

CHAPTER II

PERFORMANCE REVIEWS (URBAN LOCAL BODIES)

This chapter presents three performance reviews dealing with (a) Computerisation of functions in Chennai City Municipal Corporation, (b) Functioning of health care system in urban local bodies and (c) Financial management in municipalities.

MUNICIPAL ADMINISTRATION AND WATER SUPPLY DEPARTMENT

CHENNAI CITY MUNICIPAL CORPORATION

2.1 Computerisation of functions in Chennai City Municipal Corporation

Highlights

- Due to deficient planning, the Integrated On-line Information Processing System initiated in 1997 could not be implemented and was abandoned in February 2004 after incurring an expenditure of Rs 1.60 crore.

(Paragraph 2.1.6.2)

- Incorrect classification of non-residential properties as residential or partly residential resulted in short-assessment of Property Tax of Rs 41.79 crore.

(Paragraph 2.1.6.4)

- Demands of Rs 4.65 crore for Property Tax were not raised due to deficient systems and *ad hoc* procedures followed.

(Paragraph 2.1.7.1)

- Demand for Property Tax of Rs 52.39 crore was raised short due to deficiency in the computer system.

(Paragraph 2.1.7.2)

- Property Tax demands of Rs 33.70 lakh were reduced without corresponding collections due to lack of access controls.

(Paragraph 2.1.7.6)

- **Incorrect application of unapproved basic rental rates resulted in over assessment of Property Tax by Rs 52.03 lakh.**

(Paragraph 2.1.8.1)

- **Short-assessment of Property Tax of Rs 1.21 crore was noticed but reasons could not be ascertained due to lack of audit trail.**

(Paragraph 2.1.10.1)

- **Absence of general control led to a shortfall of 20.53 per cent in capture of birth data and 32.89 per cent in capture of death data.**

(Paragraph 2.1.11.1)

- **Data on birth and death lack integrity due to absence of input controls.**

(Paragraph 2.1.11.3)

2.1.1 Introduction

The Chennai City Municipal Corporation (Corporation) started the computerisation of its functions with a UNIX¹ based system in 1988. In 1997, an Integrated Online Information Processing System (IOLIPS) (IRIX² platform using Oracle/D2K³ in client-server architecture) was conceived to cover 41 functions⁴ for which hardware and software were acquired at a cost of Rs 1.60 crore. Implementation of IOLIPS was discontinued in 2004. Subsequently, a web-based application was developed in-house using Linux/Oracle for a limited number of functions⁵.

Data was captured in 10 zonal offices and the central office. The data was stored in two servers at the main office connected with the zonal offices, through dedicated telephone lines. The computer wing is presently headed by an Assistant Executive Engineer, supported by a Systems Analyst, a Programmer and an Assistant Programmer.

2.1.2 Objectives of computerisation

An integrated computer system was launched in 1997 with funds provided by the World Bank. The objective was to improve the efficiency in the discharge of their responsibilities, elimination of human error in maintenance of records and to speed up the functions.

¹ **Unix** (officially trademarked as **UNIX®**) is a computer operating system.

² **IRIX** is an operating system developed by Silicon Graphics, Inc.

³ Developer 2000- a front end tool developed by Oracle.

⁴ 1. Services (10 functions), 2. Personal management (eight functions), 3. Projects (six functions), 4. Asset management (two functions), 5. Inventory management (seven functions) and 6. Finance accounts (eight functions).

⁵ Property Tax, Birth and Death, Professional Tax, Company Tax, etc.

2.1.3 Audit objectives

A review of the “computerisation” in the Corporation was undertaken with the objective of ascertaining whether

- the Corporation had a well defined policy and plan for computerisation,
- the systems were complete and dependable,
- the system had adequate access, input and validation controls,
- Property Tax assessments done through the system were in accordance with the rules and rates and
- the demands raised/collections made against the assessments were complete and correct.

2.1.4 Audit criteria

The audit criteria adopted were the

- Madras City Municipal Corporation Act,
- Instructions issued by the Government of India and Government of Tamil Nadu,
- Instructions issued and rates approved by the Council of the Corporation,
- Information available on the Website and Statistical Cell of the Corporation and
- Best practices for a computerised system.

2.1.5 Audit methodology and coverage

A general study of the computer policies of the institution and the systems available was conducted. The acquisition of hardware/software and infrastructure was examined followed by a check of the application software for its completeness and adequacy of controls. The review covered the specific fields of Property Tax and birth and death registration. The entire data for the period 1998-2006 relating to the subjects taken up, was downloaded and examined using SQL Queries and specially developed programs.

Audit Findings

2.1.6 General controls

General controls are the controls that regulate the environment in which the IT operations are run. These cover areas like system hardware and software acquisition and maintenance, application system development and maintenance, data centre operation and access security. Main examples include IT practices pertaining to IT security and information protection,

software change management, segregation of duties, business continuity planning and system documentation.

2.1.6.1 IT policy and planning

A clearly laid out IT policy combined with adequate planning are the essential pre-requisites for successful computerisation. A review of the computerisation process in Corporation disclosed the following lapses in planning.

2.1.6.2 Failure of IOLIPS

IOLIPS proposed for computerising 41 functions did not fructify due to improper planning and non-development of application software.

In 1997, when IOLIPS was planned, Corporation attempted to computerise 41 subjects in one go, without conducting any studies to assess the requirement, feasibility, etc. Equipment and system software were purchased for Rs 1.44 crore and installed in March 1999.

The development of application software was entrusted to Electronics Corporation of India Limited (ECIL), Hyderabad in an open bid, based on their lowest offer of Rs 16 lakh, while all other five bidders had quoted Rs 70 lakh or more. As a result of the inadequate systems study combined with the frequent changes of user requirements by Corporation, the developer could not complete the software even after the lapse of seven years, as against the agreed 15 months. The contract was terminated (June 2004) and implementation of IOLIPS was called off.

Under IOLIPS, the entire operation was dependent on a single central server. The server purchased (March 1999) at a cost of Rs 29.69 lakh recorded 18 *per cent* down time⁶ during the period from April 1999-July 2002 due to frequent hardware problems. The server was decommissioned from February 2004 as maintenance of such an unreliable server was considered uneconomical. Though the operation of the server was mission critical, Corporation had failed to consider the risk of attempting to have their entire computerisation dependant on a single server.

Thus, attempt to computerise too many subjects in one go and the incorrect choice of server led to the abandonment of IOLIPS rendering the entire expenditure of Rs 1.6 crore incurred on the project unfruitful, besides contributing to a seven year delay in the computerisation activities of the Corporation.

2.1.6.3 Unplanned development of computerisation - failure of system development controls

After abandoning IOLIPS, the Corporation continued its computerisation with a set of existing stand-alone applications and in-house developed web-based applications for Property Tax collection, birth/death registration systems etc., using two new servers purchased at a total cost of Rs 6.46 lakh. Documentation regarding various manuals, systems design etc., in respect of the in-house developed software, was not done. Absence of documentation

⁶ Time during which the server was not functioning.

reflects poor business continuity planning and lack of system development controls.

2.1.6.4 *Misclassification of properties in terms of usage – Short-assessment Rs 41.79 crore*

Lack of inbuilt controls to identify properties resulted in misclassification of properties leading to short-assessment of Property Tax (Rs 41.79 crore).

There was no system to monitor the changes in the manner of utilisation of a property if it was not reported by the owner. Such control is pertinent as the Property Tax assessed for a non-residential property is at least three times higher than that of an identical residential property. A comparison of classification of properties in Corporation with respect to that in Chennai Metro Water Authority revealed differences in classification of non-residential properties either as fully or partly residential properties resulting in difference in assessment of Property Tax to the extent of Rs 41.79 crore (September 2006), as shown below:

Sl.No.	Actual status of the property	Status as per assessment of Property Tax	Number of cases	Short-assessment (Rupees in crore)
(a) In respect of assessments made before GRS				
1.	Fully non-residential	Fully Residential	2,279	16.91
2.	-do-	Partly residential and partly non-residential	2,709	16.43
(b) In respect of assessments made after GRS				
3.	Fully non-residential	Fully Residential	346	2.28
4.	-do-	Partly residential and partly non-residential	914	6.17
Total				41.79

Besides, there were 11,042 properties that are partly non-residential and partly residential as per Chennai Metro Water Authority, but were treated as fully residential by the Corporation for taxation purpose. As data relating to the area under non-residential usage was not available, the resultant short-assessment could not be quantified.

The misclassifications are also confirmed by the fact that, against some of these properties, treated as residential for property tax purposes, trade licences have also been issued by Corporation.

2.1.7 **Property Tax assessment/collection systems**

The 'Assessment of Property Tax' has been fully computerised from the last General Revision Survey (GRS)⁷ (October 1998). The Property Tax collection system including raising of demands and watching of their collection, developed in-house after abandoning IOLIPS is functioning since 2004 and is

⁷ The revision of Property Tax of all available assesses by the Corporation is known as 'General Revision Survey'.

being used in the assessment/revision of property tax in respect of all the 5.63 lakh properties in Chennai city. The annual collection of Property Tax was of the order of Rs 220.55 crore (2004-05) forming 82 *per cent* of the total tax revenue, making the system mission critical to the functioning of the Corporation. The Property Tax system maintains the details about the assesseees and the tax assessed/reviseed as master information and the tax due from them in the form of a Demand, Collection and Balance register (DCB) in respect of each half year. The details of collections made are separately maintained with effect from June 2004 for subsequent transfer to the accounts of respective assesseees in the DCB. Lack of referential integrity⁸ is noticed among the master, DCB and the collection details. The discrepancies due to the lack of referential integrity are listed below.

2.1.7.1 *Non-raising of demands for live assesseees*

An examination of the DCB and the assessment records disclosed that demands relating to 695 assesseees aggregating to Rs 71.43 lakh per half year and to Rs 4.65 crore till date (September 2006) were not brought under the DCB accounting system. The existence of these properties was confirmed by the fact that some of them were actually paying their taxes, which were collected and accounted for under suspense.

It was also noticed that details about 850 intervening half-yearly demands amounting to Rs 14.33 lakh were found missing in respect of another 398 assesseees.

2.1.7.2 *Demands not raised for increased Property Tax from due dates*

Non-raising of demands in respect of revised assessments in respect of 11,573 assessments (Rs 52.39 crore).

Whenever there is a change in the area of a building or its usage, the assessment made is revised. Absence of provision for simultaneous updation in the DCB resulted in non-raising of demands amounting to Rs 52.39 crore due to revised assessments of tax made after II half-year of 1998-99 in respect of 11,573 assessments/properties till the II half-year of 2006-07, and the assesseees continued to pay their taxes at the old rates. Only with effect from I half-year of 2007-08 the revised demands were found to be updated, prospectively, in DCB.

2.1.7.3 *Demands against non-identifiable assesseees*

Identity details of 18,346 assesseees with an outstanding demand of Rs 33.92 crore of Property Tax were missing.

The details of the assessments including name and addresses in respect of 18,346 assesseees with an outstanding demand of Rs 33.92 crore were not available in the database. It was also noticed that in respect of certain demands the assessee codes available in the DCB were not in the format as adopted in the assessment database. Thus, there was a risk of non-recovery of the outstanding demands.

⁸ Ensuring the existence of data in one table with reference to the data already available in another.

2.1.7.4 *Inconsistencies in posting of collections*

Due to inconsistencies in posting of collection Rs 5.31 crore relating to 12,368 assesseees was posted in excess and Rs 5.63 crore relating to 11,984 assesseees posted short.

An analysis of the collection file disclosed the following discrepancies.

Discrepancies noticed	Number of Assesses	Amount (Rupees in crore)
Amounts collected from June 2004 to November 2006 still held in the collection file and not posted to individual accounts	49,275	18.32 ⁹
Collections posted in excess in individual accounts	12,368	5.31
Collections posted short in individual accounts	11,984	5.63
Amounts collected and kept in suspense as assessee codes furnished did not match with any existing assessee	14,681	8.83

The lack of referential integrity between the collection and the DCB coupled with inconsistencies in the posting of the collection information led to the presence of the above cases, rendering the database unreliable.

2.1.7.5 *Posting of collections without considering actual demands*

The system of posting of collections of Property Tax was not correct.

The Property Tax collection system accepted any payment lesser or excess irrespective of the actual outstanding demand. When excess amounts were collected, the same were neither adjusted against future demands nor exhibited as excess in any of the reports generated through the software.

The results are as below:

Discrepancies	Number of instances
Lump sum collections for more than one half-year, posted against a single half-year	1,455
Lump sum collections for more than one half-year posted against all the related half-years ¹⁰ resulting in excess posting	276
The amounts collected were in excess (by over Rs 100) of the demand for no apparent reason	1,49,842

The above discrepancies had the effect of rendering individual accounts incorrect.

⁹ Age-wise break-up as of September 2006:
 More than two years : Rs 0.54 crore (3,779 demands)
 More than one year : Rs 10.48 crore (77,211 demands)
 Less than a year but more than nine months : Rs 7.30 crore (26,836 demands)
 Total : Rs 18.32 crore (1,07,826 demands)

¹⁰ For example, if a half-yearly Property Tax for a property was Rs 100 and tax for three half-years was received, instead of posting Rs 100 in each half-year, Rs 300 was posted in all the three half-years.

2.1.7.6 *Reduction of dues without corresponding collections – Rs 33.70 lakh*

Details of collections amounting to Rs 33.70 lakh were not available in the database.

A test check of collections posted to the DCB for the year 2006-07 disclosed that collections amounting to Rs 33.70 lakh were posted against 3,316 half-yearly demands relating to 2,360 assessments without corresponding details of collection data being available.

2.1.8 *Change management controls*

A sound change management procedure ensures that the requisite changes are made into the software in an authorised, accurate and timely fashion and the changes made are properly documented.

2.1.8.1 *Application of unapproved basic rates - excess assessment of Property Tax- Rs 52.03 lakh*

Application of unapproved basic rates resulting in excess assessment of Property Tax of Rs 52.03 lakh.

It was noticed that higher rates were used in the assessment of Property Tax during November 2004 to April 2005 and thereafter the assessments were done using older rates. However, no documents supporting the approval of higher rates during the period were available. This resulted in excess assessment of Property Tax in respect of 3,221 assessments with the resultant excess demand aggregating to Rs 52.03 lakh.

2.1.9 *Lack of input/validation controls*

The objective of input control is to ensure that the data received for processing are genuine, complete, not previously processed, accurate and properly authorised and entered without duplication. Validation controls ensure the correctness and completeness of data entered into the system duly checking the same with respect to some other data/range available. These controls are essential in the software of Corporation considering the recurring financial impact such data is bound to have in respect of Property Tax assessment and collection. Analysis of the system revealed the following discrepancies.

2.1.9.1 *Incorrect adoption of rental rates leading to erroneous calculation of Property Tax*

The city of Chennai is divided into several localities and different rental rates are prescribed for residential usage and non-residential usage in each locality. While the rates for residential properties vary from Re 0.50 to Rs 2 per sq. ft. the rates for non-residential properties vary from Rs 3 to Rs 9. While the system itself could assign these rental rates, assignment of the rates was being done manually. There was no validation control to guard against incorrect assignment of rental rates.

A test check revealed that two to six different rental rates were adopted, in 366 instances, for assessments in respect of properties situated in the same locality and street. There were several instances, where within the same property, the commercial portion was assigned the rate pertaining to one location, while the residential portion was assigned the rate pertaining to a different location. This had the risk of inconsistencies in the assessment of Property Tax.

2.1.9.2 Discrepancy in roof-type information

Roofing in a building is classified into asbestos/tiled or RCC. While the former attracts a 20 *per cent* discount, the latter does not. In the data entry screen, the totals of RCC, asbestos and tiled roofing are first keyed in, followed by a floor-wise break-up therefor. As the totals and the components are independently keyed in, validation of one against the other is possible. The failure to provide for such a validation control may lead to incorrect assessment and also make the information undependable. An examination disclosed 3,491 instances, where the roof totals did not agree with the sum of their component values.

Amongst the above, there were 219 instances where the total area was put under 'RCC' with the entire break up under asbestos/tiled roofing and vice versa in 755 cases.

2.1.9.3 Discrepancy in ownership category information

For the purpose of assessment to Property Tax, usage of a building is classified into four categories namely, residential owner or tenant and non-residential owner or tenant. In the data entry screen, the floor-wise areas under each type of usage are keyed in and stored along with their system-calculated aggregates. A check disclosed that in respect of 367 properties, the aggregate figures did not agree with their respective break-ups indicating lack of validation control between the aggregate and the break-up of the floor wise area.

2.1.10 Process controls

Process controls ensure complete and accurate processing of input and generated data. The objectives of process controls are to ensure that the processing of transactions is correct, accurate and complete. Weak process controls would lead to inaccurate processing of transactions leading to wrong outputs/results. An analysis of Property Tax assessment system revealed the following.

2.1.10.1 Short-assessment of Property Tax – Rs 1.21 crore

The process controls inbuilt in the system were weak and the audit trails were also absent.

In the Property Tax assessment system, only the basic data required for the calculation of tax viz. floor area, roof type, usage, the eventual annual value and the tax assessed are alone stored. In the absence of intermediate factors such as the rental value calculated, the different discounts allowed, the depreciation allowed, etc., a check of all the 79,306 assessments was made after GRS by Audit using the existing procedure to assess the Property Tax. The check revealed that in 465 cases the Property Tax was assessed short by Rs 23.12 lakh per half year and aggregating to Rs 1.21 crore till date (September 2006). Further it was noticed that the system did not contain any audit trail to analyse the wrong procedures adopted by Corporation in calculating the tax in these cases.

2.1.11 Birth and death registration system

Registration of birth and death is carried out through the computer system from 1998 and is presently functioning on a web-based application developed in-house. As on date, the system contains information on 22.28 lakh births and 6.81 lakh deaths. An examination of the data disclosed the following.

General controls

2.1.11.1 Shortfall in the capture of birth/death data

The statistical wing of the Health Department of the Corporation independently compiles the details of number of births and deaths in Chennai City, from the zonal offices as gathered from the number of applications received by them. The Health Inspector of respective zonal offices is responsible for providing information to both the statistical wing of the Health Department and for the capture of data in the computer wing. A comparison of data relating to births and deaths available in the database with the data in the statistical wing of the Health Department for the period 1999-2004 revealed the following:

Details	Statistical Wing (Number in lakh)	Database (Number in lakh)	Shortfall (per cent)
Birth registration	15.60	12.40	20.53
Death registration	6.11	4.11	32.89

Lack of appropriate input controls had led to incompleteness of data in the computerised system.

2.1.11.2 Incorrect organisation of birth and death data

The Corporation, in order to accommodate additional information as required by the Government and to meet the requirement of new Oracle/Linux software developed for them by NIC, had reorganised (January 2004) their database structure. In the reorganised format, many items of information were codified. All data captured subsequently, got stored in the reorganised codified form, while the earlier data remained in the original form, which was not migrated to the current format. The new application software generated birth/death certificates from the revised data formats only and did not have a provision to accept and print data from the pre-revised format. Thus, Corporation had to resort to manual operation in case of data pertaining to earlier period.

Lack of input/validation controls

2.1.11.3 Incomplete capture of birth and death data

Registration of births and deaths is mandatory and facilitates the issue of relevant certificates apart from acting as a source of statistical information.

Data in this regard is keyed in from the respective zonal offices and stored in the central server. An examination of the data disclosed that vital information such as name of mother, name of father, sex of the child, place of birth and address of the parents etc., were not available (**Appendix VI**). In respect of death registration, information such as name of the deceased and cause of death were not available indicating lack of input control. Thus, the data was incomplete.

2.1.11.4 Duplication in data on birth and death

There were instances of duplication in registration of births and deaths due to lack of input controls.

Registration of births/deaths is compulsory and is done with reference to intimation received from hospitals or from other authentic sources. Registration of birth/death is identified by a unique serial number, which contains the year, number of the zone, number of the division and serial number of registration in that sequence. In the present system, the registration numbers are assigned manually.

An examination of the birth data disclosed that the same registration number had been assigned for more than one birth. This resulted in 3,36,842 different births being registered using only 1,57,274 different registration numbers¹¹ indicating that more than one birth was registered under the same registration number in many instances. Similarly, only 38,558 registration numbers¹² were assigned to 81,843 deaths. There were also instances where the same birth/death was registered under different registration numbers. This indicated lack of input controls.

2.1.12 Conclusion

Computerisation in Corporation that commenced in 1988 is still in an initial stage of implementation. Due to deficient planning, the IOLIPS project initiated in 1997 could not be implemented and was abandoned in February 2004 after incurring expenditure of Rs 1.60 crore. Lack of documentation and absence of controls made the database incomplete and unreliable. Weak process controls led to inaccurate processing of transactions leading to incorrect assessments of Property Tax. Lack of referential integrity among Property Tax assessment system, DCB and collection details coupled with inconsistencies in the posting of the collections made the database unreliable. The birth and death registration database was incomplete to the extent of 20.53 per cent and 32.89 per cent respectively for want of controls to ensure their completeness. Thus the overall objective of the computerisation in Corporation was yet to be achieved.

2.1.13 Recommendations

- Chennai City Municipal Corporation should formulate a clearly defined IT policy and put in place a monitoring system involving the top level management.

¹¹ Birth registration numbers repeated twice 1,42,660; repeated thrice 11,548; repeated from 4 to 12 times 3,066.

¹² Death registration numbers repeated twice 34,418; repeated thrice 3,616; repeated from 4 to 6 times 524.

- Development of systems should be planned for, documented and done under proper authority.
- Considering the criticality of the IT system, sufficient input and validation controls should be incorporated to ensure its reliability.
- A system should be evolved so that changes in rates etc., are adopted only under orders of competent authority.
- Considering the volume of revenue handled, the referential integrity among the assessment, demand and collection systems needs to be strengthened.
- Action may be taken to make the master data complete and accurate.

The above points were referred to Government in January 2007; reply had not been received (May 2007).

2.2 Functioning of health care system in urban local bodies

Highlights

Tamil Nadu is a State with a relatively higher proportion of urban population. Urban local bodies shoulder the responsibility for providing health care in urban areas. Lack of policy initiatives, inadequate budgetary support, shortage and improper deployment of manpower and lack of proper disease surveillance were the major constraints in the functioning of the health care system.

➤ **The Urban Health Care Policy announced by the State Government in September 2002 has not yet been implemented. Due to non-adoption of the norms prescribed in the above policy Urban Primary Health Centres could not be established in needy urban local bodies and accordingly identified surplus staff could not be redeployed.**

(Paragraph 2.2.7.2)

➤ **There was inadequate disease surveillance, in nine out of 14 test checked urban local bodies.**

(Paragraph 2.2.8.1)

➤ **Birth rate and maternal mortality rates were higher than the State's average in four and three of the test checked urban local bodies respectively.**

(Paragraph 2.2.9.1)

➤ **Ambattur and Dharmapuri Municipalities did not utilise Rs 29.55 lakh released by Government of India under Reproductive and Child Health Project II but kept the entire sum in their bank accounts.**

(Paragraph 2.2.9.3)

➤ **In the State, in 63 out of 102 municipalities (excluding Grade III) the post of Municipal Health Officer had not been created.**

(Paragraph 2.2.10.1)

2.2.1 Introduction

In Tamil Nadu, the role of Government in health care activities in urban areas is largely advisory and supervisory in nature. Tamil Nadu Public Health Act, 1939 envisages that the Local Authorities¹ would carry out all such activities as may be necessary to safeguard public health as prescribed by Government

¹ The Act defines 'Local Authority' as Corporations and Municipalities.

for maternal and child health (MCH) and family welfare (FW) in local areas. These activities are carried through urban health posts, dispensaries and maternity homes.

2.2.2 Organisational set up

The Commissioner of Municipal Administration (CMA) exercises administrative control and the Director of Public Health and Preventive Medicine (DPH&PM) and the Director of Family Welfare (DFW) provide technical support and monitor the activities. Municipal Health Officers (MHO)/City Health Officers (CHO), appointed by Government are responsible for health care activities in the urban local bodies (ULBs) and report to the Commissioners of the respective ULBs. In ULBs without MHO/CHO posts, the Sanitary Officers are responsible for health care activities. Medical Officers of Urban Health Posts and Maternity Centres are responsible for maternal and child health and family welfare activities including outreach services, which include provision of ante natal care, conducting delivery, post natal care, immunisation of children, promotion of family planning, etc. The Sanitary Officers are responsible for disease control activities such as mosquito control, control of stray animals, chlorination of water sources, etc. (**Appendix VII**).

2.2.3 Audit coverage

The 561 Town panchayats (TPs) were not considered for the purpose of review in view of the low average coverage of population in each TP. Accordingly, the selection was made only from 158 ULBs (six municipal corporations and 152 municipalities). The health care delivery system including maternal and child health and family welfare activities and prevention and control of diseases was reviewed in 16 out of these 158 ULBs (**Appendix VIII**) selected through stratified random sampling. The review conducted between August and October 2006 in the Secretariat, offices of CMA, DPH & PM and DFW and in the selected ULBs, covered the period 2001-06.

2.2.4 Audit objectives

Audit objectives were to assess the

- effectiveness of policy initiatives for providing health care in urban areas,
- efficiency and effectiveness of the ULBs in prevention and control of diseases,
- effectiveness of the urban health posts and maternity centres in maternal and child health and family welfare activities and
- adequacy of staff provided for carrying out health care activities.

2.2.5 Audit criteria

The following audit criteria were adopted:

- policies formulated by Government for providing urban health care,

- targets fixed by Government for disease surveillance, collection of samples, immunisation, etc.,
- goals set by Government in respect of health indices such as birth rate, maternal mortality rate, maternal and child health and family welfare activities, etc. and
- norms prescribed for provision of staff.

2.2.6 Audit methodology

The audit objectives and audit criteria were discussed (August 2006) with the CMA before commencement of audit. Information on the health care activities of the ULBs was collected from the records of the respective ULBs, Government and *quasi*-Government publications and through written replies furnished by ULBs and departmental officers to audit enquiries issued to them.

2.2.7 Urban Health Care Delivery Policy

2.2.7.1 Earmarking of funds for health care activities

The average expenditure on health care activities during 2001-06 was less than six per cent of the total expenditure in the test checked ULBs.

National Health Policy, 2002 envisages that the State Governments should earmark seven *per cent* of their budget for health care, of which 55 *per cent* would be for primary health care. However, the expenditure on health care activities in the State ranged from 2.87 *per cent* to 3.56 *per cent* of the total expenditure during 2002-06. Further, Government of Tamil Nadu did not give directions to the ULBs to make similar provisions in their budgets for health care activities. Accordingly, average percentage of expenditure for 2001-06 on health care activities to total expenditure was zero in respect of two ULBs, less than five in 10 ULBs and ranged from 5.16 to 5.81 in respect of three other ULBs out of the test checked ULBs. The low expenditure on health care activities in ULBs was mainly due to deployment of lesser staff than required as detailed in the succeeding paragraphs.

2.2.7.2 Implementation of policy

The Urban Health Care Delivery Policy announced by the State Government in September 2002 has not yet been implemented.

Government announced the 'Urban Health Care Delivery Policy' in September 2002. The policy envisaged the following modalities for revamping the urban health care system:

- Establishment of health institutions as per the following norms:

Population of the ULB	Number of Urban Primary Health Centres
Less than 1 lakh	one A type ² centre
1 to 1.5 lakh	one B type ³ centre
1.5 to 2.5 lakh	two B type centres
2.5 to 3.5 lakh	three B type centres
3.5 to 4.5 lakh	four B type centres and so on

² A type centre- with one female Medical Officer, one Multi Purpose Health Worker per 20,000 population and other staff.

³ B type centre- with one male and one female Medical Officer, one staff nurse, one Multi Purpose Health Worker per 20,000 population and other staff.

- Surplus posts/staff from identified ULBs were to be phased out or redeployed.
- The DPH&PM and the Deputy Director of Health Services (DDHS) were to provide technical guidance and supervision at State and District levels.
- Expenditure on the revamped urban health care system was to be borne jointly by the ULBs and the Government.
- Administrative control of the staff and maintenance of buildings would be handled by the respective ULBs and CMA.

In April 2003, the CMA submitted a proposal to Government, wherein he indicated that 278 surplus staff including 38 Medical Officers and 188 Multi Purpose Health Workers (MPHWs) in 28 municipalities would have to be redeployed and a total of 81 staff would have to be shifted from corporations to needy municipalities.

The CMA had worked out that by diverting the surplus staff, 46 new Urban Primary Health Centres (UPHC) could be established in 46 municipalities, which did not have a proper health care system. Government sought for (December 2004) certain additional information regarding posts and vacancies in ULBs. Most of the ULBs concerned had not furnished (October 2006) the information and the CMA did not take any further action in the matter. Consequently the plan to revamp the urban health care system did not fructify resulting in non-establishment of the proposed 46 UPHCs.

Non-implementation of Urban Health Care Delivery policy resulted in continuance of posts of MPHWS that could have been redeployed to cover needy ULBs.

In eight of the test checked ULBs, non-implementation of the urban health care delivery policy had resulted in continuance of 18 posts of Medical Officers and 129 posts of MPHWS that could have been redeployed to cover needy ULBs.

As far as extending of technical guidance, the DDHSs were only obtaining periodical returns on health status from the ULBs and did not extend any technical guidance. Barring the 194 health posts maintained in 30 ULBs, the Government did not share the expenditure on urban health care in the other ULBs.

2.2.8 Prevention and control of diseases

2.2.8.1 Disease surveillance

Nine test checked municipalities did not obtain information on incidence of various notified infectious diseases from Government and private medical institutions.

Disease surveillance helps to understand the pattern of spread of communicable diseases so as to adopt suitable strategies of intervention to contain them. The surveillance mechanism includes collection, compiling and analysis of data on incidence of various diseases. As per the provisions of the Tamil Nadu Public Health Act, 1939 Government and private medical institutions in urban areas were to furnish reports to the MHOs/CHOs on the incidence of various notified infectious diseases treated by them. The ULBs were to compile them in order to monitor the health status and to initiate remedial action. However, out of 14 test checked municipalities, nine

municipalities⁴ did not obtain the above details to monitor the health status in their towns.

Incidence of cases of malaria in the State was 43,604, 41,693 and 40,948 during the years 2003, 2004 and 2005 respectively. Under the revised National Tuberculosis Programme, 6.5 lakh persons were examined and 91,720 TB patients were diagnosed. Under the National Malaria Eradication Programme and Revised National Tuberculosis Programme, the medical institutions run by the ULBs were to collect blood smears from 15 *per cent* of the out patients and sputum samples from two *per cent* of the out patients. Of the 14 test checked municipalities, there was no out patient clinic in four municipalities⁵, seven municipalities⁶ did not collect blood smears and none of the test checked ULBs except the two corporations collected sputum samples from out patients to enable surveillance of malaria and tuberculosis. Even where the samples for blood smears and sputum were collected, the percentage of collection of blood smears ranged from 0.67 to 12.47 and sputum sample was 1.47. The Medical Officers of dispensaries attributed various reasons such as shortage of staff and facilities and diversion of staff, for non-collection of samples of blood smear and sputum.

2.2.8.2 Immunisation

Immunisation against vaccine preventable diseases is an important activity of the urban health care system. Government seeks to achieve cent *per cent* immunisation against vaccine preventable diseases such as polio, diphtheria, tetanus, measles, childhood tuberculosis, etc. Government supplies the vaccines to carry out immunisation activities. Against the targets ranging from 11.57 lakh to 12.92 lakh under various vaccines i.e., TTM, DPT, Polio, BCG and Measles during 2001-06, the achievements ranged from 98 to 110 *per cent* in the State.

Koothanallur Municipality did not carry out any immunisation activity for want of staff.

Among the test checked ULBs, while Koothanallur Municipality did not carry out any immunisation activity for want of staff, Gobichettipalayam Municipality achieved less than 50 *per cent* immunisation coverage during 2001-06 under DPT vaccine. Thuraiyur Municipality achieved less than 50 *per cent* coverage under measles and DPT vaccines during 2001-06.

Government supplies Vitamin 'A' tablets for distribution to children below five years for prevention of blindness and iron tablets for distribution to adolescent girls and pregnant mothers for prevention of anaemia. Koothanallur Municipality did not distribute Vitamin 'A' and iron tablets during 2001-06. Ranipet Municipality and Salem City Municipal Corporation did not supply iron tablets during 2001-06, while seven other ULBs did not supply Vitamin 'A' and iron tablets for more than two years during the period covered by audit, thus failing in their role to prevent diseases afflicting the urban poor due to nutritional deficiencies.

⁴ Ambattur, Chinnamanur, Karaikudi, Koothanallur, Pollachi, Pudukkottai, Puliangudi, Ranipet and Thuraiyur.

⁵ Gobichettipalayam, Koothanallur, Pudukkottai and Puliangudi.

⁶ Ambattur, Chinnamanur, Cuddalore, Dharmapuri, Karaikudi, Ranipet and Thuraiyur.

2.2.8.3 Vector borne diseases control

Malaria, filaria, dengue and Japanese encephalitis are the major vector borne diseases prevalent in urban areas of the State. Even though the urban population was only 44 *per cent* of the State's total population, urban areas account for about 74 *per cent* (2005-06) of the cases of malaria reported in the State, indicating the extent of mosquito menace in urban areas.

Control of mosquitoes, the vectors responsible for spreading these diseases, is carried out by ULBs through fogging operations to control adult mosquitoes, by spraying of larvicides to control mosquito larvae and also by avoiding water stagnation.

Entomological reports in respect of six ULBs indicated that mosquito density exceeded tolerable limit.

Entomological reports by Senior Entomologists heading the zonal entomological teams of Public Health and Preventive Medicine Department in respect of six ULBs⁷, where surveys were done (2001-06) disclosed that the mosquito density exceeded tolerable limit in all the 47 surveys conducted. Similarly, as per studies conducted in Coimbatore (2003) and Salem (2005 and 2006), the larval house index⁸ was as high as 43 and 11.5 respectively against the tolerable limit of 10, indicating inadequate mosquito control operations.

The Commissioner, Cuddalore Municipality, a seashore town endemic to Japanese encephalitis, stated (October 2006) that mosquito control operations were not carried out during March 2002 to October 2005 due to vacancy of MHO post. Though the norms under National Malaria Eradication Programme for mosquito control operations provide for provision of one mazdoor per 5,000 population, the number of mazdoors employed by the six test checked ULBs⁹ was at one per 25,000 population, which adversely affected the mosquito control operations in the municipality.

The quality of insecticide and larvicide used in mosquito control operations determines its effectiveness. Insecticides and larvicides for mosquito control operations were procured by the ULBs through tender system. The DPH & PM had short listed (2001) three laboratories, which were subsequently increased to five (2002) and instructed the ULBs to get the samples of insecticides and larvicides tested by the laboratories so as to ensure the quality of the chemicals procured. Four¹⁰ out of 12 test checked ULBs required the supplier themselves to get a quality certificate from one of the short listed laboratories. Relying on the supplier to obtain certificates from the laboratories, resulted in lack of assurance on the quality of anti-mosquito chemicals. The value of purchases (2001-06) made by the above ULBs without ensuring the quality worked out to Rs 1.12 crore.

2.2.8.4 Water borne disease control

Incidence of water borne diseases like Cholera and Acute Diarrhoeal Disorder (ADD) was more in urban areas. The city of Chennai, which has eight *per cent*

⁷ Coimbatore, Cuddalore, Karaikudi, Pollachi, Puliangudi and Salem.

⁸ Number of searched houses having mosquito larvae in stored water.

⁹ Coimbatore and Salem City Municipal Corporations, Cuddalore, Pollachi, Puliangudi and Karaikudi Municipalities.

¹⁰ Coimbatore, Cuddalore, Ranipet and Thuraiyur.

of the State's population, accounted for 66 *per cent* of the Cholera cases reported in the State during 2002-05. Similarly, the prevalence rate¹¹ of Cholera and ADD was more in three of the test checked ULBs, when compared with the respective district level prevalence rate as given below, suggesting supply of poor quality of drinking water:

Year	Prevalence rate of ADD and Cholera					
	Coimbatore District	Coimbatore Corporation	Salem District	Salem Corporation	Erode District	Erode Municipality
2003	80	198	142	546	137	1,073
2004	198	535	132	558	145	1,024
2005	212	674	130	561	87	545

The Water Analyst of the Public Health and Preventive Medicine Department conducts periodical testing of water samples and furnishes reports on the findings. Further, the ULBs also draw samples and get them tested by the Tamil Nadu Water Supply and Drainage Board.

Test reports of water in respect of seven ULBs indicated that the water supplied by them was not potable.

Five of the test checked ULBs¹² did not test water samples to ensure quality. Scrutiny of 15 water test reports relating to 2001-06 in respect of seven ULBs¹³ disclosed that the water supplied by all of them was not potable due to poor organic and chemical qualities and presence of numerous micro-organisms. The Water Analysts attributed the poor quality of water to non-cleaning of storage reservoirs, filter beds and service reservoirs and lack of systematic chlorination.

As per the norms, the residual chlorine level in the water should be between 0.2 to 0.4 mg/litre. However, six test reports (March 2001 to March 2006) relating to five ULBs indicated that the residual chlorine level in the water samples of Cuddalore, Karaikudi and Pollachi Municipalities was found to be below the minimum limit and the residual chlorine level exceeded the maximum limit in Erode and Gobichettipalayam Municipalities. The quality of bleaching powder, which is used in chlorination, was also found to be below the standard. As against the minimum required chlorine content of 32 *per cent* in the bleaching powder, the actual chlorine content in the bleaching powder used by Cuddalore, Erode and Gobichettipalayam Municipalities was found (March 2001 to May 2005) to be less than 10 *per cent* and 10 to 30 *per cent* in Erode (in November 2005), Karaikudi and Pollachi Municipalities (2001-06).

The above failures on the part of ULBs in ensuring the quality of water had resulted in supply of poor quality of drinking water and consequent increase in the incidences of water borne diseases.

2.2.8.5 Zoonotic diseases control

Anthrax, rabies, leptospirosis etc., are zoonotic diseases, which are transmitted by animals to humans. Under section 241 of Tamil Nadu District

¹¹ Number of cases per one lakh population.

¹² Salem City Municipal Corporation and Ambattur, Cuddalore, Koothanallur and Ranipet Municipalities.

¹³ Coimbatore City Municipal Corporation and Cuddalore, Dharmapuri, Erode, Gobichettipalayam, Karaikudi and Pollachi Municipalities.

Municipalities Act, 1920 the ULBs have the power to kill stray dogs and pigs. However, several ULBs stopped killing of stray animals, reportedly due to a ban on killing of stray dogs under the provisions of Prevention of Cruelty to Animals Act (PCA Act), 1960. Under the Act, Government of India framed the Animal Birth Control Rules, 2001 so as to prevent increase in the population of stray animals. Though non-Government Organisations like Blue Cross of India and People for Animals came forward to assist the ULBs in performing animal birth control to control stray dog menace, none of the test checked municipalities adopted such measures during 2001-06.

Coimbatore City Municipal Corporation killed 16,438 dogs during 2001-04 and stopped the practice from October 2004. While no death due to rabies was reported from Coimbatore city during 2001-04, six and 18 human deaths due to rabies were reported in 2005 and 2006 (upto June) respectively, which can be attributed to non-adoption of animal birth control measures.

2.2.8.6 School Health Programme

The School Health Programme (SHP) is implemented by ULBs with the objective of early detection of diseases and timely medical treatment to prevent major health problems among school going children. Under the SHP, medical teams from ULBs visit all the schools in the local area thrice in an academic year to screen the students to diagnose their health problems and to provide treatment for minor ailments. The State Government sanctioned one medical team each to selected 40 ULBs in the State.

During 2004-05 out of 40,308 schools targeted in the State 37,324 schools were visited once, 20,042 schools twice and 4,564 schools thrice. However, no school health camp was conducted in Koothanallur Municipality for five years from 2000-01 to 2005-06 and Gobichettipalayam Municipality for two years during 2004-05 and 2005-06. The percentage of schools covered by Chinnamanur Municipality was less than 50 during 2001-06. The Commissioners of the ULBs generally attributed the deficiency in coverage to shortage of manpower, non-cooperation of schools, diversion of staff for other works such as Tsunami relief, flood relief, etc., and belated/short supply of medicines.

Government proposed (July 1999) to spend Rs 10 per student per year for medicines under SHP. The DPH&PM, however, released a fixed amount of Rs 70,000 each to ULBs having school medical inspection teams and Rs 63,000 each to other ULBs per year towards supply of medicines. However, the ULBs did not come forward to supplement the funds provided by Government resulting in little availability of funds for medicines in ULBs with higher student population. The expenditure on SHP medicines was less than one rupee per student per year in Coimbatore City Municipal Corporation and ranged from Rs 1.10 to Rs 6.38 per student per year in the remaining ULBs. The injudicious allotment of funds by DPH&PM and the failure of ULBs to supplement the efforts of Government resulted in ineffective functioning of the SHP, as medicines are a pre-requisite.

2.2.9 Maternal and Child Health and Family Welfare activities

Maternal and Child Health activities are aimed at providing ante natal and post natal care to women. Family Welfare activities are aimed at ensuring small family norms. These activities are carried out through the network of Urban Health Posts (UHP).

2.2.9.1 Maternal and Child Health and Family Welfare performance

During 2003-05, the birth rate in Dharmapuri, Karaikudi, Puliangudi and Ranipet Municipalities ranged from 18.79 to 37.86, while the State level achievement was 17.1 to 18.3. The maternal mortality rate in Salem City Municipal Corporation and Nagercoil and Ranipet Municipalities ranged from 1.30 to 2.57 during 2004-05 as against the State's rate of 1.1. It was 3.04 in Ranipet Municipality during 2003-04 as against the State's rate of 1.1.

2.2.9.2 Outreach services

In four test checked municipalities one MPHWS covered a population of 33,678 to 65,000 as against the prescribed norm of 20,000.

Maternal and Child Health (MCH) and Family Welfare (FW) outreach services are extended by the MPHWS attached to the UHPs or Municipal Clinics. In Koothanallur and Thuraiyur Municipalities, MCH and FW outreach services were not provided to the public due to non-availability of staff. In Dharmapuri, Gobichettipalayam, Puliangudi and Ranipet Municipalities, one MPHWS had to cover a population of 33,678 to 65,000 as against the norm of 20,000. The number of pregnant women registered by Gobichettipalayam Municipality was as low as 30 *per cent*. In Salem City Municipal Corporation an area with a population of about 50,000 comprised in Corporation Divisions 29, 30, 31 and 32 was totally left out of coverage due to non-availability of staff.

In four of the test checked ULBs¹⁴, the MPHWS visited their area only once in a month as against the norm of once in a fortnight. No day-wise programme chart indicating area to be visited by the MPHWS was prepared by the test checked ULBs. In four of the test checked ULBs¹⁵, the MPHWS/Maternity Assistants were not provided with even the basic equipments like BP apparatus, haematology kits, etc. None of the test checked ULBs had facilities for blood grouping and Rh typing, which were essential details to be recorded in ante natal registration cards so as to arrange for blood in case of emergencies during delivery.

2.2.9.3 Non-implementation of Reproductive and Child Health Project

Government of India launched (2003) the Reproductive and Child Health Project II (RCHP II) with the objective of providing an integrated and sustainable system for primary health care services in urban areas. Government of India was to meet the expenditure on urban health care for a period of five years and Government of Tamil Nadu and the ULBs concerned

¹⁴ Ambattur, Chinnamanur and Ranipet Municipalities and Salem City Municipal Corporation.

¹⁵ Ambattur, Gobichettipalayam, Puliangudi, and Ranipet.

were to provide funds for sustenance of the project beyond the initial period of five years.

Reproductive and Child Health Project II has not been implemented in Ambattur and Dharmapuri Municipalities though Rs 29.55 lakh was released by Government of India for this project.

Government of India allocated (June to October 2003) a sum of Rs 5.24 crore for five years for implementation of the project in six cities¹⁶ with a population over 10 lakhs and released (June to October 2003) Rs 82.72 lakh as the first instalment. Government of Tamil Nadu, however, released the grants to the ULBs concerned only in March 2005. The Project Director did not give any reason for the delay in release of funds. The Project Director did not also have the details of expenditure incurred by the municipalities except in respect of Thiruchengode Municipality (March 2007).

Ambattur and Dharmapuri Municipalities did not utilise the funds to establish UHCs but kept the entire sum of Rs 29.55 lakh released to them in their bank accounts (September 2006). The Commissioner, Ambattur Municipality stated (October 2006) that the project could not be implemented due to non-approval of the proposals for utilisation of the funds submitted to CMA.

As per the conditions of the grant, second and subsequent instalments would be released only after utilisation of 60 *per cent* of the assistance already released. Due to non-utilisation of the funds already released, Government of India did not release additional funds. Further, even though Government of India was ready to provide funds for implementation of the project in all the cities with a population of one to 10 lakh, the Project Director, RCHP II did not forward further proposal for implementation of RCHP due to non-utilisation of the funds already released by the Government of India.

2.2.9.4 *Functioning of dispensaries and Urban Health Posts*

In addition to the outreach services extended by them, Urban Health Posts (UHP), Maternity Centres and Dispensaries run by 12 of the ULBs audited, also provided medical treatment for minor ailments and conducted deliveries and sterilisation surgeries. Such facilities were not provided by the remaining four ULBs¹⁷ audited.

Coimbatore City Municipal Corporation maintained 22 UHPs where out patient treatment, delivery and sterilisation services were available. Audit scrutiny of performance of six UHPs¹⁸ disclosed that the number of deliveries declined from 3,187 in 2001 to 1,452 in 2005 and sterilisations from 1,607 in 2001 to 562 in 2005. The CHO, Coimbatore City Municipal Corporation stated (August 2006) that the number of deliveries and sterilisation came down due to non-availability of Anaesthetists. The reply is not tenable as Government had a scheme to provide financial assistance for hiring of Anaesthetists and the CHO had failed to hire Anaesthetists under that scheme.

¹⁶ Ambattur, Avadi, Dharmapuri, Komarapalayam, Madhavaram and Thiruchengodu.

¹⁷ Gobichettipalayam, Koothanallur, Pudukottai and Puliangudi.

¹⁸ CTM Home, MM Home, RK Bai Home, Singanallur Home, SLM Home and UVM Home.

In two UHPs in Cuddalore Municipality, Health Visitors provided out patient treatment due to non-availability of Medical Officers.

While Cuddalore Municipality maintained five UHPs, without Medical Officers, in two of the UHPs, the Health Visitors provided out patient treatment during 2003-06 and the remaining three did not provide out patient treatment. Allowing the Health Visitors to handle out patient treatment amounted to a serious compromise on the quality of services as the Health Visitors were not qualified Physicians.

During 2001-06, the Medical Officers of (i) Anna Hospital, Salem, (ii) UHP, Shevapet, Salem and (iii) Maternity Centre, Dharmapuri discharged all the 7,614 mothers and their babies within three hours of delivery. The Medical Officers stated that the immediate discharge of delivered mothers was 'against medical advise'. The Medical Officer, Maternity Centre, Dharmapuri stated (September 2006) that the delivered mothers refused to stay back till complete recovery due to non-availability of sufficient medicines and food supply to in patients. Immediate discharge of delivered mothers denied them proper post natal care.

2.2.10 Staff

2.2.10.1 Municipal Health Officer

The review by Audit revealed serious shortcomings in the health care delivery systems in ULBs on account of staffing issues. The following comments relating to deployment and availability of staff have been made in the foregoing paragraphs:

- No redeployment of staff contrary to the 'Urban Health Care Policy'.
- School health teams could not be formed due to non-availability of staff.
- MCH and FW services suffered in two municipalities due to paucity of staff.
- Lack of trained staff adversely affected the number of deliveries and sterilisations in six UHPs in Coimbatore City Municipal Corporation.
- Quality of services was seriously compromised due to utilisation of non-qualified staff in handling out patient treatment in UHPs in Cuddalore Municipality.

Further, Section 71(2) of Tamil Nadu District Municipalities Act, 1920 provides that Municipal Councils of Municipalities may create a post of Municipal Health Officer (MHO) with the approval of Government. The Act authorises the Government to fill up that post. Of the 102 municipalities (excluding Grade III) in the State, 63 including six test checked municipalities, did not have MHO posts. In the absence of a MHO, the entire Health Department, including the primary health care activities of the ULBs, is headed by Sanitary Officers. In Ranipet Municipality, even though four Medical Officers were employed in the UHPs, the Sanitary Officer headed the primary health activities. Similarly, in Cuddalore Municipality, the Manager officiated in the MHO's post despite the availability of one Medical Officer in the UHP.

Non-availability of professionally qualified persons and non-utilisation of the services of the available professionally qualified officers to head the primary health activities denied proper leadership to the urban health care system.

2.2.10.2 Government of India assistance for staff

Salem City Municipal Corporation did not claim the assistance for staff salaries in respect of seven UHPs created under Urban Revamping Scheme.

Salem City Municipal Corporation was eligible for assistance from Government of India towards salaries for staff of seven UHPs established under Urban Revamping Scheme. The Corporation had not claimed the grant from the year 1998. The Government of India assistance foregone for the period 2001-06 worked out to Rs 2.61 crore with reference to the minimum of the time scales of the staff.

2.2.11 Conclusion

Due to non-adherence to the norms prescribed in the Urban Health Care Delivery Policy, Urban Primary Health Centres could not be established in needy urban local bodies and accordingly identified surplus staff could not be redeployed. The expenditure on health care activities was less than six *per cent* in most of the test checked urban local bodies due to deployment of lesser staff than required. Sixty three municipalities did not have the post of Municipal Health Officers. Delivery of urban health care services suffered due to paucity of qualified staff. The School Health Programme was adversely affected due to inadequate allocation of funds by the Government and the urban local bodies not supplementing these funds. None of the urban local bodies had facilities for blood grouping and Rh typing.

2.2.12 Recommendations

- The Commissioner of Municipal Administration should take immediate steps to implement the Urban Health Care Delivery Policy.
- Government should direct the urban local bodies to provide adequate percentage of their budget for health care activities.
- Disease surveillance should be stepped up by filling vacant posts and by posting enough staff as per prescribed norms.
- Staff should be provided as per norms for outreach Maternal and Child Health and Family Welfare services.
- The health care system in urban local bodies should be strengthened by filling up vacant posts of qualified staff including creation of Municipal Health Officers.

The above points were referred to Government in January 2007; reply has not been received (May 2007).

2.3 Financial management in municipalities

Highlights

As per the 2001 census, Tamil Nadu is the most urbanised state with 43.86 per cent of State's population living in urban areas. The Seventy-fourth Constitution Amendment Act, 1992 has given constitutional status to urban local bodies with sustainable provisions for devolution of functions and funds. Out of 18 functions to be devolved on the municipalities, only 13 functions have been transferred so far. Financial management in municipalities in certain selected fields was reviewed during October-November 2006.

- **Budgets were not drawn up based on annual action plans by the municipalities and did not serve the purpose of expenditure control.**

(Paragraphs 2.3.6.1 and 2.3.6.2)

- **Three municipalities diverted Rs 2.96 crore from the Elementary Education Fund up to March 2004.**

(Paragraph 2.3.6.3)

- **Kumbakonam Municipality did not take action to collect Property Tax of Rs 5.98 crore as it failed to include demands in respect of 456 cases already decided under collectable demands.**

(Paragraph 2.3.7.2)

- **Installation of new turbines for augmenting water supply at a cost of Rs 58.43 lakh by Thanjavur Municipality did not result in intended savings in electricity charges.**

(Paragraph 2.3.7.7)

- **The revenue loss on account of the quantity of water lost due to leakage was Rs 3.77 crore during 2003-06 in Pollachi Municipality.**

(Paragraph 2.3.7.8)

- **Failure of three municipalities to utilise the offer for conversion of high cost loans resulted in avoidable interest liability of Rs 3.54 crore.**

(Paragraph 2.3.8.1)

2.3.1 Introduction

The urban population of Tamil Nadu is 2.75 crore as per the 2001 census accounting for 9.6 *per cent* of the country's urban population of 28.61 crore. The increase in the urban population and related economic activities accentuate the demand for urban infrastructure. The bridging of gaps in various urban services is the top priority of the Municipal Administration and Water Supply Department, along with augmenting of resources of the urban local bodies so that they can progressively become self-sustaining entities. In terms of the Seventy-fourth amendment to the Constitution of India, 13 out of 18 functions have already been transferred and transfer of the remaining functions were under consideration of the State Government. The municipalities are responsible for provision of important services and amenities to the urban population. Audit reviewed the financial management by the municipalities for budgetary control, revenue and loan management.

2.3.2 Organisational set up

There are 152 municipalities in the State categorised under various grades as furnished in paragraph 1.1.4. The municipalities come under the administrative control of Secretary, Municipal Administration and Water Supply Department at Government level. The Commissioner of Municipal Administration is the head of the department and is assisted by seven Regional Directors of Municipal Administration at regional level. The municipalities are administered by the respective councils of elected representatives, assisted by Commissioners, who are in overall charge of various wings, *viz.*, Engineering, Town Planning, Public Health and Sanitation, Revenue Collection, etc.

2.3.3 Audit objectives

The review was conducted with the objective of assessing the efficiency of the urban local bodies in

- budgetary control,
- assessment and collection of revenues,
- management of loans and
- utilisation of Eleventh Finance Commission grants.

2.3.4 Audit criteria

The following were taken as audit criteria for the review:

- provisions contained in the manuals regarding budgeting and accounting,
- provisions contained in the Tamil Nadu District Municipalities Act, 1920 and Rules made thereunder,
- terms and conditions of the loans obtained by the urban local bodies and

- conditions prescribed for utilisation of Eleventh Finance Commission grants.

2.3.5 Audit coverage and methodology

The activities in the fields indicated in the audit objectives were reviewed in seven¹ large and important municipalities in Coimbatore and Thanjavur Districts. The review conducted during October–November 2006 covered the period 2001-06 using the following methodology.

- Collection and analysis of information from the records produced by the auditee institutions.
- Obtaining replies of the auditee institutions for audit enquiries.
- Collection and analysis of information from the official web site of the Government.
- Discussion of audit objectives and criteria with the Secretary, Municipal Administration and Water Supply Department in the entry conference.

2.3.6 Budgetary planning and control

Review of activities and records relating to budgetary planning and control revealed various deficiencies as discussed in the succeeding paragraphs.

2.3.6.1 Annual action plan

Annual action plan for the municipalities and districts were not prepared to have an orchestrated growth.

The municipalities were required to prepare action plans every year, which were to be consolidated at the district level by the District Planning Committee into a draft Development Plan for the district as a whole. The main purpose of preparing such a plan is to avoid plurality in planning in various developmental issues like drinking water supply, provision of health and infrastructure facilities such as roads, housing, etc. No such action plans were prepared in any of the test checked municipalities. In the absence of local planning, the District Plan did not also emerge.

Preparation of action plans by municipalities and their consolidation along with the plans of the panchayat raj institutions is crucial to ensure incorporation of local needs and wants in the development process. The absence of such planning also compromises on the element of popular participation and the need for the plan to reflect people's wants.

¹ Coimbatore District: Mettupalayam, Pollachi, Tiruppur and Udumalpet Municipalities; Thanjavur District: Kumbakonam, Pattukottai and Thanjavur Municipalities.

2.3.6.2 *Budgeting and accounting*

Approval of the Council for budgets and reappropriation were not obtained before utilisation of provisions.

The budget of the municipality was required to be got approved by the Council before the end of February of the previous financial year. During the years 2003-06, there were delays ranging from one to nine months in placing the budget before the Council and obtaining approval in all test checked municipalities except Pattukottai. Such delays denied the Council an opportunity to incorporate its policy imperatives and priorities into the budget.

The municipalities were authorised to modify the figures shown in the budget with regard to their receipts or the distribution of the amounts to be expended on different services they undertake and for the purpose they were required to propose a supplemental or revised budget. The proposals for Revised Estimates (RE) of the test checked municipalities during 2003-06 did not, however, contain the reason for such proposals and justification for the provisions sought for.

All applications for reappropriation were to be submitted to the Council by the executive authority in time for passing orders on them before the end of the year. However, RE proposals were submitted between May and July of the next financial year by Kumbakonam Municipality (2003-04), Tiruppur and Pollachi Municipalities (2003-06).

A comparison of amounts authorised in the RE's and the expenditure during 2003-05 revealed that the expenditure was more than 20 *per cent* of the funds provided in the REs in respect of 65 heads in five municipalities². The excess expenditure was Rs 13.10 crore. The excess expenditure was not also regularised by the Councils through reappropriation orders subsequently. The municipalities did not conduct any variance analysis for the excess/savings in expenditure as compared with the estimates.

The municipality should prepare or cause to be prepared detailed annual accounts and forward a copy thereof to the auditor³ not later than 15 of May following. The delay in submission of accounts for 2003-04 ranged from two to 23 months in the test checked municipalities. Six test checked municipalities except Kumbakonam Municipality did not finalise the accounts for 2004-05 and all the seven municipalities for 2005-06 (October 2006). Due to non-adherence to the established budgetary procedures by the test checked municipalities and their inability to finalise annual accounts in a timely manner, budgetary control and financial management was adversely affected.

² Kumbakonam: 2003-05 – 13 heads; Pollachi: 2003-04 – 15 heads; Thanjavur: 2003-05 – 15 heads; Tiruppur: 2003-05 – 14 heads and Udumalpet: 2003-04 – 8 heads.

³ Director of Local Fund Audit.

2.3.6.3 *Diversion of earmarked funds*

Three municipalities diverted Rs 2.96 crore from the Elementary Education Fund to other fund accounts.

Diversion of earmarked funds even temporarily for other purposes without the previous sanction of the Government was prohibited. Three municipalities diverted Rs 2.96 crore (up to March 2004) (**Appendix IX**) from the Elementary Education Fund to the Water Supply Fund/Revenue Fund without obtaining sanction of the Government. The amounts were pending adjustment as of October 2006.

2.3.7 *Assessment and collection of revenue*

2.3.7.1 *Collection performance*

The revenue generated by the municipalities mainly falls into four categories viz., Property Tax, Profession Tax, non-tax revenue comprising fees from building licence, lease rent for markets, public toilets, shops, etc., and user charges for water supply. While percentage of collection of non-tax revenue vis-à-vis demand ranged from 69 to 71 during 2003-06, it was 50 to 60 in respect of tax revenue of the urban local bodies. Collection at macro level by the municipalities and the action taken for increasing the efficiency in collection of revenue are discussed in detail in paragraph 1.9 of Chapter I of this report. Due to lack of efforts in collection, the arrears accumulated to Rs 40.83 crore (March 2006) (**Appendix X**) in respect of all the seven test checked municipalities. No distraint action such as seizure and sale of movable properties of the defaulter for collection of dues, as provided in the Tamil Nadu District Municipalities Act, 1920 was taken in any of the seven municipalities resulting in the accumulation of huge arrears. During 2000-04, Kumbakonam, Thanjavur and Tiruppur Municipalities have written off Rs 1.43 crore of tax and non-tax dues. The proposals placed before the Councils did not elaborate the various steps taken by them to realise the revenue.

2.3.7.2 *Property Tax*

Properties were not assessed to tax indicating systemic deficiencies.

Property Tax, forming almost 50 *per cent* of the total revenue, is the major source of revenue to the municipalities.⁴ As instructed (December 2004) by the Commissioner of Municipal Administration, the municipalities undertook a survey of properties for bringing into account the properties not assessed to Property Tax earlier.

Tiruppur Municipality brought 767 unassessed properties into assessment (tax effect Rs 33.74 lakh per half year) with effect from the first half year of 2005-06, of which the building plans for 307 properties were not regularised (October 2006). Kumbakonam Municipality brought into the tax net 1,525 properties as a result of the survey, the tax effect being Rs 3.26 lakh *per annum*. These instances brought to light the deficiencies in coverage of properties for the purpose of levy of Property Tax.

⁴ Property Tax:
 2003-04 Rs 192.85 crore (48 *per cent* of total revenue of Rs 401.52 crore)
 2004-05 Rs 210.27 crore (49 *per cent* of total revenue of Rs 430.61 crore)
 2005-06 Rs 219.50 crore (50 *per cent* of total revenue of Rs 441.18 crore)

The survey also brought out that 1,069 properties in two municipalities (Kumbakonam: 830 and Thanjavur: 239) were constructed on encroached sites. The Commissioners of the above municipalities have expressed their reservation to levy tax in respect of the above properties.

Property Tax of Rs 32.80 lakh on vacant land was not levied on 35 layouts in five municipalities.

Municipalities are authorised to levy Property Tax in respect of land without any building situated within the municipal limits including approved layouts kept unsold. In respect of layouts approved during 2001-06, tax for the first half-year immediately after approval of the layout amounting to Rs 32.80 lakh was not levied as detailed below:

Sl.No.	Name of the Municipality	Total number of layouts approved during 2001-06	Area of layouts approved (in sq. ft)	Revenue loss (Rupees in lakh)
1	Kumbakonam	3	2,27,056	1.17
2	Mettupalayam	5	3,98,131	1.03
3	Pollachi	10	14,08,727	14.75
4	Thanjavur	14	28,26,116	6.33
5	Tiruppur	3	3,36,021	9.52
Total		35	51,96,051	32.80

The municipalities were not maintaining any record in respect of land held by each layout owner and details of subsequent purchases effected and hence, the exact amount of tax to be collected on vacant lands could not be worked out.

While the municipalities assess the Property Tax manually, the demand is fed into computers. The demand, collection and balance position is watched through computers.

The closing balance for 2004-05 as per the demand, collection and balance register for Property Tax was Rs 9.55 crore in Kumbakonam Municipality. However, the opening balance was taken as Rs 8.41 crore in the computer generated demand, collection and balance for the year 2005-06. The difference of Rs 1.14 crore represented short raising of demand. As the collection of Property Tax was only with reference to the particulars already fed into the computers, the non-reconciliation of differences in time would result in tax dues escaping collection. The Municipality replied that action was being taken to reconcile the difference between the manual and computer generated demand, collection and balance.

Kumbakonam Municipality had an arrear of Rs 8.41 crore in collection at the end of 2004-05. The demand for 2005-06 including this arrears was Rs 12.96 crore. Of this, Rs 6.93 crore was shown as 'under litigation' involving 494 cases. While the percentage of collection in respect of collectable demand was 67, the percentage of collection of tax in respect of properties under litigation was only three. A verification of the pending case files revealed that only 38 cases were pending at the end of 2005-06. The tax involved in respect of these cases was only Rs 70.42 lakh. The Commissioner of the municipality had failed to include demands in respect of 456 cases already decided under collectable demands. The demand in respect of these cases was Rs 5.98 crore which was 68 per cent of the total Property Tax pending collection at the end of 2005-06.

2.3.7.3 Tax on Profession

The executive authorities of the urban local bodies may, by notice, require any employer to furnish the names of all persons employed by him for the purpose of assessment to Tax on Profession. None of the test checked municipalities had called for such information from the employers for assessment of tax and had indicated the amount collected as demand. In the absence of such information, it could not be ensured that all the employees were assessed to Tax on Profession.

Tax on Profession is also leviable on persons receiving pension exceeding Rs 21,000 per half year. As ascertained from the respective sub-treasuries, 18,732 pensioners were drawing pensions above the ceiling limits as of 31 March 2006 in the seven test checked municipalities resulting in non-collection of tax of Rs 68.18 lakh *per annum*.

2.3.7.4 Cable Television Tax

The powers to levy and collect tax on cable television (cable TV) exhibition were vested with the municipalities for the period from July 2000 to May 2003. The said powers were rescinded by Government in June 2003. In five municipalities⁵ the demands for Rs 1.39 crore raised for the period from July 2000 to May 2003 remained to be collected as of March 2006. As the cable TV operators did not file statutory returns, Tiruppur Municipality had to conduct inspection for ascertaining the number of operators and connections. It issued demand notices to the operators only in October 2003 and was yet to collect tax of Rs 2.21 crore (October 2006).

Thanjavur Municipality failed to raise demand for cable TV tax to the extent of Rs 95.70 lakh.

Thanjavur Municipality did not conduct any such survey but raised (March 2002) demand for 1,771 connections only, whereas according to the President of Cable TV Operators Welfare Association (February 2002) there were 20,000 connections in the municipal area. The non-raising of demand for the rest of the connections resulted in short demand of Rs 95.70 lakh which worked out to 11 *per cent* of demand for own revenue during 2005-06.

2.3.7.5 Resolutions of the Council not implemented

Thanjavur Municipality did not give effect to enhancement in lease rent for vacant land resulting in loss of revenue of Rs 98.34 lakh.

Thanjavur Municipality resolved (November 1998) to revise the lease rent payable by the occupants of vacant lands of the municipality. The resolution also laid down that the lease was to be renewed and rent revised every three years. There were 106 lessees to whom vacant lands measuring 16 sq.ft. to 43,346 sq. ft. were leased out. Even after seven years, the revision proposed by the Council was not given effect to, resulting in a loss of Rs 98.34 lakh for the period 1999-2006.

⁵ Kumbakonam: Rs 46.26 lakh, Mettupalayam: Rs 15.59 lakh, Pattukottai: Rs 27.72 lakh, Pollachi: Rs 18.20 lakh and Udumalpet: Rs 31.47 lakh.

2.3.7.6 *Non-collection of enhanced water supply deposits*

Thanjavur and Tiruppur Municipalities failed to collect the enhanced water connection deposits resulting in non-collection of Rs 15.89 crore.

Thanjavur Municipality enhanced the deposit amount for new and existing water supply connections during June 2001 in respect of its domestic and non-domestic connections. However, it did not raise any demand on the 18,773 consumers for the enhanced deposit, resulting in non-collection of Rs 1.88 crore.

Though Tiruppur Municipality enhanced the deposit amount for water supply with effect from January 2005, it did not raise the demand on the 43,538 consumers for the enhanced deposit. The deposit to be collected amounted to Rs 14.01 crore. Though the Municipality had (May 2006) an overdue liability of Rs 15.05 crore towards loans taken for water supply schemes, the Commissioner of the Municipality did not make use of the opportunity to collect the enhanced deposit and settle the overdue.

2.3.7.7 *Non-accrual of intended savings*

Thanjavur Municipality was extracting water from the river Kollidam at Thirumanur. The head works had three pump sets with motors rating 200 HP, 25 HP and 60 HP. The Municipality replaced the old pumpsets and installed (January 2005) new pumpsets at a cost of Rs 58.43 lakh. It was envisaged that the Municipality would save Rs 24 lakh *per annum* towards electricity charges and also improve the quantity of water supply after installation of the new pumpsets.

The average monthly electricity charges paid during the period February 2005-April 2006 was Rs 4.72 lakh as against average monthly consumption charges of Rs 4.85 lakh during February 2004-January 2005. The savings in electricity charges *per annum* was Rs 1.52 lakh only as against the envisaged Rs 24 lakh. Further there was no increase in the quantity of water supplied daily. Thus, the project completed at a cost of Rs 58.43 lakh did not yield the expected benefits.

2.3.7.8 *Recurring loss due to leakages in water distribution*

Revenue loss on account of water lost due to leakage amounted to Rs 3.77 crore (2003-06) in Pollachi Municipality.

Out of 16.91 mld of water pumped for distribution in Pollachi Municipality, only 6.58 mld actually reached the consumers. About 62 *per cent* of the water pumped was lost due to leakage as the system was more than 30 years old. The municipality was put to a revenue loss of Rs 3.77 crore for the period 2003-06. The proportionate operational cost for pumping the quantity of water lost due to leakage (after allowing 10 *per cent* for normal leakage) was Rs 1.97 crore⁶ during this period 2003-06. Though Government accorded (June 2004) administrative sanction for Rs 9.30 crore towards implementation of a scheme for improving the distribution system, the same was only in tendering stage (November 2006).

⁶ Quantity of water pumped: 16.90 mld (less) 10 *per cent* (1.69 mld) for normal leakage; Net quantity: 15.21 mld; Actual quantity distributed: 6.58 mld; Loss due to leakage: 8.63 mld; Total operation cost: Rs 3.85 crore; Proportionate cost for 8.63 mld: Rs 1.97 crore.

2.3.8 Loan Management

2.3.8.1 *Non-conversion of high cost loan into soft loan resulting in avoidable interest liability*

Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited (TUFIDCO) offered (January 2003) taking over of high cost loans of urban local bodies availed from Government and other lending agencies into soft loans with interest ranging from 10.25 *per cent* to 8.25 *per cent* during January 2004-March 2006. The Commissioners of Pollachi, Thanjavur and Tiruppur Municipalities did not pursue the matter actively and convert their high cost loans amounting to Rs 37.20 crore bearing interest at 13.5 *per cent* into soft loans resulting in avoidable interest liability of Rs 3.54 crore (Appendix XI).

2.3.8.2 *Lack of demand for remunerative assets created*

Due to lack of demand for shops constructed by Thanjavur and Tiruppur Municipalities, the municipalities were forced to amortise the loans from General Fund.

Tiruppur Municipality constructed (December 2001) a new bus stand at a total cost of Rs 4.11 crore. The Municipality obtained loans from Integrated Urban Development Fund (Rs 30 lakh) and Tamil Nadu Urban Development Fund (Rs 80.75 lakh) for the purpose. The shops constructed within the bus stand alone were expected to yield revenue of Rs 4.22 crore for the period January 2002-October 2006 at Rs 7.29 lakh per month. Since the new bus stand was only partially functional, the Municipality could not derive the anticipated revenue. Consequently, the Municipality was forced to repay the loan instalments from its General Fund (Rs 1.43 crore upto September 2006).

Thanjavur Municipality obtained a loan of Rs 1.35 crore from TUFIDCO in 2003-04 for construction of 130 shops and one community hall. After completion of works in August 2004, the Municipality had initiated action to put them to use. However, 52 shops and the community hall could not be auctioned (December 2006) due to lack of demand. Thus, the construction of shops without ascertaining the actual demand resulted in an interest burden of Rs 8.30 lakh *per annum*. The loan was being repaid using the General Fund.

2.3.8.3 *Diversion of water supply deposit*

Due to non-utilisation of the water supply deposits for payment of loans taken for water supply works, Kumbakonam Municipality incurred an avoidable interest liability of Rs 24.85 lakh.

The deposit for water supply connection collected from house owners should be utilised for execution of capital expenditure, debt servicing and repayment of loans taken for executing water supply works. However, Kumbakonam Municipality diverted Rs 96.73 lakh from out of Rs 1.27 crore received as deposit to the General Fund during the period June 2001 to December 2003.

The Municipality obtained a loan of Rs 92.70 lakh (March 2004 and June 2004) at 9.5 *per cent per annum* for augmentation of water supply. The Municipality had (December 2005) Rs 66 lakh in fixed deposits and a deposit of Rs 7.51 lakh in the savings bank account made from the water supply deposits received. Though these deposits could have been utilised towards settlement of loans taken for water supply purposes, the municipality failed to do so, resulting in avoidable interest liability of Rs 24.85 lakh. While, the Municipality had earned an interest of Rs 4.29 lakh during 2004 and 2005, it had also paid Rs 14.74 lakh during the same period towards interest on the loan taken.

The Commissioner of Kumbakonam Municipality replied that necessary action would be taken to foreclose the loan after obtaining the approval of the Commissioner of Municipal Administration (November 2006). The reply is not acceptable as the foreclosure of loan was well within the powers of the Council of the local body.

2.3.9 Utilisation of Eleventh Finance Commission grants

Government of India guidelines for utilisation of local bodies grants recommended by the Eleventh Finance Commission, stipulate that the grants should be used to finance the maintenance of civic services in rural and urban areas. The works to be taken up included provision of primary education, primary health care, safe drinking water, street lighting, sanitation including drainage and scavenging facilities, other common property resources, etc. The urban local bodies should contribute a matching grant of not less than 50 *per cent* of the grant received from the Government of India.

In contravention of the above guidelines, the Commissioners of four municipalities⁷ out of seven test checked municipalities executed 101 original works at a cost of Rs 3.81 crore during 2000-05. The works executed included laying of water supply lines, provision of bore-wells, construction of storm water drain, construction of building for council hall, etc. The proportionate grant involved in the above ineligible expenditure was Rs 2.12 crore (**Appendix XII**).

The Commissioner, Kumbakonam Municipality had not utilised (as of October 2006) the Eleventh Finance Commission grant of Rs 11.21 lakh received (March 2005) towards second instalment for 2004-05.

2.3.10 Conclusion

Budgets were not prepared based on any annual action plans, as required. Performance in revenue collection was not efficient. Three municipalities failed to utilise the offer for conversion of high cost loans. Two municipalities resorted to amortisation of loans from their General Fund as the assets created out of the loans did not generate the anticipated revenue due to lack of demand. Four municipalities utilised the local bodies grant released by Government of India based on the Eleventh Finance Commission recommendations for ineligible items of work.

2.3.11 Recommendations

- The budgeting and accounting system should be streamlined so as to serve the purpose of expenditure control.
- The municipalities should make concerted efforts to improve efficiency in collection of tax and non-tax revenues.
- The municipalities should take up creation of income generating assets out of borrowed funds, only after assessment of demands so that they need not depend on General Fund for amortisation of loans.
- The municipalities should refrain from utilising local bodies grants for ineligible items of work.

The above points were referred to Government in January 2007; reply has not been received (May 2007).

⁷ Kumbakonam, Pollachi, Thanjavur and Tiruppur.