect of 3,539 properties paying water charges resulted in loss of revenue to the tune of ₹ 1.20 crore.**

(Paragraph 1.4.9.4)

- **Adoption of lower annual value (AV) in respect of 7,722 properties for computing water tax resulted in a loss of ₹ 8.84 crore.**

(Paragraph 1.4.9.5)

- **Non-updation of 13,017 live properties in Board's database resulted in non-raising of taxes to the tune of ₹ 21.35 crore.**

(Paragraph 1.4.9.6)

- **Non-raising of continual demands for metered connections resulted in a loss of ₹ 1.11 crore.**

(Paragraphs 1.4.9.7(a) and (c))

- **Data in 'Complaint monitoring system' lacked integrity and reliability as number of complaints were indicated as cleared within seconds and within 5 minutes of their registration.**

(Paragraph 1.4.10.3)

1.4.1 Introduction

The Chennai Metropolitan Water Supply and Sewerage Board (Board), created by an Act of the State Legislature in July 1978, caters to water supply and sewerage requirement of about 6.51 lakh properties in Chennai metropolitan area and parts of Ambattur Municipality. The main sources of revenue for the Board were water tax and water charges. Water tax, at 7 *per cent* of its Annual Value as fixed by the Chennai Municipal Corporation (CMC) was collected from all the properties under the Board's jurisdiction. Water charges were collected only from such properties that were provided with a water connection, at different rates for domestic and non-domestic consumers.

1.4.2 Organisational Structure

The Board is headed by a Chairman supported by a Managing Director and a team of four Directors and other technical and administrative officials. For administrative purpose, the jurisdiction of the Board is split into 10 Areas each headed by an Area Engineer. The 'areas' are further sub-divided into divisions, each headed by a Depot Engineer.

1.4.3 The Computerisation

Computerisation in the Board started in 1986 and the functional and administrative activities of the Board were carried out using stand-alone

Unix/Cobol systems. These activities were to be integrated through an ERP (Enterprise Resource Planning) system procured from M/s. Oracle Corporation and implemented through M/s. Tata Consultancy Services (TCS). The process commenced with a pilot study conducted during March 2003 and October 2004 and was rolled out in February 2007 after providing necessary infrastructure and connectivity. The ERP system works on a wide area network (WAN) connecting Headquarters Office with all its 161 depots and 10 Area offices, through Fibre Optic/Copper Cables and Wireless links[44]. The entire data was stored in a set of central servers placed at the Headquarters office. The computerised activities include 'Billing and Collection', 'Material Management', 'Complaints Monitoring', 'Payroll', 'Provident Fund', 'Pensions' and 'Financial Accounting'.

The objective of the Board was to integrate its stand-alone applications through an appropriate ERP system. An ERP system was contemplated as it would purportedly help in minimizing development and implementation time, cost and risk and also reduce the support load on internal staff.

1.4.4 Audit Objectives

The objectives of the Information Systems (IS) Review were to examine whether

- implementation of the ERP offered an integrated online computer system as contemplated, encompassing all major functions of the Board;
- implementation of the ERP had improved communication and interaction with public and stake- holders;
- implementation of the ERP had reduced duplication of work and streamlined the functioning of the Board;
- the demands raised towards water taxes were correct and based on the prevailing Annual Value of the property;
- the demands raised towards water charges were based on the actual classification[45] of the property;
- all taxable properties under the jurisdiction of the Board were covered in the tax net;
- the online complaints monitoring system worked satisfactorily and
- the observations and deficiencies pointed out in the last review were duly addressed in the ERP.

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[44] Area Offices were linked to Head Office through parallel 2-Mbps Optic Fibre connections provided by BSNL and VSNL. Similarly Depots were linked to respective Area Offices through a 64-Kbps managed leased line of BSNL and a parallel 64-Kbps wireless link by M/s. Tulip

[45] Domestic/Residential, Commercial, Partly Commercial, Institutional and Municipal Bulk Supply

1.4.5 Audit Criteria

The criteria of audit included

- The Chennai Metropolitan Water Supply and Sewerage (CMWSS) Act, 1978;
- Projected objectives of the ERP System;
- Data relating to Annual Values and classification of properties obtained from the Chennai Municipal Corporation(CMC);
- Certified Final Accounts of the Board and
- Earlier Information Technology Audit on Computerised Billing and Collection in the Board brought out in the Report of the Comptroller and Auditor General of India for the year ending March 2005 – Civil – Government of Tamil Nadu.

1.4.6 Audit Coverage and Methodology

The review commenced with an entry conference on 11th February 2010 followed by an in-depth examination of major activities *viz*., Billing and Collection, Inventory Management and Complaints Monitoring. Other functions like Pay roll, GPF, Pensions and Financial Accounting were also examined. In respect of these items, data available in the ERP system (January 2007 to December 2009) were also examined. As water tax was quantified using the Annual Value (AV) of properties as assessed by CMC, data obtained by Audit from CMC, was used to cross verify the correctness of the Water Tax calculated by the Board with reference to the 15-digit identification codes of properties (CMC Number) which were common for both institutions.

As the bulk of the infrastructural facility was in the head office and data was centrally stored and the entire decision making and monitoring activity rested with that office, most of the review activity was carried out from that office. As inputs for the major systems emanated from the level of the Depots and Area Offices, three out of the eleven Area Offices and the depots under their control were visited. The Main Stores was also visited for first-hand information of their activity and procedures. Audit concluded with an exit conference on 13th May 2010.

Audit Observations

1.4.7 Planning

1.4.7.1 'New Water Connection' not included in ERP

One major activity of the Board, namely provision of new water connections was kept out of the ERP and was functioning as a stand-alone system. The billing was done through the ERP system.

(a) Of the 20,045 new water connections given during April 2005 to September 2009, which according to the Board's 'New Water Connection' system belong to commercial category, water charges for 237 connections were assessed at domestic rates, resulting in short collection of ₹ 8.96 lakh. This was a result of feeding incorrect classification in to the ERP System for billing purposes. This could have been avoided, if the new connection system was made part of the ERP system where such repeated data entry of the classification would not have arisen.

(b) Information on 18,568 properties for which new water connections were given was fed into the ERP Billing and Collection system after a delay ranging from 1 to 239 months. Delay in updating such information led to belated raising of demands and resulted in a notional irrecoverable loss of interest[46] of ₹ 97.56 lakh.

The Board replied (June 2010) that efforts were underway to have the new connection system linked with the ERP and in future there would be no delay in raising demands for new connections. Board also replied (June 2010) that action had been taken to revise these incorrect assessments.

1.4.7.2 Complaints monitoring System

The Board was unable to put to use the envisaged complaints monitoring system, due to inadequate manpower. Though the investment on hardware and software for the complaints monitoring system was in the order of ₹ 1.12 crore[47], commensurate human resource for manning the same was not considered at the planning stage. Poor planning resulted in non-achievement of the objectives of on-line complaints monitoring system, besides non utilisation of installed infrastructure and recurring expenditure on their maintenance.

1.4.8 Implementation of the ERP system

The Board went in for an ERP to bring about a complete integration of all its functions and to implement the same in a short time. However, even after a pilot study of 18 months and regular operation for three years it had not achieved optimum functioning (June 2010) as brought out in the following paragraphs.

1.4.8.1 Compilation of accounts not done through ERP

The Accounting function was at the core of the ERP system with outputs from other processes designed to flow into it, online. In spite of the system being in operation for more than five years, final accounts of the Board were yet to be compiled through the ERP. Inputs from all related modules of ERP system are fed manually into the legacy Unix/Cobol system and the accounts were prepared.

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[46] Notional interest for this review is calculated at 15 *per cent*, the rate at which the Board collects surcharge for belated payments of taxes and charges.

[47] Cost of computer (₹ 25,500), Citrix Server license (₹ 15,427), Oracle license (₹ 28,901) each, for 161 Depot offices

The balances in respect of a large number of account codes differed between the Unix/Cobol system and the ERP system resulting in disagreement in figures from the Trial Balance stage itself. The Board hence opted to continue with the Unix/Cobol system for compilation of its final accounts.

The Board replied (June 2010) that final accounts will be compiled through the ERP system from the year ending 31 March 2011.

1.4.8.2 Parallel Accounting of Inventory

The ERP inventory system was operational in the Main Stores of the Board, however, for purposes of maintenance of stock and accounting thereof, a parallel manual record was relied upon. The print-outs generated from the ERP system were modified with regard to rate and quantity based on the manual records. These modified figures were then fed to the legacy Unix/Cobol system and forwarded to the accounts wing for compilation. The ERP system was deficient to this extent and was not relied upon.

1.4.8.3 Collections details and Final Accounts

Errors in data entry resulted in incorrect figures in final accounts amounting to ₹ 18.73 lakh

All Billing and Collection transactions were carried out on-line and related data was stored in the ERP system. Thereafter, the reports generated by the ERP system were re-fed in to the Unix/Cobol system for compilation of final accounts. The figures printed in final accounts, however, differed with the figures in the ERP system by ₹ 18.73 lakh.

The Board in its reply (June 2010) attributed the differences to data entry errors in posting of data from the ERP system to the Unix system and that they proposed to switch over to the accounting function of the ERP system from the year 2010-11.

1.4.9 Billing and Collection

The Board collected water tax from all properties in Chennai at 7 *per cent* of their AV per year and water charges from properties which are connected with water lines based on its classification. For this purpose AV of properties is obtained from the CMC. Audit observed short assessments and other deficiencies relating to raising of water tax and charges, as brought out hereunder. The discrepancies pointed out in paragraphs 1.4.9.2, 1.4.9.3, 1.4.9.5 and 1.4.9.6 were also pointed out in earlier review and the Board continued to depend on the system with such discrepancies.

1.4.9.1 Continued billing using temporary numbers – Non updation of data from CMC

Whenever a new water connection was given to a property, yet to be assessed by CMC, a temporary number was assigned by Board for identification, based on which water charges were being collected till the property was regularly assessed and a permanent consumer number was assigned by the CMC. Due to absence of control to ensure that AVs of all assessed properties were duly obtained and incorporated in the Board's data and tax was duly collected,

charges alone were collected, in respect of 1,211 properties[48] through such temporary numbers, for more than one year. These included cases that were already assessed by CMC and regular consumer numbers were already assigned. The Board replied (June 2010) that 609 cases were updated after verification with CMC and the remaining cases were being verified. The Board has also stated that in future temporary numbers would be cancelled as and when CMC regularly assessed the properties.

1.4.9.2 Multiple records for the same property – undue boosting of assets of the Board

More than 1800 instances of multiple entries were made for the same property resulting in boosting up of the assets of the Board.

Due to lack of input controls in the application software, in more than 1,800 instances the same property was assigned more than one CMC number indicating multiple data entries in the system. The related consumers were paying their dues through one of these numbers thus ignoring the dues under the other. The dues shown as outstanding against the other left out assessments unduly boosted the assets of the Board. In response to a similar observation in the last review the Board stated (June 2004) that 1,113 such duplicate assessments were eliminated. The Board promised (May 2010) corrective action in consultation with CMC.

1.4.9.3 Incorrect classification of property - short assessment of ₹ 7.67 crore

Short raising of demands at domestic rates amounting to ₹ 7.67 crore in respect of 7, 222 commercial properties

Water charges are lower for domestic properties and higher for commercial and industrial properties. Though data on usage was available with the CMC, the Board adopted its own methodology for assessing the same. A comparison of usage as per ERP system with that of CMC revealed that in respect of 7,222 properties of commercial/industrial nature, water charges were demanded at domestic rates by the Board. This led to a short assessment of ₹ 7.67 crore.

In a similar exercise during the last review, audit had pointed out short assessments aggregating ₹ 1.30 crore relating to properties in Corporation Areas 5 and 7. Subsequently, the Board had raised revised demands aggregating ₹ 5.47 crore from all the ten areas under the Board's jurisdiction. However, the present state of affairs indicated that no tangible efforts had been taken to correct the discrepancies in the system. Also the possibility of deliberate wrong classification of the properties with *malafide* intention could not be ruled out. The Board replied (May 2010) that they would take appropriate action in consultation with CMC and by inspecting the related properties.

[48] More than 1 year – 112 properties; More than 2 years - 153 properties; More than 3 years - 946 properties

1.4.9.4 Non-collection of water tax due from regular assessees paying water charges

Non-raising of Water Tax in respect of 3,539 properties - short collection of ₹ 1.20 crore

There were 3,539 properties holding regular consumer numbers in respect of which only water charges were collected but no water taxes. These properties even not exempted from payment of water tax. The total short collection from these properties spread across a period of six half-years (January 2007 to September 2009) was ₹ 1.20 crore. The Board in the exit conference (June 2010) promised to take corrective action.

1.4.9.5 Short assessment of water tax due to incorrect adoption of Annual value – ₹ 8.84 crore

Adoption of lesser AV than that prevailing in the Civic bodies resulted in short assessment of tax amounting to ₹ 8.84 crore

In respect of all new properties and those which underwent a revision of its AV, the Board obtained data from the CMC on a bi-monthly basis. Based on such data, the AVs of the related properties in the Board's database were updated. Despite such arrangement, analysis revealed that in respect of 6,160 properties the AVs adopted in the Board's data were found lesser than the AVs as per CMC data. This resulted in short assessment of water tax to the tune of ₹ 8.58 crore. On a similar analogy, the short assessments in respect of consumers in Ambattur Municipality, was ₹ 26.37 lakh relating to 1,562 properties.

It is stated that such short assessments were due to lack of controls to ensure complete and updated data transfer from CMC to Board and that all the updates were given due effect to in the Board's data. Similar audit observations raised during last review resulted in additional revenue to the Board to the tune of ₹ 13.90 crore, despite which, the lacuna in the system had not been addressed.

The Board accepted the facts and agreed (May 2010) to take corrective action. It has also raised the revised demands for ₹ 21.68 lakh (June 2010) in respect of properties under Ambattur Municipality.

1.4.9.6 Incomplete data transfer of Live properties in the CMC data to the tax net of the Board - short assessment of ₹ 22.88 crore

13,017 properties were not brought under the tax net of the Board, resulting in short assessment of ₹ 21.35 crore

It is imperative that that all properties that are live in the data of CMC have to pay water tax also. However, there were 13,017 properties which were live in the records of CMC but did not figure in the records of the Board. As per the records of the CMC these properties came into existence from dates ranging between one and 11 years earlier to the period of audit. Non-raising of tax demands for these properties resulted in a short assessment of ₹ 21.35 crore. Similar short assessment in respect of the Ambattur municipality was in the order of ₹ 1.53 crore involving 8,827 properties. This indicated deficiencies in the existing internal control for ensuring completeness in transfer of data from CMC. A similar observation raised in the earlier review report yielded ₹ 2.91 crore to the Board. However no sustainable action has been taken to

ensure that all live properties are brought under the tax net of the Board. The Board in the exit conference (June 2010) promised corrective action.

1.4.9.7 Non-raising of demands in respect of Metered connections

The Board has 17,864 metered connections for which demands for water charges were to be raised monthly based on meter readings. Data analysis showed that

(a) in respect of 1,319 new metered connections, even after lapse of two months to four years from the date of connection, Board has not started raising demands for charges, resulting in loss[49] of ₹ 85.45 lakh;

(b) in respect of another 974 connections, demands were raised belatedly resulting in a notional loss on account of interest of ₹ 8.91 lakh for the intervening period and

(c) in respect of 1,344 connections, though the demands were raised, they were not continuous and no demands were raised for several intervening months. This resulted in a loss ₹ 25.05 lakh.

It is stated that non-integration of the 'new connection' system with the ERP system has resulted in such losses. The Board replied (May 2010) that they would take steps to ensure monthly readings were taken and billed.

1.4.9.8 Mismatch of consumer numbers between the CMC and the Board

Non-revision of water tax in 6,355 properties - loss of revenue of ₹ 82.49 lakh

The Board adopted the CMC number as their consumer number for their assessment. However, data analysis showed that there were several live assessees in the Board's database who could not be directly linked to the CMC's database through their consumer number as their consumer numbers adopted in Board's data were different with the CMC data. As a result, updates of AVs relating to these properties could not flow to the Board's data with the existing arrangement. Of these, 6,355 properties did not suffer even the minimum 20 *per cent* upward revision of water tax that was due from second half year of 1998-99[50] resulting in a loss of revenue of ₹ 82.49 lakh. In its reply (May 2010) the Board accepted the possibility of variation between their codes and that of the CMC and promised corrective action.

1.4.9.9 Delay in raising of demands for water tax for new properties

Delayed raising of demands for water tax resulted in loss of interest of ₹ 89.38 lakh

Though the CMWSS Act, 1978 provided for the obtaining of AVs from the CMC till such time the Board was able to assess the AVs by itself, this procedure was continued indefinitely. Thus, any delay in assessment of properties by the CMC or a delay on the Board's part in obtaining the information resulted in a corresponding delay in raising demands for water tax

[49] In the absence of actual readings, the losses have been calculated based on the minimum charges applicable for metered connections in respective categories.

[50] From October 1998 the AV of all properties in Chennai city were increased, the minimum of which was 20 *per cent*.

for new properties. In respect of 96 *per cent* of new properties inducted from April 2007, demands were raised belatedly resulting in a notional loss of interest of ₹ 89.38 lakh to the Board. The Board in their reply (June 2010) stated that the procedure of obtaining AV from the CMC was being streamlined to cut down delays.

1.4.10 Complaints monitoring – Ineffective automation

The ERP system envisaged the implementation of an online Complaints Monitoring System (CMS) wherein all complaints received were to be recorded in real time, capturing the time of registration from the system. Based on this time, deadlines were fixed in the system for resolving the complaints. The system would escalate the complaints to higher authorities if the complaints were not resolved by the fixed deadlines. However, data analysis of the complaints registered and details of their further processing showed that the system was not functioning on line as envisaged, as brought out in the following paragraphs.

1.4.10.1 Functioning of Complaints Monitoring System

Complaints monitoring is not online thus not serving the purpose to the Board as well as the general public

All complaints received were initially recorded in manual registers and then fed to the computer system with delays ranging between a day and a month. Such delayed entry generated a set of irrelevant deadlines/dates for resolving the complaints and escalating the unresolved complaints to higher authority. It was noticed that the system was working on a batch process. As a result, complaint numbers were not given to the complainants and job slips were not generated for the field staff, as envisaged. The system did not yield any additional benefit over and above the existing manual system either to the Board or to the general public. The Board in its reply (April 2010) accepted the facts and promised to make the complaints monitoring system on-line.

1.4.10.2 CMC numbers not captured - no useful MIS information possible

The system was designed to capture of the CMC number in respect of each complaint but its capture was made optional. Neither the consumers nor the Board's officials were advised to furnish/obtain the CMC numbers citing public inconvenience. As a result, the CMC numbers were not captured in respect of 95 *per cent* of the complaints. This resulted in the complainants remaining un-identifiable with their complaints purported to have been received from 'General Public'. Data analysis of complaints showed that though 1,46,566 numbers of complaints registered related to sewerage block within individual properties, the same were registered as those received from general public. Thus such complaints could not be tracked to the respective complainants/properties and remained un-identifiable for follow up activities. Even duplicate complaints involving the same properties could not be tracked. The Board in their reply (April 2010) stated that action would be taken to get the CMC number from the complainants.

1.4.10.3 Data captured lacked integrity

The complaints data contained erroneous and redundant information and lacked integrity

The CMS database lacked integrity as 4,07,239 records captured under it contained erroneous, misleading and redundant information as detailed below.

The time of registration and the time of clearance of the complaints did not reflect the actual time of these events as 25,808 complaints were stated to be cleared within seconds of their registration. Similarly 58,134 complaints were cleared in 1 to 5 minutes of their registration indicating absence of online system.

- 2,363 complaints remained outstanding for periods between 1 and 24 months of their registration as the fact of their clearance was not updated in the system.

- Complaints were to be classified as 'very urgent', 'urgent' and 'not very urgent' at the time of their registration and based on this categorisation the system fixed the target time for resolving the complaint. However, all the complaints were categorised as 'urgent' as a matter of routine, defeating the purpose of its capture.

- As all complaints were registered by the employees of the Board, the provision to enter the source as 'employee' in all the records which was redundant could be done away with.

- It was indicated that all the complaints received were through telephone only though the complaints were also being received through, e-mail and also in person.

The Board in general acknowledged (April 2010) all the above deficiencies and promised corrective action.

1.4.11 Inventory Management system

The inventory management system - which catered to stock valued at ₹ 12 crore and was part of the ERP system since 2004. The deficiencies in the system were as brought out.

1.4.11.1 Differences in stock value

On a test check of one month's ERP data of the inventory system with the manual ledgers maintained in the stores, differences amounting to ₹ 23,64,141 in ground stock in respect of 16 items were noticed. The Board accepted (May 2010) the difference attributing the same to wrong data entry and promised rectification action.

Further, in respect of all the 12 storage depots, the value of stock as per the basic records in the ERP system did not agree with the value of stock projected in final accounts. While the value of inventory in the ERP system was ₹ 13.09 crore, the same was projected as ₹ 12.51 crore in the Balance Sheet . Since the figures in the Balance Sheet are duly certified by the Board, it was apparent that the data in the ERP system was not dependable. The Board replied (June 2010) that steps would be taken to set right the discrepancies.

1.4.11.2 Valuation of Stock

(i) The ERP system calculated the value of stock items to 6 decimal places of a rupee from which it computed the value of issues. However, in the manual records the rates were calculated manually adopting 2 decimal places and the same has been adopted in financial accounts by the Board. The Board in their reply (May 2010) accepted the facts and stated that they would follow the values as provided for by the ERP system in future.

(ii) The software lacked a provision for accounting transfer of an item of stock between sections/wings. Scrapped items were also not accounted in the inventory management system for want of a separate coding system. The Board replied (May 2010) that they would suitably modify the system.

1.4.12 GPF accounting system

1.4.12.1 Interest on GPF Subscriptions

Rules for calculation of interest on GPF subscriptions not mapped correctly in the system

GPF Accounts of staff and workers of the Board are maintained as per the GPF (Tamil Nadu) Rules. Rule 13(3) thereof states that, where there has been a delay in the drawal of pay of a subscriber and consequently in the recovery of his subscription, the interest thereon shall be payable from the month in which the pay of the subscriber was due, irrespective of its day of drawal. However, the system, allowed interest on these subscriptions only from the month in which they were recovered resulting in loss of interest for the intervening period to 44 subscribers who had drawn their salaries in subsequent months. The Board replied (June 2010) that the software would be suitably modified after verifying the rule position.

1.4.12.2 Deficiency in GPF Account Slips

The GPF accounting system had a provision in the data entry screens for nullifying any excess posting of credits/debits by posting compensating figures. This resulted in modifying the annual account slips and exhibiting a set of misleading figures therein. The Board, in reply (May 2010), accepted the flaws in the data entry form/ GPF slip print out and stated (June 2010) that the program will be corrected to print GPF Account Slips without any discrepancies.

1.4.13 Conclusion

The Board, whose major activities were already computerised, introduced (April 2004) an ERP System to integrate all its activities after a pilot study. Due to inadequate planning and poor implementation the ERP system was not fully functional (June 2010).

- The core of the ERP system *viz*., Financial Accounts, was not functional.
- Online complaints monitoring system with an elaborate infrastructure did not achieve intended objectives.
- Maintaining inventory on three parallel systems, *viz*., ERP, Unix/Cobol and a manual system resulted in inconsistencies across the systems.

The investment of ₹ 9.63 crore on the ERP system in addition to annual recurring expenditure of ₹ 0.98 crore on maintenance of hardware, software and network connectivity did not yield desired results and the Board continued to suffer losses aggregating to ₹ 42.69 crore on account of short/delayed raising of demands on water taxes/charges due to input/output control deficiencies.

1.4.14 Recommendations

To set right the deficiencies observed and to avoid recurring losses the Board should

- ensure on-line preparation of final accounts through the ERP by integrating all other modules including inventory management;
- make complaints monitoring on-line by capture of data in real time so as to benefit the stakeholders;
- devise a mechanism possibly through a network interface ensuring quick, complete and regular transfer of data from CMC and Ambattur Municipality to avoid delay in collection and arrest leakage of revenue and
- make good the losses and short-assessments pointed out by audit and identify similar deficiencies across the Board and take necessary correction in the system so as to avoid continuance of such deficiencies in future.

PUBLIC (ELECTIONS) DEPARTMENT

1.5 Preparation of Electors' Photo Identity Card and updation of Photo Electoral Roll

Highlights

The preparation and updation of electoral database is the responsibility of Chief Electoral Officer. The Public (Elections) Department introduced the concept of photo electoral roll in July 2006 in the entire State of Tamil Nadu. Audit examination revealed unwarranted deletion of voters from the roll, non-issuance of Electors' Photo Identity Card to eligible voters, shortfall in coverage of fresh electors, errors in the database due to inadequate validation controls in the system leading to chances for bogus voting.

- **The Department is yet to formulate an Information Technology policy, even though computerisation of electoral rolls is about a decade old.**

(Paragraph 1.5.7.1)

- **Documentation exists neither for old software nor for the present Electoral Roll Management System software.**

(Paragraph 1.5.7.2)

- **No proper back up storage exists; consequently the data of earlier years may not be available.**

(Paragraph 1.5.7.3)

- **Central Server is still to be connected with District Servers.**

(Paragraph 1.5.7.4)

- **The Department did not have backup of 73 lakh eligible voters who were deleted for want of photographs in 2006.**

(Paragraph 1.5.9.1)

- **55 lakh eligible electors were not issued Electors' Photo Identity Card as of August 2009.**

(Paragraph 1.5.9.2)

- **More than six lakh fresh eligible voters were not included in the roll during 2007 to 2009.**

(Paragraph 1.5.9.3)

- **Errors in the database due to inadequate validation controls in the system may contribute to bogus voting.**

(Paragraph 1.5.10)

- **Failure to negotiate with the vendors led to huge financial outgo in printing of Electors' Photo Identity Card during 2006 and 2007.**

(Paragraph 1.5.13.1)

1.5.1 Introduction

Article 324 of the Constitution of India, empowers the Election Commission of India the superintendence, direction and control of the preparation of the Electoral rolls and the conduct of all elections to the Parliament, Legislature of every State and to the offices of the President and Vice-President. At the State level, the Chief Electoral Officer (CEO) is an officer of the Government in the cadre of Secretary designated or nominated by the Election Commission under Section 13AA of the Representation of the People Act, 1950 in consultation with the State Government.

1.5.2 Organisational structure

The Election Commission of India is assisted by the Chief Electoral Officer (CEO) at the State Headquarters and by the District Election Officers (DEOs) being the Collectors at the District level except in Chennai District, where the Commissioner of Chennai Corporation is the DEO. The Electoral Registration Officers (EROs) and Assistant Electoral Registration Officers (AEROs) function under the District Collectors in the Taluks.

The Electoral rolls are prepared and maintained by the EROs under whose orders any inclusion, modification or deletion to the existing electoral rolls are carried out. The database in the District Server in the DEO's office is updated on the basis of these orders.

1.5.3 Overview of the system

The Election Commission of India (ECI) has been endeavoring to improve the fidelity of Electoral Rolls. The electoral roll is a list of people registered to vote in the public elections organised and conducted by ECI. The electoral roll is normally revised every year to include the names of those who attained 18 years as on 1st January of that year, voters who have migrated from other constituencies and to delete the names of those who have either died or moved out of the Constituency. The updating of electoral roll is a continuous process.

The issue of Electoral Photo Identity Card (EPIC) was taken up in 1993 so as to check the identity of the electors and also to prevent impersonation at the time of poll. An EPIC issued to an elector is a permanent document valid for his life time and has a unique number. In 1997, the ECI decided to computerise the electoral rolls. As a further improvement, the ECI embarked upon a new initiative of inserting photographs in the Electoral Rolls for identifying the electors at the Polling Stations. In Tamil Nadu, the exercise of preparation of Photo Electoral Rolls began in July 2006 soon after the elections to the State Legislative Assembly.

During 2006 and 2007, the execution of work relating to issue of EPICs and printing of Photo Electoral Rolls was entrusted to ten vendors dividing the State into 14 regions. The Department appointed M/s CMC Ltd., as the State Level Agency (SLA) (January 2008) and entrusted with them all Information Systems (IS) related functions (both hardware and software) for a contractual period of six years. EPIC centres were established one for each Assembly Constituency (May 2008) to cater to the needs of the electors to generate new EPICs/duplicate EPICs.

The electoral roll database was earlier maintained in "MS-Access" till June 2009 and then migrated into SQL in August 2009 to facilitate a centralised State level database. The "Electoral Roll Management System" (ERMS), software developed by the SLA is being used by the Department from the summary revision, 2010. The data entries made at EPIC centres are stored at the District Servers at DEO's office and interconnected through Tamil Nadu State Wide Area Network (TNSWAN). There were about 4.25 crore registered voters in Tamil Nadu spread over 30 districts, 234 assembly constituencies and 54,542 polling stations as on 1st January 2010.

1.5.4 Audit Objectives

The main objective of the IT audit of the Electoral Roll system was to see whether the primary objective of the Department to have an error-free electoral roll and issue of EPIC to all eligible voters has been achieved.

For this purpose, audit verified whether -

- sufficient controls existed to ensure completeness, correctness and reliability of the database;
- the system had adequate IT security controls to ensure that data was safeguarded against accidental or wilful manipulation;
- the department had adequate backup policy and business continuity plan;
- the benefits derived were proportionate to the investments made and
- the expenditure towards the generation of EPICs/photo rolls was properly monitored.

1.5.5 Audit criteria

Audit used the guidelines and instructions issued by ECI to CEO from time to time and the instructions issued by the CEO to DEOs for conducting the revisions, issue of EPICs and printing of rolls etc.

1.5.6 Audit scope and methodology

The data and related records pertaining to the period 2006 to 2009 in respect of ten districts[51] out of 30 districts were studied and analysed in audit. Computer assisted auditing methods were used to analyse the data and the related manual records. The data in respect of ten districts were downloaded and analysed using Computer Assisted Audit Techniques (CAATs). The audit commenced with an entry conference with CEO in January 2010 and concluded with exit conferences in two stages in July/October 2010.

The major findings of IT audit are summarised in the succeeding paragraphs.

1.5.7 General controls

1.5.7.1 IT Policy

Even after 12 years of computerisation of electoral roll, the department is yet to frame an IT policy

The Department computerised its activities in 1997. It had invested a sum of ₹ 92 crore (2006 to 2009) towards creation of IT infrastructure and printing of electoral rolls/EPICs but is yet to formulate an IT policy and strategy for proper governance and control of its IT related activities. The Department replied (July 2010) that since the basic purpose of computerisation was to print the rolls rather than to have a database management system the objective was limited. Hence, the need for developing a full-fledged IT policy was not felt essential and there were no directions from ECI in this regard.

However, it is reiterated that formulating an IT policy and IT strategy would be essential in the light of the department having moved towards a database management system since 2009.

1.5.7.2 Documentation

The department was using the software developed in MS-Access through outsourcing for more than a decade, for printing of EPICs and generation of Photo Electoral Roll. After migration of the database to SQL (August 2009) from summary revision, 2010, a new software called Electoral Rolls Management System (ERMS) is being used.

Documentation for the old and the present software was not available

It was observed that the User requirement specifications (URS), System requirement specifications (SRS) were not available with the department for the earlier software. In respect of the new software, ERMS also, they remain to be documented. Further, it was noticed that frequent changes were being

[51] Chennai, Coimbatore, Cuddalore, Dharmapuri, Krishnagiri, Madurai, Namakkal, The Nilgiris, Thiruvallur and Villupuram

made to the ERMS software during implementation, indicating the absence of user acceptance test (UAT) before its implementation.

The department replied (January 2010) that it has followed the data structure as per the guidelines received from the ECI in 2008 and System requirement specification and User Requirement Specification based on the directions received from time to time from ECI.

However, it is suggested that such instructions and guidelines need to be documented for future reference.

1.5.7.3 Storage of backup

The Department is yet to have a proper backup policy for its database

The backup of the database was periodically taken up at the District level in CDs and a copy of the same was regularly sent to CEO. However, such backup CDs were not properly stored and hence were not readily traceable at CEO office and at DEO offices. For instance, the backup CD for Chennai district for 2007 was not readily traceable by the department (July 2010) during the period of audit.

1.5.7.4 Centralised database

Central Server at CEO's office yet to be connected with District Servers

One of the main objectives of the Department is to maintain a centralised database at CEO's office. It was planned to provide connectivity using TNSWAN[52] for the EPIC centres, District server at DEOs office and also with the central server located at CEOs office. Towards this objective, 266 numbers of network switches were procured and installed (May 2008) at an expenditure of ₹ 20.38 lakh.

However, the centralised database concept was yet to take off due to non-connectivity of the Servers at the Districts with the Central server at the CEO's office. It was observed by comparing the database of one district with another in the test checked districts that instances of same records available in both the districts were noticed which would ultimately give room for bogus voting, in addition to boosting up of the size of the electoral roll. Centralised database would assist in identifying and elimination of duplicate records and in updating records owing to shifting of residence.

The department replied (February 2010) that action would be taken to have a centralised database server early with the newly developed software.

[52] Tamil Nadu State Wide Area Network

1.5.8 Logical Access Control

It was observed during current summary revision, 2010 that in one of the test checked districts[53], access to the system was done using same user id and same password by both data entry operators and programmers indicating absence of segregation of duties among users. However, in respect of other test checked districts, the access was made with different passwords.

1.5.9 Incomplete Database

1.5.9.1 Large scale deletion of voters from voter list

73 lakh eligible voters were deleted by the department in 2006 without maintaining any backup

Immediately after the State Assembly Elections (2006), during the preparation of photo electoral rolls, the department issued notices to voters to either submit photographs or appear in person for taking photographs at the Designated Photo Locations (DPL). In this process, the department deleted the data relating to around 73 lakh voters, from whom photos could not be captured/ collected, however, without maintaining a backup for such deleted records. Since updating of photo electoral rolls is an ongoing process, deletion of 73 lakh voters from the database without any backup is irregular.

The Department replied (July 2010) that they did not have the backup of such large scale deletions because of its volume.

The reply could not be accepted because the deleted records were approximately 2.5 lakh per district and could have been stored in a CD/DVD.

1.5.9.2 Failure in issuance of EPIC to eligible fresh / residual voters

Fifty five lakh eligible fresh/residual voters were not issued EPIC

One of the main objectives of the department during each revision was to bring down the number of "Residual Electors"[54], in addition to identifying the fresh electors (18 years) and issue EPICs to them. The residual electors as on 1 January 2006 were 200 lakh. During 2006 to 2009, the fresh inclusions made by the department (after considering all the deletions made during 2006-2009) worked out to 40 lakh. The department declared (June 2010) that they were nearing cent *per cent* photo coverage. Hence, EPICs should have been issued to 240 lakh eligible voters. However, the department has so far issued only 185 lakh EPICs resulting in a shortfall of 55 lakh. Further 185 lakh EPICs issued included duplicate/replacement cards, the break up details of which were not available with the Department.

Hence, the declaration of the department (June 2010) that they are nearing cent *per cent* photo coverage was incorrect.

1.5.9.3 Shortfall in enrolment of the fresh electors in the age group of 18 plus

[53] Thiruvallur District

[54] Residual Electors – whose details are available in the electoral database without photo / incorrect photo

The Department failed to cover six lakh eligible fresh voters during 2007 to 2009

A comparison of the year-wise/district-wise manual statements relating to new inclusions and deletions furnished by Elections Department with the estimated child population[55] as on 30 September 2002 revealed that the shortfall in coverage of eligible fresh electors during 2007, 2008 and 2009 were 3.6 lakh, 2.3 lakh and 0.6 lakh respectively.

However, analysis of data as furnished by the department in respect of seven sample districts showed that such shortfall ranged from 63 to 78 *per cent* during 2009 as detailed in **Table 1**.

Table 1: Shortfall in enrolment of fresh voters

District	Estimated Population (18 plus)	Actual Inclusion			Total	Shortfall	Percentage
		18 yrs	19 yrs	20yrs			
Chennai	79,824	Nil	6,709	18,728	25,437	54,387	68
Thiruvallur	54,498	Nil	5,593	12,442	18,035	36,463	67
Coimbatore	68,615	99	5,170	12,474	17,743	50,872	74
Namakkal	24,993	Nil	2,862	5,815	8,677	16,316	65
Villupuram	64,210	Nil	7,732	16,192	23,924	40,286	63
The Nilgiris	15,059	Nil	1,161	2,160	3,321	11,738	78
Cuddalore	47,243	Nil	5,842	11,107	16,949	30,294	64
Total	**3,54,442**	**99**	**35,069**	**78,918**	**1,14,086**	**2,40,356**	**68**

The Department replied (June 2010) that it was not possible to cover all the fresh eligible voters, as there was no system of inclusion of a person's name in the electoral roll automatically and the onus rests with the individual only.

The reply is not acceptable as one of the main objectives of conducting door to door verification is to identify fresh electors and include them in the roll as reiterated by ECI time and again. It is stated that such shortfall in the inclusion of fresh electors reflected the quality of door to door verifications done by Government officials who acted as Booth Level Officers (BLOs) with a meager honorarium of only ₹ 1,500 per year.

1.5.9.4 Comparison of electoral database with Civil Supplies Department

The electoral database were not consistent with Civil Supplies database

A comparative study of Election data with Civil Supplies Department data, with particular reference to Thiruvallur District (Poonamallee Assembly Constituency) revealed that many of the names which appear in the Ration Cards issued by the Civil Supplies Department do not appear in the Electoral roll and *vice versa*.

The main reason for such inconsistency in the electoral database is due to shifting of individuals from one place to another. In the case of ration card, if there is a shifting of residence, the responsibility for obtaining fresh ration

[55] As per the seventh All India Educational Survey data as available in the web site http://www.schools.tn.nic.in/SV/SV5.pdf

card in the new place rests with the individual by getting his name deleted in the old place. No such procedure is in existence in the case of EPIC/Photo electoral roll. Unless the importance of the EPIC is made on par with that of the ration card, by enforcing proper methodology in the case of "shifting" of residence, the situation would remain the same leading to possession of more than one EPIC by individual and duplicate entries in the photo rolls.

1.5.10 Input/validation checks

Despite series of summary revisions taken up through 100 *per cent* field verifications (as claimed by the Department), there were numerous cases of invalid and incorrect data due to poor input and validation controls in the system. The data furnished by the department in selected ten districts were analysed using CAATs and the following types of errors were detected in the database maintained in MS-Access.

- As per Representation of the People Act, 1950, no person is entitled to be registered in more than one constituency and for any constituency more than once. The ID number allocated to an individual voter is a unique number and no two persons should have the same number. During 2006, 9.34 lakh duplicate ID cards (in 26 Districts) were generated and issued to electors. The above error was identified by the Department through de-duplication software at a later stage and such duplicate records were removed from the data. This has resulted in a wasteful expenditure of ₹ 1.28 crore incurred in printing of such cards. Further data analysis showed that such duplicate IDs still existed (10,457 records) in test checked eight[56] districts. This indicated absence of proper validations in this regard.

- There is no proper validation even in the present ERMS software as well. The new system also permitted generation of another ID for the same set of data.

- The ID card number should have a prefix indicating the Assembly Constituency. There were cases of ID card numbers without such indication.

- The system accepted values upto 999 and less than 18 years against age of voters.

- The voter name and the relationship name were identical in 28,865 records indicating data entry error.

- The voter name is left blank in 14,339 records and the relationship name is left blank in 14,208 records. Even in the present ERMS software, there are no mandatory fields.

[56] Chennai, Coimbatore, Cuddalore, Dharmapuri, Madurai, Namakkal, Thiruvallur and Villupuram

- If the voter is a "Male", then the relationship cannot be 'husband'. It was observed that in respect of 2,437 records, incorrect gender was fed

- The photograph of an individual voter in an EPIC should be unique and pertain to the concerned individual. In respect of 46,451 records, there were duplicate photo images.

- The photo image field was blank in 1.34 lakh records and the combination of ID card number and photo image fields were blank in 1.10 lakh records.

- The photo mismatch errors/incorrect relationship/gender/age etc. which were existing in 2006 database were not rectified till date in respect of certain records.

The Department accepted (May 2010) the audit observations and replied that action would be taken to rectify the defects in the current system.

1.5.11 Micro Analysis

Data of three districts[57] where bye elections were conducted in 2009/2010 were analysed in-depth. The data analysis showed the existence of the following types of errors:

- Records which were deleted due to death, continued to appear in the live electoral roll, which denotes that the database was not duly updated.

Lack of validation controls in the system led to room for bogus voting in General Election 2009

- Before General Elections 2009, two supplementary electoral rolls were prepared by the department to update the original electoral roll. The Supplementary roll - 2 contained only fresh electors identified before elections. However, it was observed that, none of the records in all the three districts contain ID Number / Photo Image (36,149 records). Due to the absence of photos in the roll, the main objective of preparation of photo roll to act as a deterrent against impersonation, bogus voting and even against inclusion of bogus persons in electoral roll is lost.

- If an elector shifts his residence within the Assembly Constituency, his record should be modified with change of residence. However, in many of the cases a fresh inclusion is made instead of modification, resulting in inclusion of the same voter in two different places (268 records).

- Though there were no changes in the existing details of the voter, they are included in the supplementary rolls with "modified status" resulting in his existence in two different places (1,782 records).

[57] Dharmapuri, Krishnagiri and Madurai

- The name of an elector appears in two different places (with same ID card) with different images (4,127 records).

Thus, the database with the above stated errors could lead to bogus voting. These discrepancies were due to non-integration of the tables relating to existing, modified and deleted records before conduct of elections. Hence, three separate rolls (mother roll, supplementary rolls 1 and 2) were used during elections, giving room for possible bogus voting. Hence, integration of data should be mandatory before conduct of each election. During the exit conference (October 2010), the department replied that it is not possible to integrate the tables at the time of elections due to paucity of time.

1.5.12 Updation of Master tables before Summary Revision 2010

The master data table of the electoral roll contains details of the Assembly Constituency numbers, booth numbers, Blocks, Sections (streets), Polling stations, Post Offices, Villages etc., with appropriate codes and hierarchical linkages which serve as critical inputs for generation of EPICs and photo rolls to identify the voter individually.

As these data captured in the master tables are crucial, these tables should be updated before start of the data entry work, when summary revision is taken up to ensure correctness of data in the electoral roll.

However, it was noticed that during the Summary Revision, 2010, instructions for updation of master data were issued (March 2010) only after near completion of the data entry process.

The department stated (June 2010) that the master data was already updated in 2009 and as there was no mandate to publish the rolls in English, the updation of fields (English) was not considered significant.

The department's reply is not acceptable in view of clear instructions to perform (September 2008) data entry in both Tamil and English as against the unilingual data entry made earlier and the rolls were to be published in English as well as in the regional language (Tamil) as mandated by ECI.

1.5.13 Financial issues

1.5.13.1 Printing of EPICs during the year 2006

Failure to negotiate with vendors led to huge additional expenditure to Government in printing of EPICs

(i) During the year 2006, ten vendors were selected covering 30 districts in the State for on-line production of EPICs and generation of photo electoral rolls involving five activities[58] (C1 to C5). The CEO negotiated with all the 10 firms and reduced the rates for selected activities in respect of four districts. The Designated Photo Locations (DPL) established for undertaking C1 activity varied according to the size of the population in a District.

It was observed in audit that though the activities carried out by the vendors were one and the same, there was huge variation (₹ 8.89 to ₹ 21.25 per card) in the rate of C1 activity. The rates approved in 14 districts out of 30 districts, where the activity was carried out in plains, were over and above ₹14.98 per card, the rate quoted by the vendor for the Nilgiris District, a hilly terrain and ranged from ₹ 16.70 to ₹ 21.25. Negotiation at par with the rates adopted for Nilgiris district would have saved a sum of ₹ 1.84 crore in printing of EPICs during 2006 and 2007.

(ii) When a vendor was allotted more than one region, the department should ensure to keep the rate constant in both the regions. However, department approved two different rates *viz*., ₹ 11.57 and ₹ 9.94 per card (C1 activity) for adjacent districts[59]. Failure to streamline the rate resulted in extra expenditure of ₹ 13.30 lakh[60] for printing of 8,16,058 EPICs at the rate of ₹ 11.57 per card in Kancheepuram District.

Department replied (April 2010) that as more number of vendors were required to be inducted simultaneously for extensive coverage and due to paucity of time and to avoid public criticism, different rates were settled with vendors, involving huge outgo of expenditure.

The reply is not acceptable as conduct of elections is a planned event.

(iii) Though the rates for C1 to C5 activities were negotiated and brought down in certain districts and the same were communicated to the DEOs concerned, the revised rates were not adhered to by the DEOs while making payments to the vendors. In Thiruvallur District, the revised rates were not adopted in certain cases resulting in excess payment of ₹ 4.15 lakh.

DEO, Thiruvallur accepted (May 2010) the facts and intimated that action would be taken to recover the excess payment.

1.5.13.2 Payments towards Digital cameras

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58 C1-Online production of EPICs at DPL (static units); C2- Online production of EPICs at DPL (mobile units); C3-scanning of miniatures and retrieval, numbering and resizing; C4-Linking of images and printing of draft roll and C5- Printing of final rolls

59 Kancheepuram and Thiruvallur.

60 8,16,058 x ₹ 1.63 (11.57-9.94)

Digital video cameras/still cameras were hired and deployed at sensitive polling stations during elections. During Assembly Elections, 2006, tenders were floated centrally and the rates were finalised. However, for the General Elections, 2009, quotations were called for and the rates were finalised at the district level which varied from district to district ranging from ₹ 1,150 to ₹ 4,500 per camera. Further, the above agreed rates were also not adhered to and the settlement was made at higher revised rates based on the individual claims setting aside the already agreed rate. Settlement made at a higher revised rates led to excess payment of ₹ 28 lakh.

CEO replied (February 2010) that due to paucity of time, tenders could not be floated centrally and hence variation in the rates was inevitable.

The reply is not acceptable as the conduct of elections is a planned event.

1.5.13.3 Unspent balance with Electronics Corporation of Tamil Nadu

Electronics Corporation of Tamil Nadu (ELCOT) is the nodal agency for procurement of computer infrastructure and accessories. Department released ₹ 5.63 lakh to ELCOT during March/November 2009 for the purpose of upgradation of hardware without taking into account the unspent balance of ₹ 52 lakh lying with ELCOT from the earlier amounts released for the related purchases during 2007. This indicated absence of monitoring of the advances made to ELCOT.

1.5.14 Other Points of interest

1.5.14.1 Deletion of death cases registered with local bodies

According to the instructions received from ECI in 1994, it is mandatory that every local body should furnish to the respective ERO of the Constituency, the details of death cases and such cases may be deleted from the data by the concerned EROs. In Ambattur Municipality, 1,676 death cases were registered in 2009, whereas in the Electoral database only one death case was accounted for. Hence, it is evident that the instructions of ECI were not followed scrupulously.

The Department replied (June 2010) that DEOs have been instructed to get updates from local bodies in this regard.

1.5.14.2 Deletion of non-bailable warrants cases

As per ECI instructions (August 2005) the names of persons against whom non-bailable warrant (NBW) cases are pending for more than 6 months were to be removed from the electoral roll after following due procedure. However, it was noticed that as against 8,894 NBW cases included in the list, only 907 cases were deleted from the roll. Though, two major elections were conducted in Tamil Nadu i.e. 2006 (Assembly Elections) and 2009 (General Elections), no action was taken by the Department to delete the remaining in this regard.

1.5.14.3 Electors' Photo Identity Card centres

The EPIC centres were established (May 2008) in all the 234 Assembly Constituencies in Tamil Nadu with the objective of issuing new/duplicate/replacement EPIC cards. However, in the test checked districts, it was observed that fresh EPICs were not issued on a day to day basis. New cards were issued from the EPIC centres only at the time of inclusions identified during summary revision period. At present replacement/duplicate cards were only issued from the EPIC centres.

1.5.14.4 Delay in establishment of infrastructure for Tiruppur District

Government sanctioned ₹ 9.33 lakh in May 2009 to ELCOT for the procurement and supply of computers and peripherals, for Tiruppur District which was newly formed (October 2008). It was noticed that though the servers and other peripherals were installed (May 2010), the scanners and switches were yet to be procured and installed (August 2010), due to which the network connectivity between EPIC centres and the District server, Tiruppur was yet to be established. The database of this district is continued to be maintained at the district server at Coimbatore.

1.5.15 Conclusion

The fidelity of the electoral roll is a pre-requisite for conduct of free and fair elections. This implied that the data should be complete, correct and reliable. Though a sum of ₹ 92 crore was spent (2006 to 2009) for preparation/printing of EPICs and updation of Photo Electoral Roll, by conducting various summary/special summary/continuous revisions, the department is yet to achieve the said objective due to lack of input/validation checks in the system. The department is yet to achieve completeness of electoral photo roll since shortfall in issuance of EPICs was to the extent of 55 lakh (23 *per cent*) as on date despite the department's claim of near complete achievement in this regard. Department has failed to enroll all the new eligible voters and short fall was about 6 lakh indicating poor door to door campaign to add new voters. The department is not following any fool-proof method to ensure due accounting of shifted voters from one place to another and this resulted in duplicate voter ID cards for the same persons. A centralised database which would eliminate such discrepancies is still to be established.

1.5.16 Recommendations

- Establish a Centralised database with inbuilt controls to ensure fidelity of the electoral roll.

- Review and streamline the door to door campaign employed to cross verify the rolls and include fresh voters, effectively to achieve complete, correct and reliable database which would assist free and fair election process.