

Conversion of CCP into

BUSINESS PLAN FOR VELLORE

Draft final Report

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PREFACE



Preparation of Business Plan was the second important step taken by the Tamilnadu Urban Development Fund (TNUDF) under Tamilnadu Urban Development Programme (TNUDP – III) being sponsored by World Bank. In the earlier attempt under capacity building of urban local bodies TNUDF had sponsored to prepare CCP for number of towns. The C.C.P. has identified series of projects focusing on economic development, environmental protection, infrastructure improvement and preservation of historical monuments and heritage elements, besides formulating strategies and tasks for mobilization of resources and augmentation of municipal finance. Though the local body could implement various projects proposed in the C.C.P, the local bodies needed the guidance in implementing some of the innovative projects especially private partnership. Therefore, it is considered pertinent to formulate a strategic plan for effective conversion of C.C.P into a Business Plan (BP).

The BP is a non-conventional and practical plan with economic viability and sustainability. Methodically and systematically, it generates funding through “Business like” means and with the application of innovative techniques and management skills including Private Partnership and improvement of services effectively. Good Business Plans are practical in the sense that it sets concrete goals, responsibilities and deadlines. While the project is on implementation, the BP provides a platform for regular review and course of corrections. We are thankful to the Managing Director, Tamilnadu Urban Development Fund (TNUDF) for awarding this job to us. We believe this project is a practical planning exercise to us.

We are extremely thankful to the Chairperson of the Vellore Town Council, They promptly called the consultative meetings of the Council, stakeholders, and in providing all information and discussing the issues, prospects of town’s improvement and growth. We are sure that implementation of projects of Business Plan would bring in vibration in the towns activities.

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INTRODUCTION

1.1.Context of Conversion of CCP into Business Plan

City Corporate Plan (CCP) was prepared for Vellore in 2004 under the Tamil Nadu Urban Development Programme II (TNUDP-II). The unique feature of the C.C.P is that it is a plan prepared with united efforts and involvement of stake holders- elected representatives, public, private agencies, Non-Governmental Organizations (NGOs) and Community Based Organizations (CBOs). Therefore, C.C.P. focuses on felt needs and priorities of the city, in terms of quality of environment and municipal services. The C.C.P. has identified series of projects focusing on economic development, environmental protection, infrastructure improvement and preservation of historical monuments and heritage elements, besides formulating strategies and tasks for mobilization of resources and augmentation of municipal finance. However, the local body could not implement various projects proposed in the C.C.P due to financial constraints, lack of implementing mechanisms, institutional capacity and lack of private investments and resources. Therefore, it is considered pertinent to formulate a strategic plan for effective conversion of C.C.P into a Business Plan (BP). The BP is a non-conventional and practical plan with economic viability and sustainability. Methodically and systematically, it generates funding through "Business like" means and with the application of innovative techniques and management skills including Private Partnership and improvement of services effectively. Good Business Plans are practical in the sense that it sets concrete goals, responsibilities and deadlines. BP assigns tasks to each involved in the project life cycle or departments and links to milestones. BP also guides to breakdown one strategy to many implementable parts. While the project is on implementation, the BP provides a platform for regular review and course of corrections

1.2. Objectives:

In the above context, the following are the primary objectives of the Business Plan (BP):

- 1.2.1. To crystallize and prioritize bankable projects from out of the projects identified in the CCP and newly thought programme, if any;
- 1.2.2. To confirm the so identified projects through consultative process;
- 1.2.3 To workout and test performance indicators to assess the services and financial efficiency of the local body;
- 1.2.4 To formulate FOP and design a mechanism of project implementation including identifying potential investors.

1.3. PREPARATION OF BUSINESS PLAN

Business Plan is (a) to augment the financial resources and minimization of expenditure of the local body and (b) to develop Asset Management Plan for improving the quality of basic services. These are the two prime components of the Business Plan. The approach towards BP is essentially the state of art of consultative and stakeholders involvement in preparing and implementation of the plan respectively. The method of realizing the objectives of the plan will be essentially collective and coordinated efforts of planners, local body administrators and participation of stakeholders. It is also to turn the local bodies' efforts for the provision of services and facilities from conventional provider role to innovative private investments as under business like environment. This, in turn improves the municipal finance besides improve the service delivery.

1.4. Methodology

1.4.1. Financial status report:

First step in the process of optimization of the financial system of the local body is to prepare a status report on the financial position of the local body, on one side and on improving the quality of basic services on the other. The status report dwells on sources of income and the pattern of expenditure. The main sources of finance of local bodies could be categorized as internal and external. Internal reserve, include 'local taxes', 'user charges', 'fees' and rent or lease amount collected from properties owned by the local body. Following are some of the taxes collected by local bodies.

- (i) Property tax
- (ii) Registration fee
- (iii) Fair tax
- (iv) Annual tax
- (v) Market tax
- (vi) Profession tax
- (vii) Advertisement tax
- (viii) Entertainment tax

The user charges are directly connected with the services rendered by the local body. This would include lighting tax, water tax and library cess. Fee and duties are stamp duty and land and property registration fee. Part of this amount is made available to the local body from out of the enhanced value of properties. Proceeds

from tenants and lessees of municipal properties constitute another source of income. Loans and grants are important components of external source of revenue. Grant-in-aid may be of three types.

- a. An ordinary grant meant to defray administration costs;
- b. Grant in lieu of octroi;
- c. Special grant-in-aid for assistance in development or maintenance.

A lion's share of the income is spent on salary to staff and pension to retired employees. Local bodies have hardly any resource for capital investment or for rehabilitation of existing assets. Maintenance of decaying services becomes responsibilities of municipal councils, whereas, the entire capital input into cities fall to the share of development authorities.

1.4.2. Financial Assessment of the local body

The purpose of this BP is to identify issues and problems in the process of augmentation of the municipal resources.

Basis of levy of taxes: To examine the principles, in which a particular type of tax is levied. For example, the property tax is levied based on certain principles such as location, land and building use, housing typology, and owner/tenant occupation. This concept will be examined with reference to all taxes and additional parameters, if any, for any of the tax base will be proposed

- a. Rationality of revision of taxes:
Tax structure/ rate has to be periodically revised based on certain logical reasoning. To quote an example, property tax structure has to commensurate with the increase in rental and property value.
- b. Payment of grants and its predictability:
- c. Grant-in-aids are mostly paid based on certain formulae as proposed by the State Finance Commission and other concerned agencies. Therefore, it may be possible to predict future grants and plan accordingly.
- d. Identification of issues in revenue realization:
This is to consider whether

- the methods of tax assessment is simple and the collection mode is hassle-free;
- Transfer of grants / defrayed amounts are automatic and routine;
- Institutional mechanism for assessment and collection is transparent and accountable.
- Cost- benefits analysis of projects/ assets
- This method is adopted to evaluate economic and social inability of projects. In this method, the ratio of net annual benefits to the net annual cost is determined. The capital cost which is one time cost, is converted into an annual cost by using the Capital Recovery Factor (CRF).

1.4.3. Financial Plan:

A Financial plan for the local body is formulated based on the outcome of the status report and Financial Assessment.

- ⊕ Optimization of Existing Resource Base: Existing resource base may be optimized by activating the system, by plugging loopholes, by achieving perfection in recovery, and periodical revision of tax-structures.
- ⊕ Identification of benchmark cost: Benchmarking is a process of comparing and measuring costs of various services within the local body against with that best in class. The benchmark cost is taken for optimization.
- ⊕ Institutional Mechanism for Financial Management: The existing institutional mechanism for the financial management may have to be revamped by honing of skills through training, motivation and by the system of incentives and disincentives. Building Management Information System will help to rein accountability and transparency.
- ⊕ Resource Generation: Additional resource may be generated through non-conventional and innovative methods such as:
 - Recycling of municipal land
 - Land use conversion and intensification of development of municipal property.
 - Public- Private Partnership (PPP) for service Provision, BOT (Build, Operate and Transfer), DBFO (Design, Build, Finance and Operate)
 - Higher tariff for excess consumption

- Leasing of Air space
- Optimization of energy resources

1.4.4. Improve the quality of basic services

The quality of basic services provided by the local body is improved through the assessment of the level of the basic services and formulation of Asset Management Plan (AMP).

Assessment of Level of Basic Services (LBS): The level of basic services provided by the local body is assessed by development of performance indicators. Performance indicators provide the 'Gauge' to measure the level accomplishment of quality services.

The following may be various elements of performance indicators.

Coverage – including that in Economically weaker Section Area (EWSA).

Economic viability of the service vis- a- vis tariff/user charges, subsidies, Benefits Cost Ratio(BCR).

Affordability, with particular reference to Economically Weaker Sections/ Slum dwellers.

Participatory process: whether services system enables and encourages the participation by stakeholders-end users, representation from Non-Governmental Organizations (NGOs), Community Based Organization (CBOs), and private investors in decision making.

Technical application in the planning, design, development and delivery recycling, reuse. Application of modern techniques such as GIS and Remote Sensing.

Environmental Impact of the Services: water- surface and ground water Land; Air quality; Noise level; Vibrations; Dust; Soil erosion; Cutting and filling of soil; Cutting of trees.

- Institutional constraint
- Dearth of technical know-how
- Lack of accountability and transparency
- Excessive overhead charges.

Comprehensive asset Management plan:

The principal objective of Comprehensive Asset Management Plan is to prioritize projects for capital investment and for investment for re-habilitation. Various services provided by the local body are examined against a set of performance indicators. Depending upon the level of different services offered by the municipal council, proposals will be formulated to improve the quality of services.

1.4.5. Formulation of Business Plan:

Financial Plan and Asset Management plan are dovetailed to have the Business Plan (BP). The BP will be a sustainable one from economic, social, technical and institutional points of view and emulate improve the service delivery.

2.1 LOCATION

Vellore town is located in the 12°55'N latitude and 79°08' E longitude, on the southern banks of the river Palar, about 135 km west of Chennai. The N.H 46 from Ranipet to Krishnagiri (forming part of Madras – Bangalore corridor) and the State Highway No.1 (Cuddalore – Chittoor) cut across the town. The Villupuram – Tirupathy metre gauge railway line passes through the town with Vellore cantonment and Vellore town railway station located within the town. One of the major B.G. railway corridors in the country, Chennai – Bangalore/ Coimbatore/ Ernakulam runs about 5 km north of this town with Katpadi being the feeder railway junction to the town. (Fig 2.1)

2.2 HISTORICAL ASPECTS

The name of the town 'Vellore' derived from the term 'Vel' of Lord Subramanya, told to chieftains of the tribal huntsman that his 'Vel' could appear on a lotus in the local pond and he could conquer his rival with it. Accordingly it was done. Thus, 'Vel Oor' would mean the town of that Lord who has the weapon called 'Vel' which means speed. It is also said that there was a dense forest of Velan trees (Babul trees) and therefore this place came to be known as Vellore.

Vellore town was under the Rule of King Karikalan and early Cholas, Nandivarman III". King of Pallava bought this town under his control and ruled to the close of 9th century A.D. Afterwards it came under the rule of the Cholas of Uraiyur, the Rashtrakuta dynasty of Malkhed Raja Raja of Thanjavur, the later Cholas and Vijayanagar kings. The Vellore fort was built up by Chinna Bommy Nayak, a sub-ordinate chief under Sadasivaraja and Sriranga Maharaja the Vijayanagar kings in the 3rd quarter of 16th century A.D. The 17th and 18th century periods have seen battles between Vijayanagar kings and the nawabs and the between Nawabs and the Englishmen. In 1805 the Palayakars were opposing the English rulers and were subdued latter.

2.3 IMPORTANCE OF THE TOWN

Vellore is for its rich history known town with the famous Vellore fort (and the temple inside) built as early as 1500 B.C to function as one of the major seats of administration in the Vijayanagar empire. Even in the modern world it is an important administration center being the district headquarters of not only the erstwhile North Arcot district for a long time but also the recently carved out Vellore district. The hinterland of Vellore consisting of Ranipet, Ambur, Vaniambadi etc., famous for its tannery industries. It is an important transportation node with the major railway junction at the nearby Katpadi town on the intense B.G. railway line; the town itself located at the intersection of N.H. 46 and S.H 1. The world famous CMC hospital with 1800 beds and 2000 daily outpatients makes Vellore as an internationally famous health center for more than a century now. The recently developed Vellore Institute of Technology and the Thanthai Periyar Government Engineering College and Thiruvalluvar University have made this town as a major educational center for its hinterland. It is a major commercial center famous for the wholesale trade of Rice and Jaggery. The important places of tourists and archaeological interests are Vellore Fort, Jalakanteswara Temple, Fort Ground and cemetery opposite to the ground, CMC hospital, etc.

2.4 HISTORY OF THE MUNICIPALITY

The Vellore City Municipal Corporation was constituted as early as 1866 under the provision of Town Improvement Act 1865. The Municipal Council was formed in the year 1920 as per the provisions of the MDM Act 1920. The municipality was upgraded to first grade in 1947 and to selection grade in 1970. It was further upgraded to a special grade in 1979. At the time of initial constitution of the municipality, the areas of Kaspas, Fort, Adavananthall, Beripet, Velapadi, Salavanpet, Thottapalayam, Aruganthampoondi, Kosapet, Kavaraipet, Commissary Bazaar and Sankaranpalayam were included in its limits.

2.5 TOPOGRAPHY

This town lies in the Eastern Ghats regions and in the Palar river basin. A part of the town, to the extent of 103 ha (8.90% of the Municipal area) in fact forms part of reserved forest. The Vellore and Palamathi reserved forest areas are located on the eastern side of the town. The southern and western sides of the town are mostly plain agricultural lands with a number of irrigation tanks. The southern bank of Palar river forms the northern boundary of the town. The topography of the town is mostly plain having slope from west to east.

2.6 CLIMATE AND RAINFALL

Being situated 220m above M.S.L, Vellore town has a dry and hot climate. The minimum temperature is 18°4 during November – January and the maximum temperature is 40°5 during April – June. The humidity ranges from 40% -63% in summer and 67% - 86% in winter. the average annual rainfall is 996.7mm. The maximum rainfall occurs during September and October through north east monsoon. The area gets a fairly good rain during southeast monsoon also. The town and its hinterland and fairly received good rainfall during 2005 and because of this the town's water supply has been improved from once in 17 to 11 days to once in 3 days.

2.7 DEMOGRAPHIC CHARACTERISTICS

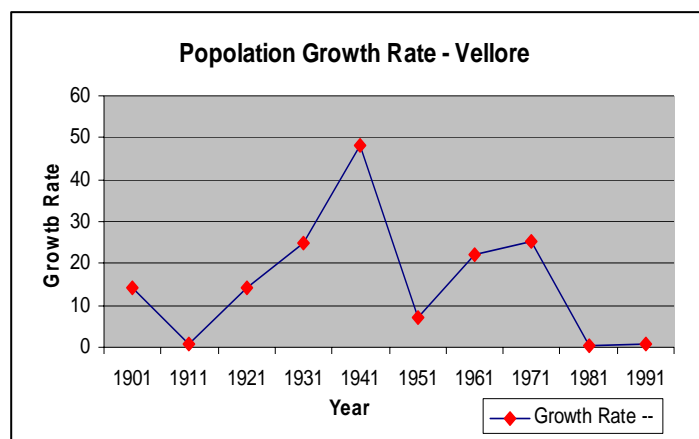
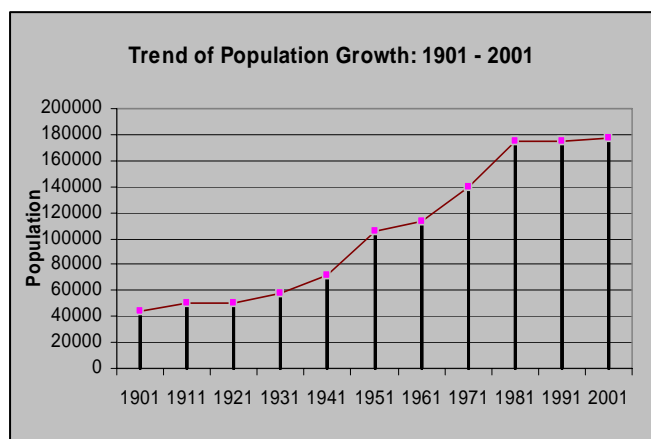
2.7.1 Population Growth

The town's population was 43,537 in 1901, which registered a four fold increase i.e. 1, 77,413 in 2001 (Table 2.1). A maximum growth rate of 48.28% was seen during 1941-51 and a negligible growth rate of just 0.46% was seen during 1981-91 and 1.32% during 1991-2001. Thus the average growth rate during the 10 decades works out to 15.90%. There have been fluctuations in the population growth during the past 10 decades (Fig 2.1).

Table 2.1: Growth of Population – Vellore Town 1901-2001

Year	Population	Variation in	
		Persons	Percentage
1901	43,537	-	-
1911	49,746	6,209	14.26
1921	50,210	464	0.93
1931	57,265	7,055	14.05
1941	71,502	14,237	24.86
1951	1,06,024	34,522	48.28
1961	1,13,742	7,718	7.27
1971	1,39,082	25,340	22.27
1981	1,74,257	35,165	25.28
1991	1,75,061	804	0.46
2001	1,77,413	2,352	1.32
	1,87,915	Av. Growth rate	15.90
		Max. Growth rate	48.28% in 1941-51
		Min. Growth rate	0.46% in 1981-91

Source: census of India



2.7.2 Sex Ratio

Table 2.2 shows the male and female population and number of females per 1000 males i.e. sex ratio during 1951-2001.

Table 2.2: Distribution of population by sex in Vellore town

Year	Males	Females	1951-2001 Females for 1000 males
1951	52,970	53,054	1001
1961	57,451	56,291	980
1981	87,846	86,401	983
1991	87,968	87,093	990
2001	88,048	89,365	1001

Source: Master plan: Vellore 1992 figures for 2001 derived from census and added.

It is observed that, the sex ratio of the number of females to thousand males had been decreased from 1001 to 980 and from 980 to 959 during the decades 1951-61 and 1961-71 respectively. But slight increase from 959 to 983 to 990 during the decades 1971-81 and 1981-91. Recent decade the sex ratio in 1001 females per 1000 males.

2.7.3 Literacy

The number of literate persons in the town and their distribution by sex from 1951 to 2001 is shown in Table 2.3.

Table 2.3: Distribution of Literates by sex 1951 to 2001 in Vellore town

Year	Population	Total literates	% literate to total population	Male literate	% of literate to male population	Female literates	% of female literates to female population
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1951	1,06,024	42,980	40.55	26,672	54.13	14,308	26.97
1961	1,13,742	55,366	48.68	34,444	60.00	20,922	37.17
1971	1,39,082	84,168	60.52	48,622	68.53	35,506	52.15
1981	1,74,247	1,06,339	61.02	60,957	69.39	45,382	52.52
1991	1,75,061	1,13,980	65.11	62,693	71.27	51,287	58.89
2001	1,77,413	1,31,215	73.96	70,341	79.89	60,874	68.12

Source: Vellore Master Plan 1992 and census of India for 2001.

It is observed that the positive increase of percentage of literates to the total population during the decades since 1951 due to facilities available and awareness about education among the people. There is a steady increase in literates both male and females.

2.7.4 Population Density

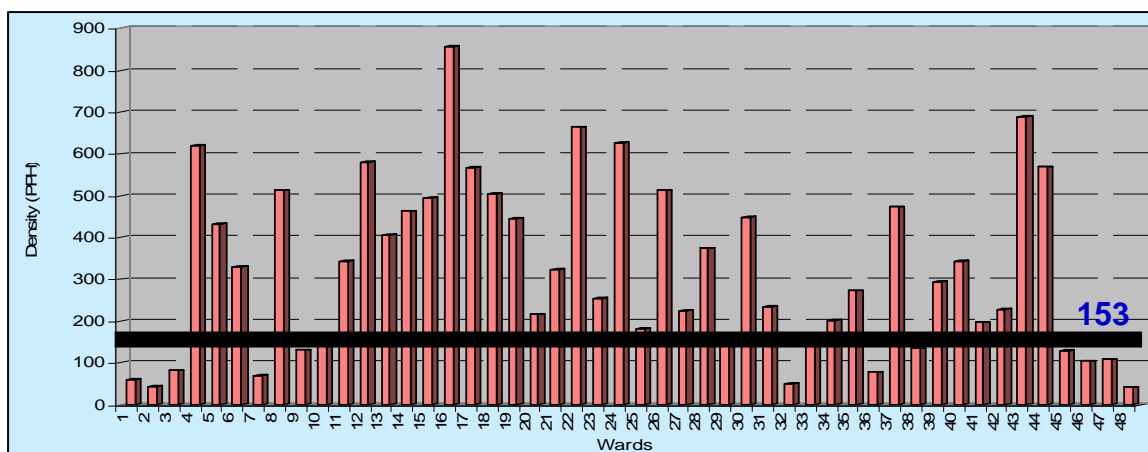
Vellore Town covers an area of 1054 hectares excluding the reserve forest of 103 hectares. Out of this, 736.55 hectares 69.88% is the developed area. The gross density of the town works out to 241 persons/ hectare. The wardwise density during 1996 is given in Table No.2.4. The maximum density was 902 PPH in census Ward No.4 (Arugandhampoondi area) and the minimum density was 31.76 PPH in Ward No.32 (Poonthottam area).

Table 2.4: Ward wise area, population and density of Vellore town (1996)

Ward No.	Area (sq.km)	Population	Density (PPH)
(1)	(2)	(3)	(4)
1.	0.67	3671	54.79
2.	106	3946	37.23
3.	0.61	3690	60.49
4.	0.04	3609	902.25
5.	0.08	3682	460.25
6.	0.21	3695	175.95
7.	0.55	3715	55.36
8.	0.08	3579	447.38
9.	0.15	3650	243.33
10.	0.12	3586	298.83
11.	0.09	3694	410.44
12.	0.05	3542	708.40
13.	0.08	3789	473.63
14.	0.09	3733	414.78
15.	0.09	3972	441.33
16.	0.05	3555	711.00
17.	0.09	3687	409.67
18.	0.07	3649	521.28
19.	0.08	3526	440.75
20.	0.17	3597	211.59
21.	0.09	3573	397.00
22.	0.07	3578	511.14
23.	0.12	3703	308.58
24.	0.06	3565	594.17
25.	0.15	3653	243.53
26.	0.07	3694	527.71
27.	0.08	3852	481.71
28.	0.12	3760	313.33
29.	0.32	3614	112.94
30.	0.07	3650	521.43
31.	0.14	3752	268.00
32.	114	3621	31.76
33.	0.22	3354	152.45

34.	0.12	3608	300.67
35.	0.12	3679	306.58
36.	0.43	3597	83.65
37.	0.07	3668	524.00
38.	0.27	3720	137.78
39.	0.10	3550	355.00
40.	0.12	3808	317.33
41.	0.15	3672	244.80
42.	0.14	3559	254.21
43.	0.06	3412	568.67
44.	11	3578	325.27
45.	0.15	3643	242.87
46.	0.33	3489	105.73
47.	0.42	3641	86.69
48.	0.94	3501	37.24

Source: CCP Report & Vellore City Municipal Corporation



2.8 POPULATION OF VICINITY AREA

2.8.1 Population Growth

Through the population growth in Vellore is fluctuating the fact is that, the growth rate in the last two decades is insignificant. But the growth in its hinterland is continuously growing. There are thirty inhabited settlements constituting of 8 Town Panchayats and 22 Village Panchayats in the planning area coming under the influence of Vellore Town. The Growth of population in the vicinity area as altogether for the past few decades is as shown in Table 2.5.

Table 2.5: Population growth in vicinity area of Vellore town

Year	Population	Variation in	
		Persons	Percentage
(1)	(2)	(3)	(4)
1951	78,452	-	-
1961	90,493	12,041	15.35
1971	1,25,329	34,836	38.50
1981	1,69,813	44,484	35.50
1991	2,11,283	41,470	24.42
2001	2,86,704	75,421	35.70

Source: Master plan 1992 and census of India

The growth rate percentage of the Vicinity area during the decade 1961-71 is high and falls during the decade 1981-91 and it again rises during the decade 1991-2001. This seems that some of the activities of Vellore got shifted to most of the influx population settled in the vicinity area and so the Vellore town population is standstill during this decade 1991-2001.

To look at the dynamics of population, it would be appropriate to study the trend of variation of population in Vellore town Group as a whole, which consists of Vellore Town and 8 Town Panchayats with the trends of variation of population in Vellore Town and the other urban centers of the town group. The decade variation of population from 1941 to 2001 is given below in Table No.2.6 for the Town Group, Vellore Town and other urban centers (Excluding Vellore Town) in the Planning Area.

Table 2.6: Percentage variations of population in Vellore town group, town and other urban centers

S.No	Decade	Percentage Variation of Population		
		Vellore Town Group	Vellore Town	Urban Centres Other than Vellore Town in the Town Group
(1)	(2)	(3)	(4)	(5)
1.	1941-51	46.73	48.28	42.56
2.	1951-61	9.30	7.27	14.95
3.	1961-71	30.53	22.27	52.01
4.	1971-81	30.75	25.28	40.92
5.	1981-91	13.17	0.47	34.10
6.	1991-2001	19.11	1.34	41.05

Source: Approved Master Plan Report and Taluk Office

As the table reveals the variation is not significant in all columns during the decade 1951-61. But the variation is high from the decade 1961-71 to 1991-2001 in the urban centers other than Vellore Town in the town group (i.e. column No.5) when compared to Vellore Town and Vellore Town Group. It is significant that the rate of growth of population in the urban centers at the fringe of Vellore Town was shown when compared with the growth of population in the town. Yet another revealing fact is that 69% of the population (2001) in the vicinity area is concentrated in the urban centers and the remaining 31% of population are living in villages within the planning area.

2.9 OCCUPATIONAL STRUCTURE OF VELLORE TOWN

The distribution of the working population by their occupation of the town in the year 2001 is shown in the Table No.2.7.

Table 2.7: Distribution of workers by sex and occupation in Vellore town

S.No	Occupation	No.of total workers	% to total workers	No.of male workers	% to total population	No.of female workers	% to total population
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Agricultural cultivators	419	0.35	300	0.17	119	0.07
2.	Agricultural Labours	560	0.46	325	0.18	235	0.13
3.	Household Industry	16309	13.52	8880	5.01	7429	4.19
4.	Other workers	100583	83.35	67055	37.80	33528	18.90
5.	Marginal workers	2800	2.32	850	0.48	1950	1.10
	Total	120671	100.00	77410	43.64	43261	24.39

Source: Vellore & Katpadi Taluk Office

In 2001, the total working force is 1,20671 out of the total population of 1,77,413. The participation rate is 68.03% to the total population.

This town is oriented to a Trade center and also the District Head Quarters of Vellore District, the prime economic activities of the town is in tertiary sector, the percentage of workers in this sector, which include services, commerce and transport

works out to 83.35% to the total workers. The occupation under secondary sector such as manufacturing and household industries is the next predominant sector, which works out to 13.52% to the total workers. Primary occupation is insignificant to the town.

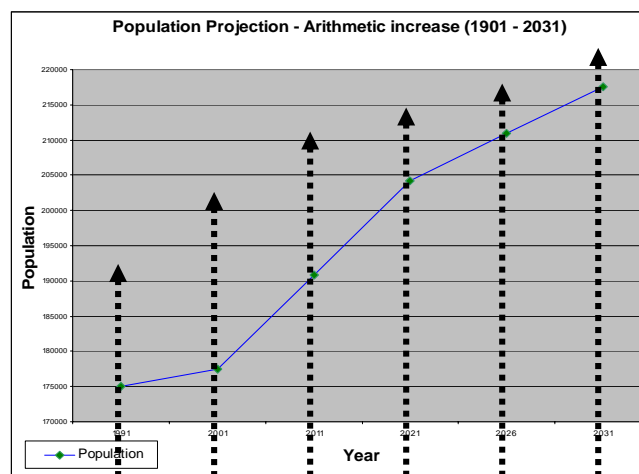
Male workers participation is higher than the female participation in all sectors in occupation. The percentage of male workers to the total workers is 43.64% whereas, female workers is 24.39%.

2.10 Population Projection up to 2026

The development of the town depends on the population for the next 20 years. The scope for the town can be arrived with the requirement. The population projection is done in 3 methods Arithmetic Projection, Geometric Projection, Exponential Projection.

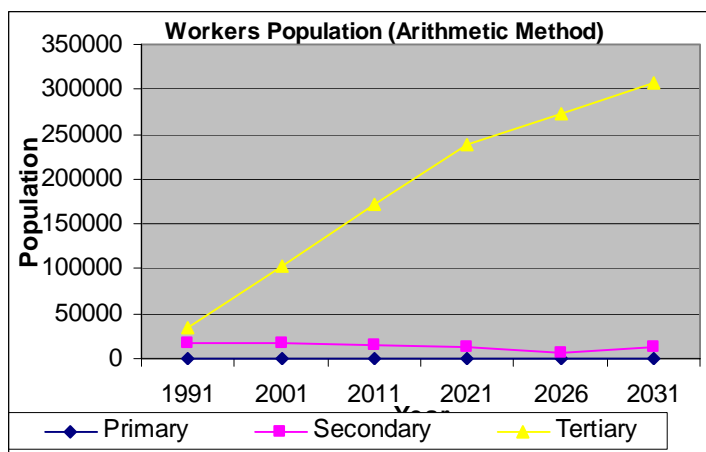
2.10.1 Scenario for Arithmetic Projection Method

In projection may forecast by implementation of only physical development projects funded by the municipality in the next 5 years we could find the population projected will be in increased phase. Assuming the out migration is nil the projection is done identifying the increase with respect to the present needs.



**INCREASE OF
POPULATION
and
WORKERS
POPULATION**

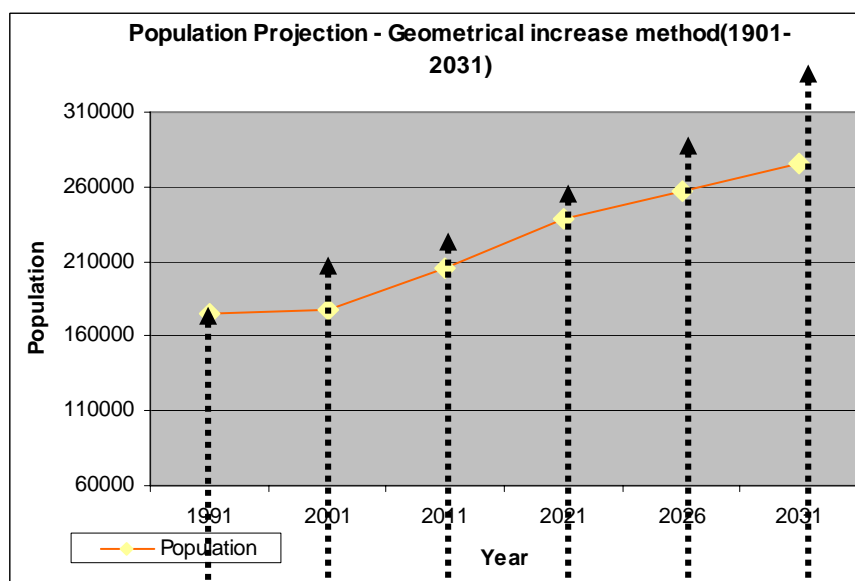
With this increase in the population and the Vision of Vellore is to make it a **“Major Commercial centre in the region with adequate comfort and solace for habitation”** in the next 20 yrs we can see the tertiary sector is in the increasing high.



The demand for Primary and secondary sector is less comparatively. Thus 97% of the total population belongs to tertiary sector.

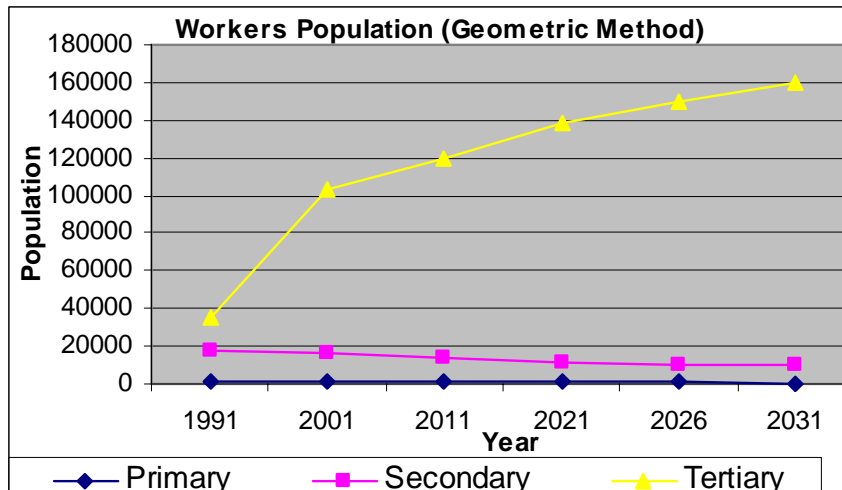
2.10.2 Scenario for Geometric Projection Method

This type of projection may happen with the provision of economic opportunities to the projected population. The projects to be implemented may have to raise the financial status of the municipality to support the town development. The projects identified in CCP such as Office complex, Market complex may strengthen the status of the town.



**INCREASE OF
POPULATION
Vs
WORKERS
POPULATION**

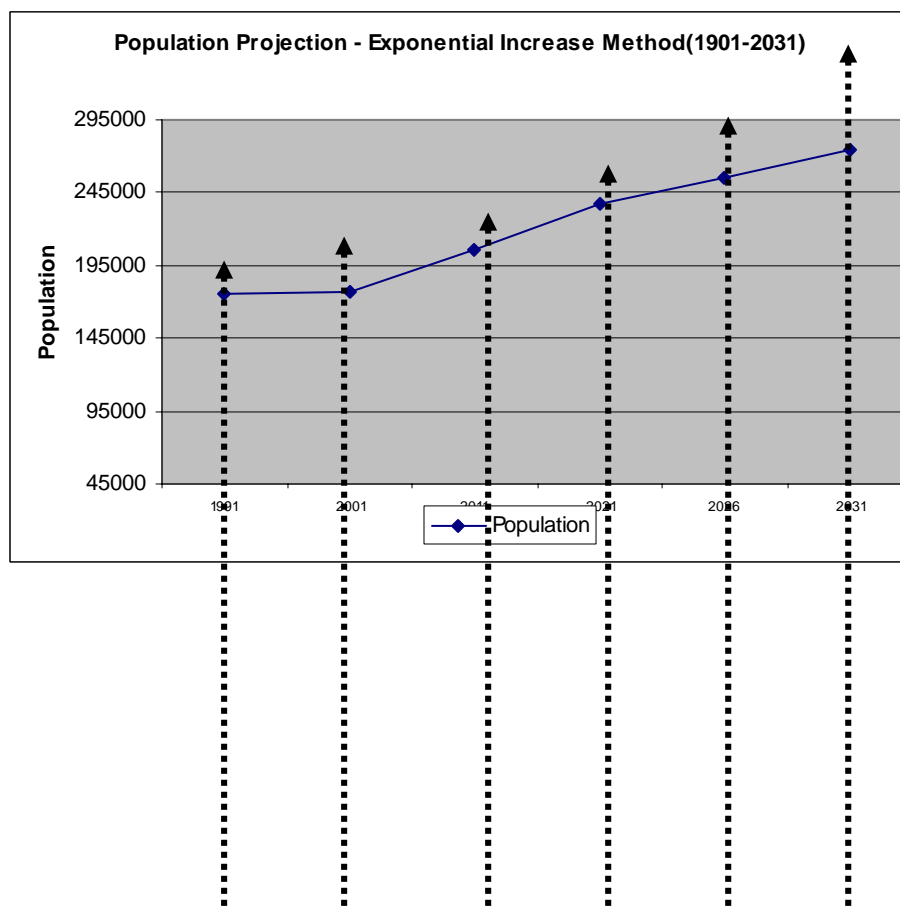
In Geometric projection method the percentage increase in population from decade to decade is assumed to be a constant. This method gives a better result to reach the better saturation in development.

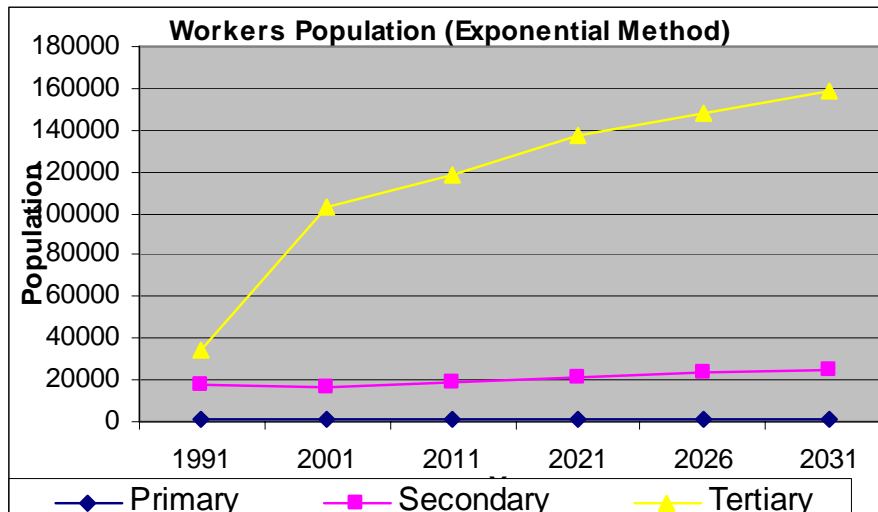


From the available census data, the tertiary sector is still increasing in the past decades with about 90% of the total population thus the primary and secondary sector will be very less increase. So in adopting the above said projects the vicinity of the town gets increases with the influence of tertiary sector.

2.10.3 Scenario for Exponential Projection Method

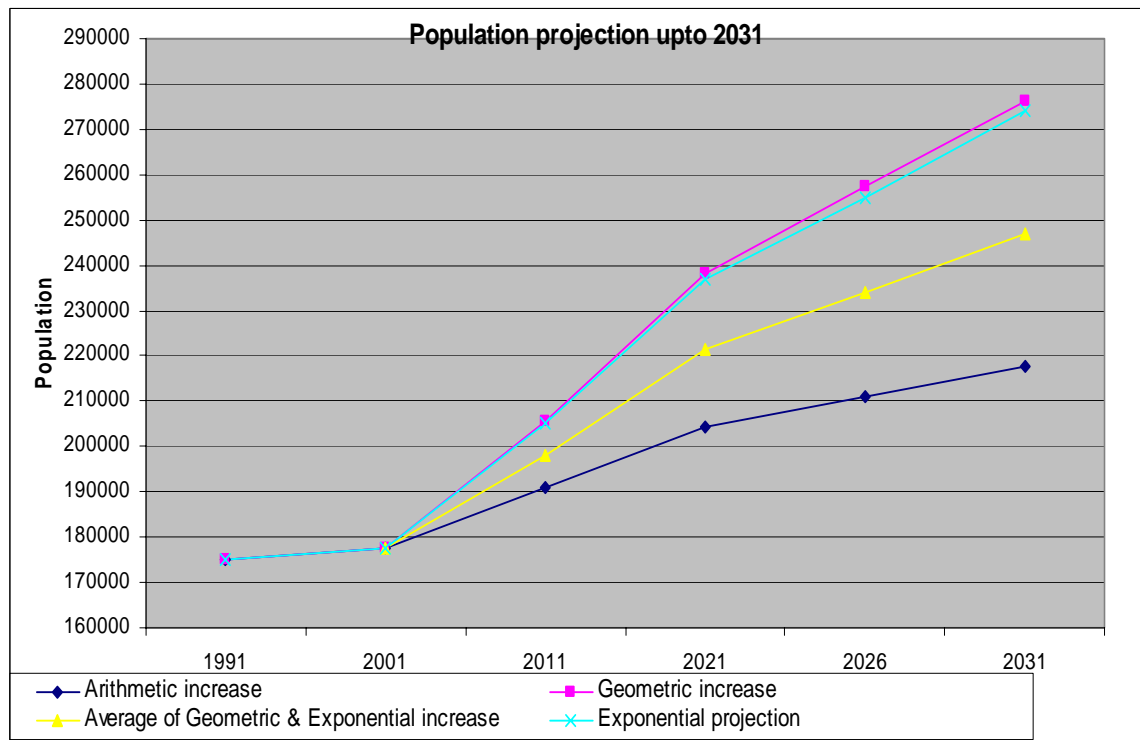
This type of projection may be high with the immigration of the families with the provision of employment opportunities. The town attracts a maximum population with implementation of projects like industries, in the near future. Immigration of the families for the employment generated will occur with the improved of the infrastructure facilities and the town may be developed with the exponential increase.





In the graph, the projected population is in rapid phase with 85% increase in the tertiary sector. The projects identified in CCP include financial development projects which could be privatized in order to increase the income to the municipality. We could see from graph the other sectors will have a less growth comparatively on implementing these projects.

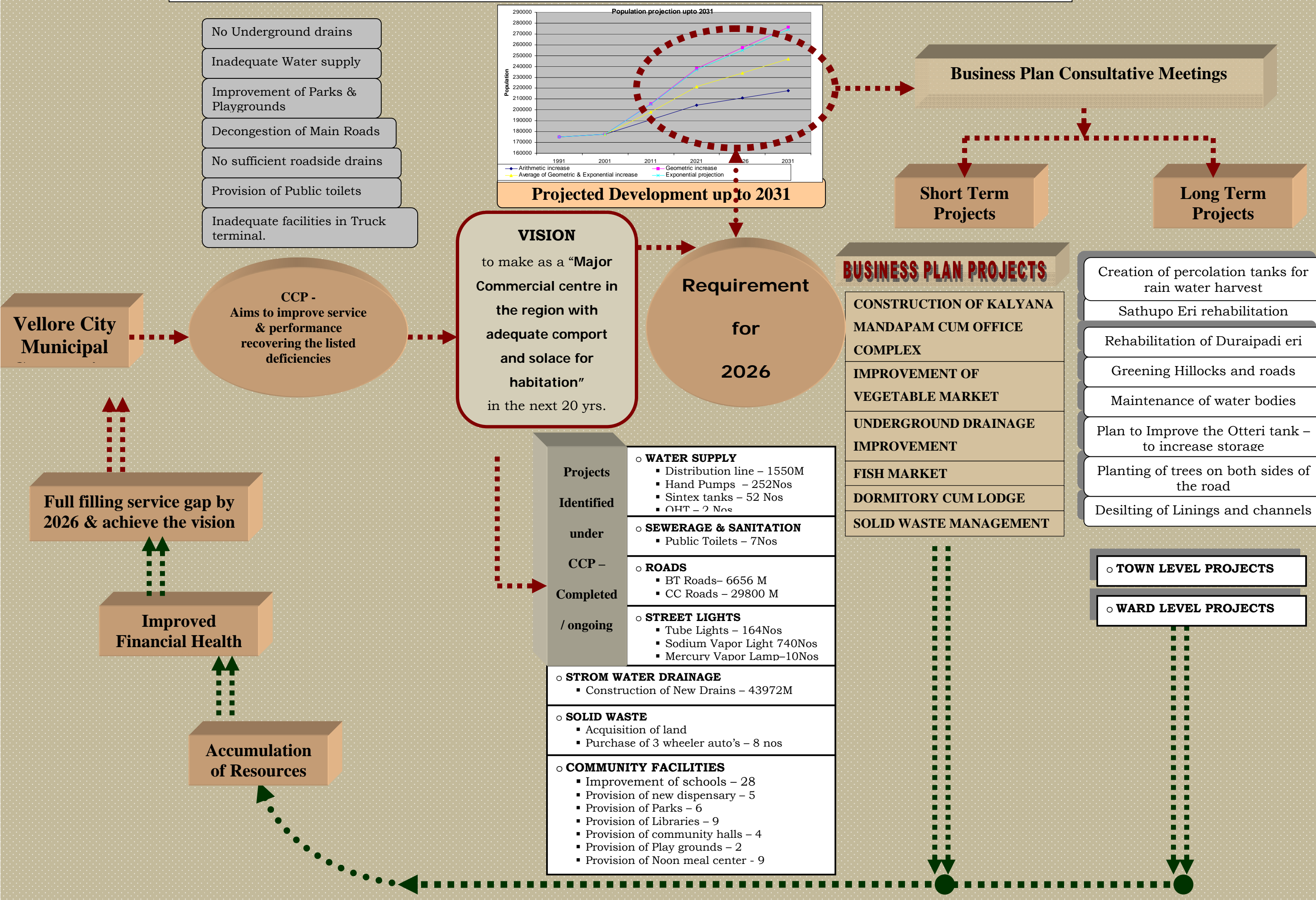
2.10.4 Population Projection for the Next 20 Years



The projected population for the next 20 years in three different methods is described in detail. For the next five years the increase in population will be in an increasing phase. The projects of money & time consuming projects may not be implemented and we can adopt short term & infrastructure projects we may have very less immigration in the next 5 years thus resulting the population increase may be of as that of Arithmetic increase method.

But there are certain projects with self supporting & revenue generating to be implemented in the next 20 years may lead to accountable increase in population. Thus we can conclude that the increase in population may be in between **Arithmetic Projection & Geometric Projection method**. The town is having the vision to develop in Tourism & Transportation we may have the tertiary sector to be increased.

Fig 2.4: Strategy to develop Business Plan in Vellore



Town is presently insufficient with all infrastructure facilities like Underground drainage facilities, inadequate water supply, improvement of Parks & Playgrounds, decongestion of main roads, public toilets, insufficient roadside drains, inadequate facilities in truck terminal. To support the future projected population the town should be satisfied with all the defects identified to fulfill the vision for Vellore to make as a **“Major Commercial centre in the region with adequate comfort and solace for habitation”** in the next 20 years.

2.10.5 PROJECTS IDENTIFIED IN CCP

The proposed services in the CCP states that the town development is identified in both ward level and town level. The ward level projects are Water supply project: Distribution line – 1550M, Hand pumps – 252 Nos, Sintex tanks – 52 Nos, OHT – 2No, Sewerage & Sanitation: Public Toilets – 7Nos, Storm Water Drainage: Construction of New Drains – 43972M, Roads: BT Surfacing – 6656 Sq.M, CC Roads– 29800 M, Street Lights: Tube Lights – 164 Nos, Sodium Vapour Light – 740Nos, Mercury vapour Lamps – 10 Nos, Solid waste management – Acquisition of land and Purchase of 3 wheeler auto;s – 8 nos, Provision of community facilities like Improvement of schools – 28 nos, provision of new dispensary – 5, provision of parks – 6, provision of libraries – 9 provision of community halls – 4, provision of play grounds – 2, provision of noon meal center – 9.

2.10.6 POST CCP PROJECTS COMPLETED/ PROCESSED

The Town level projects are also included are both Long term & short term. The short term projects to be completed in the next 5 yrs are creation of percolation tanks for harvesting rain water, Sathuperi Eri rehabilitation, rehabilitation of Duraipadi eri, greening hillocks and roads, maintenance of water bodies, plan to improve the Otteri tank- to increase storage, planting of trees on both sides of the road, Desilting of linings and channels also be implemented in the next priority. In completion of these projects listed above the town may be fulfilled with the vision thus the Business plan is done with projects identified as per the immediate requirement of the town. Thus we conclude the Business plan projects will be the extension of the CCP formulated are construction of kalyanamandapam cum office complex, improvement of vegetable market, underground drainage improvement, fish market, dormitory, solid waste management. Thus these are prioritized with the construction period & funding by both self & private agencies.

LAND USE AND URBAN GROWTH TRENDS

3.1 IMPORTANCE OF LAND USE

Land use plays a vital role in the development of better urban living environment. It also helps towards better and orderly urban growth trends. Better management and distribution of activities in the town will reduce many problems relating to traffic and transportation and distribution of services. Land and land use are considered as the key elements is resource generation for the municipalities.

3.2 EXISTING LAND USE

The Vellore Corporation limits cover an area of 1157.12 ha out of which 103 ha (i.e.10%) is the reserved forest. Land use break up of Vellore Town Area, based on the land use survey conducted during 2001 is given in the Table 3.1. Of the total geographical area (excluding the forest area), 69.87% is developed area and 30.13% is undeveloped area.

Table No 3.1: Existing Land Use Break Up of Vellore Town – 2001

Sl. No	Land use	Extent in Hectares	Percentage to total developed undeveloped area	Percentage to total area
(1)	(2)	(3)	(4)	(5)
I	DEVELOPED AREA			
1.	Residential	410.71	55.76	38.96
2.	Commercial	61.39	8.34	5.82
3.	Industrial	11.67	1.58	1.11
4.	Educational	24.81	3.37	2.35
5.	Public & Semi Public	121.27	16.46	11.51
6.	Transportation	106.70	14.49	10.12
	Total developed area	736.55	100.00	69.87
II	UN DEVELOPED AREA			
7.	Agricultural	283.67	89.33	26.91
8.	Water bodies	33.90	10.67	3.22
	Total undeveloped area	317.57	100.00	30.13
	Grand total	1054.12		100.00

Source: Survey conducted by Vellore LPA, Vellore.

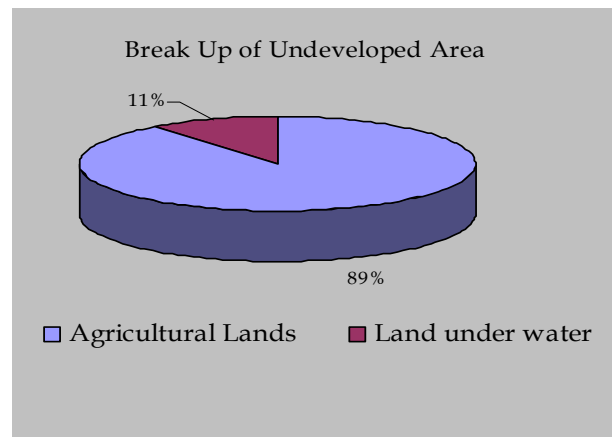
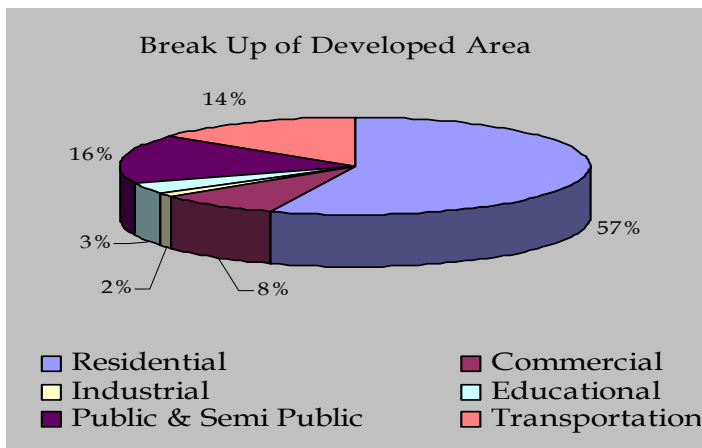
3.3 COMPARISON IN LAND USE

Table 3.2 shows a comparative land use break up between 1992 and 2001 in Vellore Town Area. At present the area developed is 736.55 hectares which constitute about 69.87% of the whole area. Early study 1992 revealed 594.27 hectares as developed area which is about 56.37% to the total area. Nearly 13.50% of the total area has been developed during the past 28 years, the fact of which is the development of the town through the time is insignificant.

Table No. 3.2: Comparative Land Use Breakup Between 1992 & 2001

		Master plan 1992 (Base year 1973)			Existing Land use 2001		
Sl. No.	Land use	Extent in Hectares	% to total developed & undeveloped area	Percentage to total area	Extent in Hectares	% to total developed & undeveloped area	% to total area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I . DEVELOPED AREA							
1.	Residential	305.40	51.40	29.98	410.71	55.76	38.96
2.	Commercial	32.22	5.42	3.06	61.39	8.34	5.82
3.	Industrial	11.52	1.94	1.09	11.67	1.58	1.11
4.	Educational	-	-	-	24.51	3.33	2.35
5.	Public & Semi Public	82.86	13.94	7.89	121.27	16.46	11.51
6.	Transportation and Communication	113.20	19.05	10.74	106.70	14.49	10.12
7.	Recreational	17.98	3.02	1.70	-	-	-
8.	Public Utilities	18.59	3.13	1.76	-	-	-
9.	Vacant developed	12.50	2.10	1.18	-	-	-
	Total developed area	594.27	100.00	56.37	736.55	100.00	69.87
II. UN DEVELOPED AREA							
10.	Agricultural	397.19	86.37	37.69	283.67	89.33	26.91
11.	Land under water	50.05	10.88	4.75	33.90	10.67	3.22
12.	Vacant undeveloped	12.61	2.75	1.19			
	Total undeveloped area	459.85	100.00	43.63	317.57	100.00	30.13
	Grand total	1054.12	-	100.00	1054.12	-	100.00

Source: approved Master Plan Report 1992 and Survey conducted by Vellore LPA, Vellore 2001.



3.3.1 RESIDENTIAL USE

The Residential Use is more dominated in Vellore Town. Residential areas are scattered over almost all parts of the Town. At present it constitutes (including its own roads) about 410.71 hectares which is 55.76% of the developed area of the town. In earlier land use survey in 1973 it is found that 305.40 hectares or 51.40% of the developed area of the town comes under this use. There are few pockets of organized developed residential area by way of approval layouts. The details of approved layouts in Vellore Town and vicinity area are given in Table No. 33. The fact is that the vicinity area both town Panchayat and villages closer to Vellore City Municipal Corporation and town Panchayats has been growing in terms of urbanization. The growth in Vellore is kept insignificant.

Table 3.3: Approved Lay Outs in Vellore Town & Vicinity Area (Up to 2001)

Sl. No	Name of the Local body	Number of Layouts	Extent in hectares	Total extent (in Hectares)
(1)	(2)	(3)	(4)	(5)
I	MUNICIPALITY			
1.	Vellore Town	92	78.87	78.87
	Sub Total	92	78.87	
II	TOWN PANCHAYATS			
1.	Sathuvachari	65	359.39	
2.	Dharapadavedu	68	205.73	
3.	Kalinjur	49	146.66	
4.	Allapuram	11	21.91	
5.	Gandhi Nagar	9	0.18	
6.	Shenbakkam	2	8.31	
7.	Thorappadi	14	15.44	
8.	Katpadi	23	42.90	
	Sub Total	241	800.52	
III	VILLAGE PANCHAYATS			847.10.21
1.	Ariyur	3	4.79.70	
2.	Virudampattu	6	9.01.90	
3.	Kangeyanallur	7	6.14.90	
4.	Palavansathu	3	3.38.70	
5.	Alamelumangapuram	13	21.37.60	
6.	Vanjur	2	1.80.00	
	Sub Total	32	25.12	
	GRAND TOTAL	367	925.97.93	

Source : Available records in Vellore LPA.

3.3.2 COMMERCIAL USE

The major economic activity of Vellore Town is trade and commerce. Vellore being the district Head Quarters, the town ranks first in the commercial activity in the Vellore district. Land under commercial use constitutes 8.34% to the developed area of the town with an extent of 61.39 hectares. Earlier in 19 as per the approved Master Plan the land under commercial use was 32.22 hectares (i.e.) 5.42% of the developed area.

3.3.3 INDUSTRIAL USE

The area developed under industrial use is 11.67 hectares which constitute about 1.58% of the developed area. Early study (1992) revealed that 11.52 hectares which is about 1.94% of the developed area under industrial use. Hence Industrial development and its reflection in Land use have been very poor in this town for the last 3 decades or more. The town does not experience any large scale industry.

3.3.4 PUBLIC & SEMI PUBLIC

Public and Semi Public uses usually consist of administrative offices such as Government and Quasi Government offices, Taluk offices, offices of the Local Authorities, Courts and health facilities like Hospital, Dispensary and Nursing Home. The total area under this use works out to be 121.27 hectare which constitute about 16.46% of the developed area. In 1992 the total area under this item includes Educational use which works out to 82.86 hectares (i.e.) about 13.93% of the developed area.

3.3.5 EDUCATION

The educational institutions like Elementary Schools, High schools, higher secondary schools, College and other institutions, such as Arabic College, Police Training college, Type writing institutions, Tutorials constitutes 24.81% hectares i.e. 3.37% of the developed area of the town.

3.3.6 TRANSPORT AND COMMUNICATION

Land use of transport and communication accounts for 19.05% of the developed area in 1992 and 14.5 percent in 2001.

3.3.7 UNDEVELOPED AREA

Undeveloped areas in the town include the following uses:

1. Agricultural
2. Water Bodies

The total are under undeveloped status is 317.57 Hectares (30.13%) of the total area of the town.

3.3.8 AGRICULTURAL

The land under agricultural use forms 283.67 hectares and 26.91% to total area of the town (2001). Almost agricultural and vacant lands are being converted in to residential and other uses. Agricultural and existing nearby developed areas are converted mostly for residential purposes. The undeveloped use is distributed mainly along the fringes of the town. The coverage of this use is more on the north i.e. along the river Palar and south eastern direction.

3.3.9 WATER BODIES

The land under this use constitutes 33.90 hectares and 3.22% to total area of the town. The Kanar (jungle stream) and the fort moat area come under water bodies which form part of the non-urban use.

3.4 VICINITY AREA

As per LPA study (2001) the vicinity area, consisting of 30 villages including of eight Town Panchayats which are around the vellore town, spreads in area of 18112 hectares.

3.5 LAND USE BREAK UP OF VICINITY AREA AS PER APPROVED MASTER PLAN (BASE YEAR 1973) AND AS PER 2001 SURVEY

The Land use break up of vicinity area as per approved master plan 1992 (base year 1973) and 2001 survey is shown in Table No.3.4.

Table No 3.4: COMPARISON IN LAND USE (VICINITY AREA) / Small Hs

S. No	Land use	Master plan 1992 (base year 1973)			Existing land use 2001		
(1)	(2)	(3)	(4)	(5)	(6) (Ext. in Ha)	(7) (% of total developed area)	(8) (% of total area)
I. DEVELOPED AREA							
1.	Residential	575.85	41.31	3.18	2898.31	72.25	16.00
2.	Commercial	9.25	0.66	0.05	68.60	1.56	0.35
3.	Industrial	55.27	3.96	0.31	176.63	4.40	0.98
4.	Educational				243.00	6.06	1.34
5.	Public & Semi Public	347.09	24.90	1.92	245.00	6.11	1.35
6.	Public Utilities & Services	30.61	2.34	0.17			
7.	Transportation	374.05	26.83	2.07	386.00	9.62	2.13
	Total developed area	1393.95	100.00	7.70	4011.54	100.00	22.15
II. UN DEVELOPED AREA							
8.	Agricultural wet/ dry	10494.40	62.77	57.94	8268.46	58.64	45.65
9.	Open & meadows	101.11	0.60	0.56			
10.	Land underwater	2331.54	13.95	12.87	2041.00	14.47	11.27
11.	Reserve forest & hillocks	3791.00	22.68	20.93	3791.00	26.89	20.93
	Total undeveloped area	16715.05	100.00	92.30	14100.46	100.00	77.85
	Grand Total	18112.00		100.00	18112.00		100.00

Source: Approved Master Plan Report 1992 and survey (2001) conducted by Vellore LPA, Vellore.

3.6 DESCRIPTION OF EXISTING LAND USE

The details of the major land use in the vicinity area are briefly given below.

3.6.1 RESIDENTIAL

The major residential settlement in the vicinity area are Thorapadi, Allapuram, Konavattam, Shempakkam, Virudampattu, Kalinjur, Gandhi Nagar (Katpadi extension), Dharapadavedu, Katpadi, Kangeyanallur and Sattuvachari. The other major important settlements are Ariyur, Virupakshipuram, Seduperi, Palavansathu, Alamelumangapuram, Karigiri Virudampet and Jafrabad.

3.7 REASONS FOR GROWTH OF VICINITY AREA

It is observed from Table 3.4 that residential development is much faster in the year 2001 i.e.72% against 41% in 1992. The next important land use development is reflected in Transportation (9%).

The increase in the residential area is mainly due to the development of the housing schemes developed by the Tamil Nadu Housing Board, besides shifting of the offices of the district collectorate, District D.S.P. office central jail and other offices from Vellore town in the recent past. A number of higher educational institutions have been attracted in the vicinity area of Vellore town (VIT, Thanthai Periyar Govt. Engg. College, the Govt. Arts College, Two colleges for Women, Govt. Polytechnic, CMC's new block, B.Ed Training College, NTTE and Others).

3.8 IMPACT

As a whole, the growth of the Vellore town in terms of population and activities is stagnating while the vicinity area of the town is growing in terms of population and activities. The impact of such trend is that the local body of Vellore is losing property tax, professional tax and a number of other taxes directly and indirectly.

BASIC SERVICES AND SOCIAL FACILITIES

4.1 WATER SUPPLY

4.1.1 Existing status

Vellore Municipality has its water supply requirements through sub-surface sources. The sub-surfaces sources are the bore well/ well at the Otteri lake, Palar river bed and Sathavachari town panchayat. These are the sources the Vellore City Municipal Corporation is dependent for drinking water supply, as the town does not have perennial water course. However the Palar river existing at the northern boundary of the town but it is always dry through out the year. Only at the time of normal and adequate rainfall, the river sees the thin water flow. The year 2005 has given some what adequate rain in the town and its vicinity areas. Last year rains and seepages in the river bed and Otteri lake have given hopes of water supply to the town.

Thus the town and its population is supplied with water from the following four sources:

1. Otteri lake
2. Palar hendworks
3. Karugampathur head works and
4. Sathuvachari town panchayat

4.1.2 Otteri Lake

This is the oldest scheme commissioned during 1907 and has its source at Otteri lake. The water from this source is drawn to two ground level reservoirs (GLR) located at filterbed from where it is distributed to the town. This scheme has served its life period and no water is available in the lake. The rainfall during 2005 has helped the seepage. Thus, the borewells drilled in and along the banks of the lake from borewells is being supplied to the town. On an average about 5 lakh litres of water is drawn daily, during summer.



Otteri

4.1.3 Palar Headworks

This scheme was commissioned subsequently during 1934, with headworks at Palar River near old bridge leading to Katpadi. This scheme consists of one 4m diameter suction well, 5 infiltration galleries of 90 m length. The Palar headwork has also served its life period more than of 50 years. Only an average of 10 LLD is available from this source, during summer. The rainfall during 2005 in Vellore and its vicinity areas has slightly by improved sub-surface water. Thus, today 60 to 70 LLD is extracted and supplied to the town.



Old Palar

4.1.4 Karugamputhur Head works

This was the third scheme and commissioned in 1982 again with Palar as source but at a different point i.e., near Karugamputhur village. This head works is situated at about 5 kms from Vellore town. This scheme has been designed for a population of about 2 lakhs by 1996 as an intermediate stage and 250000 lakhs by 2011 for ultimate stage. The scheme was meant not only for Vellore town but also for Allapuram and Government institutions like polytechnic, central jail etc. It was proposed to draw 23.04 MLD in the intermediate stage and 28.25 MLD for ultimate stage. The scheme consists of a collector well with 8 radial arms. Due to depletion of water level in river Palar during summer months 2 infiltration wells have been added in addition to existing 8 borewells. Now an average of 30 LLD is realized from this source.

4.1.5 Sathuvacheri Town Panchayat

All the above 3 sources of water were found to be very much insufficient for Vellore town and hence about 10 LLD of water is drawn from Sathuvacheri Town Panchayat water supply scheme till 2004. This water is being pumped directly from Sathuvacheri headworks to the elevated reservoir (capacity 10 lakh litres) located at Saidapet. This caters to the needs of people at Saidapet, Kakithapattarai and Thotapalayam areas. However the first three sources, namely Otteri lake. Palar head

works, karugamputhur headworks have been recharged with water during the rains of 2005 and they continue yield in some what improved state. Due to the availability of water, sathurachari water is not available by the town and instead a new source again at the Palar river namely Ponnai source harnessed supplies 20 to 25 LLD from 2004. Today vellore town people get once in the three days instead of once in the 11 days prior to 2005. Today the municipality supplies 74 LPCD. The duration of supply is 2 hours.

Table 4.1: Total quantity of water supplied to Vellore at 2005.

Sl. No.	Source	Quantity Available	
		Ordinary/days	During summer days
1	Otteri lake (1906)	10 LLD	10 LLD
2	Palar headworks (1934)	70 LLD	60 LLD
3	Karugamputhur headworks (1982)	45 LLD	35 LLD
4	Sathuvacheri town panchayat / Ponnai (2004)		-
5	Ponnai	30 LLD	25 LLD
Net quantity to Vellore town		155 LLD	130 LLD

Source : Vellore Municipality

4.1.6 Street borewells

In addition to the above piped water supply system there are as many as 423 hand pumps each with borewell located in various part of the town officials claims that 250 to 300 borewells have been (2004) laid till 2005. In addition there are open wells/ bore wells maintained by the individual families. Thus there at least 850 hand pumps with borewells in Vellore town.

4.1.7 Distribution System

a. Overhead Tanks

The water from the sources at items i. to v above are stored in the following reservoirs.

Table 4.2: Location of Reservoirs in the Municipality

S. No	Location	Type of Reservoir	Capacity
1	Filter bed	GLR	20 LL
2	Filter bed	GLR	19 LL
3	Sankaranpalayam	OHT	15 LL
4	Bharathiyar Nagar	OHT	10 LL
5	Saidapet	OHT	10 LL
6	Vasanthapuram	OHT	5 LL
7	Punniakodi Nagar	OHT	5 LL
8	Arugadam Poondi	OHT	6 LL
9	Kakitha Pattarai	OHT	2 LL
10	Krishna Nagar	OHT	15 LL

Source : Vellore City Municipal Corporation

b. House Connections

There are as many as 16371 domestic house connections as against the total 33772 households. In addition, there are 364 non-domestic connections (2005).

As per the standard 90 LPCD should have been supplied in the town. But due to inadequate source and failure of rains, only 55 to 74 LPCD is supplied in the town. Thus, the gap is 16 to 35 LPCD or 30 MLD. Even this 55 to 74 LPCD is supplied once in 3 days, not daily. Thus, the water supply is poor and the requirements are on increasing trend.

c. Issues

I. Town Level

(i) Quantity

The average daily supply ranges from 26 LPCD during summer to 67 LPCD during the remaining period prior to 2004. But today 55 to 74 LPCD is supplied which is grossly inadequate comparing the norms of State Government i.e. 90 LPCD. This is only average supply and hence the supply is inadequate in several places for several days. The reasons are as follows:

(ii) Pressure

Though the existing reservoirs are located on the high level sites, still there were large number of complaints in the ward level meetings pointing out the places where the pressure is very less and also there is no supply at all for days together. The public from the areas like Saidapet R.N. Palayam have complained that for more than 2 months there is no supply at all prior to 2004. They were also critical that in some of the areas there is good pressure and longer duration of supply. This clearly shows that not only the supply is inadequate but also water is not supplied with uniform pressure. In addition it was also brought out that the water was supplied even during odd hours.

(iii) Duration of Supply

Water is supplied on alternative days even during the non-summer period and during the summer, the frequency of supply has comedown even up to once in seven days. Periodical supply is as follows:

Ordinary days till December'99	-	Once in 2 days
From December'99 to 23.5.2000	-	Once in 3 days
From 24.5.2000 to 15.6.2000	-	Once in 5 days
From 16.6.200 to 23.6.2000	-	Once in 6 days
From 23.6.2000 to 30.8.2000	-	Once in 7 days
From 1.9.2000 to 19.9.2000	-	Once in 6 days

From 20.9.2000 onwards the supply has been gradually increased from once in 5 days to once in 3 days. Today 2006 onwards i.e. after 2005 rains, water is supplied once in 3 days.

Thus it may be seen that the duration of supply for almost 75% of the year is more than once in 3 days, which is totally inadequate.

(iv) Storage Capacity

The total capacity of storage tanks is 74 LLD and the maximum is 118 LLD. Hence the storage capacity of the ground level reservoirs are inadequate.

(v) Unserved areas

The distribution lines don't cover the areas like, parts of Ambedkar Nagar, Arugandampoondi, Poonthottam, Vasanthapuram etc., falling in parts of ward number 1,2,3,6,7,32 & 47. Existing water supply is shown in Fig 3.1.

II. Ward / Street Level

The weakness in the water supply system brought out in the above paragraphs manifests themselves in different forms at town level which was expressed by councilors and public.

- i. The public and the councilors have demanded atleast smaller capacity (5000 Lts) sintex tanks to be installed in each street where the supply is absent for weeks together. Accordingly 122 sintex tanks have been provided
- ii. To supplement the piped water supply and sintex tanks 820 bore wells have been provided.
- iii. Distribution lines in the uncovered areas need to be provided. Thus, the ward / street level deficiency can be met to certain extent only. Still more is to be done and this is possible only when sources of water supply with good quantity is identified and harnessed.

d. Future Requirements

I. Town Level

(i) Quantity

For the present population of 1.77 lakhs (2001) the supply ranges from 45 to 130 LLD. The per capita supply is varying from 55 to 74 LPCD. Considering the fact that more than 75% days of the year the household gets supply only once in 3 days, the pressure and quantity of water presently available is totally inadequate. Added the population is expected to be around 1.9 lakhs by 2011 2.03 lakhs by 2021 and 2.16 by 2031 through arithmetic projection. Considering the norms of supply of 90 LPCD the demand for 2011 will be 171 LLD and by 2021 it shall be 183 LLD and 194 LLD by 2031. Deducting the present availability of 55 to 74 LLD the shortage by 2011 and 2021 will be 97-116 LLD, 109-128 LLD and 120-139 LLD respectively.

(ii) Unserved areas

The uncovered areas have to be provided with water supply in the immediate future.

(iii) Construction of OHTs

Additional OHTs have to be constructed not only for taking care of additional supply but also to serve the unserved areas as well as to reduce the difference in pressure levels.

II Ward/ Street levels

- i. Further Sintex tank has to be provided wherever necessary.
- ii. Further Borewells have to be provided wherever necessary.
- iii. Public fountains have to be provided wherever necessary.

e. Strategies

- a) Augmentation of sources for water supply so that there is adequate supply by 2011 and 2021.
- b) Extension of distribution network to cover the unserved areas.
- c) To provide additional OHTs at suitable locations to meet the quantum and pressure requirements.
- d) To plan for improvement of ground water table by way of massive tree plantation on hill slopes (Strategic Plan)
- e) To plan for compulsory and effective Rain water harvesting (RWH) by individuals family and institutions.
- f) To generate more revenue by levying user charges and deposits for water supply related works.

f. Tasks

(i) Augmentation of water supply:

- i. In the stakeholders meeting (27.6.07) it was mentioned that 10 acres of land is available in Salvanpet hill area. Another piece of 15 acres may be purchased so that a lake with an extent of 25 acres to be formed in a planned manner. A check dams be constructed in Changamnatham-Saidapet area that lies along the eastern hilly areas. The existing pipe lines between Chenganatham-Saidapet and Salvanpet hill area be used with some improvements to pass the water that is collected in the proposed check dam to the proposed lake in the Salavanpet hill area as shown in Fig 3 OHT proposed in higher elevation between check dam and lake along the foot hills will receive water from the lake and through the gravity and along the slopes the water will be supplied to the some of the residential areas of eastern Vellore. This way wards No 9, 13, 14, 15, 16 and 17 will be benefited.
- ii. Desilting and Improvement of Otteri Lake
Another augmentation of water supply is by way of desilting the entire Otteri lake, cleaning of encroachment/obstacles so that capacity of seepage and storage is increased. A planned embankment and park along the Otteri with trees will provide an opportunity to the people of Vellore enjoy the nature and go for morning/ evening walk. Even though it is not much beneficial at present, it may be useful to retain and store rainwater at times rains that will occur in its catchments area on way or other the seepaged water will help improve the towns water supply at critical points of time. A through investigation needs to be undertaken before formulating water supply source of the above two schemes.
- iii. The water charges have been revised in 2004. Flat rates as per month for domestic and non-domestic connections are Rs.50 and Rs.100. The capital investment on additional water supply will be recovered from the users in forms of further revision and new connection Fee / Deposits.
- iv. The distribution lines will be extended for a length of 1000-1500 metres.
- v. Additionally 300 bore wells with hand pumps will be developed.

- vi. 100 sintex tanks will be installed in various streets whereas pressure is inadequate.
- vii. The entire system will be computerised and GIS will be created to include system configuration that would cope with needs of the components like, age, structural characteristics, tarif structure, collection performance etc.,

4.2 SEWERAGE AND DRAINAGE

4.2.1 Existing Status

a) Town Level

There is no separate system of sewage and storm water disposal. The drains are provided on either side of most of the roads and they carry both sullage and drain water. The sullage from northern parts of the town is collected from the main drains along Arni road and Katpadi road which is then taken across Palar River to its northern bank by means of pumping and finally let into the sewage farm of about 20 acres located at Virugampattu Village. The sullage from the southern portion of the town is collected through various kanars (hill streams) channeling through Salavanpet, Velapadi, Suriyakulam which then runs parallel to the railway line along the western municipal limit and bye-pass road and crosses the Katpadi road and let into Palar river. The arterial drains having a length of 52 km belonging to PWO run length and breadth of the town and collect storm water from the collector drains.

The drainage network in the town is shown in fig 3.2. As observed in Fig 3.2 the Northern parts i.e. east to west portions south of Palar river do not have drainage network excepting one or two streets, south eastern part which is partly hilly area is devoid of drainage facilities. The area that lies south western of fort, namely, Vasanthapuram has one side drainage along the roads. Thus approximately two third area of the town has drainage facilities and one third area is not with drainage facilities.

b) Ward / Street Level:

The wards, such as 1, 2 and 3 in northern parts of the town excepting one or two roads do not possess drains. South eastern part of the town namely wards 29, 31, 32 do not possess drains. All other wards excepting few roads are endowed with drains on either side of the roads. The conditions of the drains are shown in Annexure.

4.2.2 Issues

a) Town Level

- i) There is no separate system of sewerage / drainage, the existing system is combined one.
- ii) Sullage which is let into the sewage farm as well as that into palar river are not treated.
- iii) The major drainage system belonging to PWD have been desilted recently and that the major inundation in some of the areas like Thorapadi, Sankaranpalayam, Kaspas, Vasanthapuram, Velapadi, Salavanpettai, Saidapet, Thottapalayam etc. has been reduced to a greater extent. However there is a need to pave the sidewalls of these major drains so that they will not get desilted and to desilt the major drains regularly.
- iv) The other arterial drains belonging to PWD also need to be desilted.
- v) Need for some more public toilets and better maintenance either by local body or private agency needs to be carried out regularly. If necessary some of them be converted into "pay and use toilets".

4.2.3 Ward / Street level

- i) The Councillors and residents have brought out the need for construction / reconstruction of drains in several streets, the ward and street level.
- ii) Some of the drains have not been laid with gradient.
- iii) They have also complained that some of the drains have not been cleaned periodically.

4.2.4 Future Requirements

I. Town Level

Under Ground Sewerage Scheme (UGSS) has been proposed for Vellore town. The detailed project Report (DPR) for providing UGSS in Vellore City Municipal Corporation has been prepared and revised recently by TWAD Board in Consultation with CMA on 28.06.05.

Table 4.3: Revised cost of the estimate:

Description	Original Cost	Revised Cost
Phase I	Rs. 42.46 Crores	Rs.31.86 Crores
Phase II	Rs. 28.33 Crores	Rs. 38.15 Crores

Fig 3.2 shows the areas under Phase I and Phase II. Phase I covers the wards of central areas of the town and while Phase II covers the wards of surrounding areas within the municipal limits.

a. Salient features of UGSS Vellore Town

Vellore Town area	:	11.65 sq.km
Length of streets	:	139.20 km
No. of zones	:	Two
No. of Wards	:	48
Variation in ground level	:	+ 200 m to 244 m
Contour ranges from		
Population 2001	:	1,77,413
Base year 2008	:	1,88,555
Design year 2013	:	1,97,657
Intermediate year 2023	:	2,12,432
Ultimate Year 2038	:	2,36,500
Per capita supply of water	:	110 LPCD
Sewerage Flows	:	90 LPCD
Length of NH roads where		
Sewer lines proposed to be laid	:	4000 m

Table 4.4: Phasing of collection lines:

Collection Lines	Phase I	Phase II	Total
a. Upto 375 mm stoneware pipe	56.2 km	76.0 km	132.20 km
b. 400 mm to 1200 mm RCC pipe	2.67 km	4.31 km	6.98 km
Total	58.87km	80.36 km	139.2 km

Thus, the proposed construction of UGSS in Vellore town will be answers for many of the issues more particularly the environmental and public health aspects of the town level, ward/ street levels.

4.3 SOLID WASTE MANAGEMENT

4.3.1 Existing Status

a) Town Level

The population of vellore town as per 2001 census, was 1,77,413 and its area in 11.65 sq.km. As enumerated in 2004 the population was 1,80,000 and the floating population was 26670 during the same period. As per action plan for SWM, 83 metric tons are generated per day and thus the per capita generation of waste in Vellore town is 400 gms per person per day. The major source of waste is from houses/streets (63 mts) and vegetable markets/hotel, Bazaars (20 mts).

Table 4.5: The source and generation of waste in vellore town.

S.No	Particulars	Quantity
1.	Average quantity of waste generated per capita per day (in kg)	0.40
2.	Average quantity of waste generated per day (in mt)	83.00
3.	Seasonal variation in daily waste generation due to festivals etc (in mt)	5.00
4.	Break up of waste generated per day (in mt) a. Honseholds / streets b. Vegetable markets/hotels/commercial establishments/ hospitals	20.00
5.	Total waste generation expected/ day as per projected population (in M) i) in the year 2006 ii) in the year 2110 iii) in the year 2021 iv) in the year 2031	84.00 86.00 92.00 98.00

i) Collection:

As on today all the wastes of all wards (48) are collected through 139.2 km length of streets (604 member of roads/ streets) by using 7 mini lorries, 4 hird factors, 31 tricycles, 3 power tillers and 1 JCB.

There are 9 sanitary divisions and 447 sanitary workers against the sanctioned strength of 476 workers. Table 3.3.2 shows ward wise generation, collection and uncollected wastes in Vellore town.

Table 4.6: Ward wise population, generation, collection in Vellore Town : (1996)

Ward No	Population	Generation in Kgs	Collection (Kgs)	Uncollected Waste (kg)
1.	3671	1470	110	370
2.	3946	1580	1106	480
3.	3690	1486	1200	286
4.	3609	1450	1200	250
5.	3682	1480	1220	260
6.	3695	3480	3000	480
7.	3715	1500	1250	250
8.	3579	1435	1230	200
9.	3650	1460	1220	240
10.	3586	2435	2000	435
11.	3694	2550	2000	550
12.	3542	1420	1200	220
13.	3789	1515	1280	235
14.	3733	1500	1300	200
15.	3972	1400	1400	-
16.	3555	1420	1050	370
17.	3687	1500	1250	250
18.	3649	1500	1250	250
19.	3526	3420	2400	1020
20.	3597	3440	2400	1020
21.	3573	3430	2400	1030
22.	3578	3430	2400	1030
23.	3703	2490	2200	290
24.	3565	2430	2200	230
25.	3565	1430	1200	240
26.	3694	1480	1280	200
27.	3894	1560	1300	360
28.	3760	1505	1300	205
29.	3614	1445	1350	95
30.	3650	1460	1350	110

31.	3752	1500	1300	200
32.	3621	1455	1250	205
33.	3354	1340	1100	240
34.	3608	1500	1200	300
35.	3679	1470	1200	270
36.	3597	1340	1050	290
37.	3668	1470	1200	270
38.	3720	1500	1250	250
39.	3550	1430	1200	230
40.	3808	1560	1300	260
41.	3672	1555	1350	205
42.	3559	1430	1200	230
43.	3412	1365	1100	265
44.	3578	1440	1200	240
45.	3643	1550	1250	300
46.	3489	1420	1200	220
47.	3641	1552	1150	402
48.	3501	1400	1250	150

Source: Pop. as per EEP, generation as per 0.4 Kg person, collection based up on 70-80% of collection.

(ii) Collection

The Collection of solid waste is done manually and transported using 7 mini lorries and 2 bullock carts. All sanitary workers to clean the streets manually are supervised by 23 supervisors and 11 sanitary inspectors. The town has been divided into 9 divisions for the purpose of solid waste collection. Each sanitary inspector is in charge of one division. An average collection per day is around 60 or 70 mts & the remaining 13 to 23 mts left is uncollected as per the discussions the consultants had with the workers mainly due to lack of persons or vehicles.

iii) Disposal Method

Two transit points are used for intermediate collection (i.e.) at Sarpanamedu and near bypass road. The Solid waste from the town as well as from the intermediate collection points is dumped in the compost yard located at Sadhuperi. Since the compost yard is full now even to a height of 2 m there is no possibility for further dumping in this location.

4.3.2 ISSUES

a. Town Level

- i) Since the composite yard at Sadhuperi is full and as there is no alternative land developed for this purpose, the municipality is dumping in all available vacant spaces and low lying areas.
- ii) The collection of solid waste is only 70 – 83%
- iii) Recycling and separation of organic and inorganic materials are not being practiced.

b. Ward / Street Level

- i) No daily cleaning even in the high density residential and commercial areas.
- ii) Inadequate dustbins in residential and commercial areas
- iii) Solid waste being dumped in the side drains as also any available open space thus causing environmental and health hazards.

4.3.3 Future Requirement

a. Town Level

- i) Development of a new site for dumping solid waste is required immediately.
- ii) The inorganic and bio gradable waste should be separated out.
- iii) The bio gradable waste should be treated and manure should be prepared out of it.
- iv) The possibility of privatizing the whole process of collection, transportation and then treatment of solid waste or atleast some part of the process.

b. Ward / Street Level

- i) The cleaning should be done daily at least in the high intensity commercial areas and high density residential areas.
- ii) Enough dustbins have to be provided at appropriate locations in the streets.

4.3.4 Strategies

- i) To progressively plan for privatization.
- ii) To actively pursue recycling of waste and segregation of organic / biodegradable waste.
- iii) To train the operation and maintenance staff in collection, transportation and disposal.
- iv) To educate the local people, regarding upkeep of the town litter free.

Tasks

- i) The new site of 10 acres for composite yard will be acquired
- ii) Adequate vehicles for garbage clearing will be purchased.
- iii) Adequate solid waste bins will be provided.
- iv) Garbage transporting vehicles will be provided with wireless sets.
- v) Privatization of SWM will be tried in one or two wards on experimental basis.
- vi) Computerization of SWM will be undertaken for better monitoring.

4.4 Existing Status Roads & Streets

4.4.1 Highways & Location

Vellore town the district headquarters town is located about 135 km west of Chennai. The N.H. 46 from Ranipet to Krishnagiri forming part of Madras – Bangalore Corridor and the state Highway (Endelalore – Chithoor) cut across the town. Two bye – pass roads are in existence. The Vellore bye – pass road commences to the east of level enclosing of Villupuram Katpadi rail way link and crosses Endelalore – Chithoor road & joins the NH bye pass. The NH bye pass takes off from west of railway line and crosses the State Highway 1 and joins in front of the collector's office complex. The villupuram – Tirupathy metre gauge railway line passes through the town with Vellore cantonment. Vellore town railway station town (now abandoned) is located within the town. One of the major B.G. railway corridors in the country i.e. Chennai Bangalore / Coimbatore / Ernakulam – runs about 5km north of this town with Katpadi being the feeder railway function to the town.

4.4.2 Network Pattern

The road network pattern is quite observable i.e. around fort and south of it, it is round about and north – south stretches in sparse and it is grid – iron pattern in eastern parts of the fort and its densities (Fig 3.4.1). Excepting the highways and few other major roads, the road stretches have smaller widths. The foot paths of highways, major roads and all other major roads are earthen and dusty. The overall density of the roads is 10.24 km per sq. km and 0.66 meters as per capita road length.

4.4.3 Road Types

The Road types within the municipal limits are shown in Table 3.4.1. Totally there are 604 roads order different types.

Table No 4.7: Types of Roads : Vellore Town 2004

Sl.No	Types of roads	Length in km	% total
1.	National Highway	8.10	6.70
2.	State Highway	7.10	5.80
	Sub Total	15.10	12.50
	Municipal Roads		
3.	Concrete Roads	50.26	42.10
4.	B.T. Roads	47.88	40.10
5.	WBM roads	01.99	01.70
6.	Earthen Roads	04.26	03.60
	Sub Total	104.39	87.50
	Total	119.49	100.00

Source : Vision plan 2004 Vellore City Municipal Corporation toad indicators

Table No 4.8: Road Indicators of Vellore Town

Sl.No	Municipal road indicators	Current Situation
1.	Road density (Km/per Sq.km)	10.24
2.	Per errata road length (meter)	663
3.	Highway roads (% age of natal reach)	12.50
4.	Municipal roads (% age of total roads)	87.50

4.4.4 Future requirements

I. Town Level

a. Traffic improvement proposals

The PTC services Ltd has suggested the following proposals in their traffic operation & management plan in consultation with the Divisional Engineer, Highways Vellore.

1. Short term projects
2. Mid term projects

Short term projects include the road markings such as centre line marking, traffic line marking, stop lines, direction arrows, bus stops & pedestrian crossing in the following functions.

1. Arya Bhavan junction
2. Maccans junction
3. Palace case function to National theater & Palace cafe function to Srinivasa Theatre
4. Officers line road (from VHS School to Govt. Muslim Hr. Sec. School.)
5. Construction of bus Shelters a) nearby Jaya Murugan Theatre & Govt. Muslim Hr. Sec. School

Midterm projects consist of widening or reads & providing islands at the junction of Fort round road with Nethaji stadium road and junction of fort round road with Krishnagiri road and widening of bridge nearby Krishna theatre. Since the study was undertaken during late nineties a detailed study is needed to understand current situation of the above nine links.

b. Town level requirement

Capacity of major read limits in Vellore

As per the consultancy report prepared by Pallavarm Transporter consultancy Services Ltd, Chennai, there are nine major road limits in Vellore. The carriage width of these links vary from 10.0 mts to 26.0mts. The capacity of the roads were computed based on the norms recommended in IRC viz 1200 PCUS for tow lane width. According to this study, the width of the carriage way do not vary much in all the nine stretches. The average width of the carriageway, the length of the road stretches and their capacity are given in Table 3.4.1

Table 4.9 Width, Length and capacity nine links: Vellore town.

Sl.No.	Road Stretches	Carriage width (mts)	Length of the Stretches (mts)	Capacity (PCUS)
1.	Bangalore road (NH46) Dr. Ambedkar Statue – Railway line)	20.8	600	3578
2.	Bangalore road (NH46) Dr. Ambedkar statue – palace café junction)	18.0	280	3096
3.	Dr. Ida Seudder Road (NH46) Arcot Road)	13.0	950	2236
4.	KatPadi road (SH – 1)	12.0	630	2064
5.	Officers line (Dr. Ambedkar Statue – Bharathiyar Salai SHI)	26.0	820	4472
6.	Officer's line (Bhavathiyar Salai – AryaBhavan function SHI)	24.0	280	4128
7.	Officers line (Beyond Arya Bhavan Junction)	10.0	40	1720
8.	Infantry road	12.0	360	2064
9.	Arni Road (SH – 1)	16.0	240	2762

Source : Report by PTC Services Ltd (1996).

- ii) Improvements and ratifying the pot holes and dug up portions by municipally or Telephone department through out the wards especially in wards numbers. for details see annexure.
- iii) Laying of CC roads / gravel loads particularly in new layout (approved and unapproved) in the pacifier of the town.

c. The Other Facilities

Facilities like Bus Terminal functioned within the centre of the town has be shifted to the periphery nearer to the bye pass to the NH 46. This New Bus Stand is quite spacious and with required amenities.

The truck Terminal leaded within the town in Bangalore road has no basic facilities like shelter, rest rooms for the crew. The toiled facilities are under so deteriorated condition. Thus the existing truck terminal has to be made fill fledged with required facilities like shelters, rest rooms for the crew, toilet facilities, repair & service sheds etc. It is atmost necessary as vellore town in quite popular for whole sale market for rice and jaggery for the entire district and neighboring districts.

II. Ward / Street / have level issues

It is observed and brought out from the survey and as well as during stake holder meetings that problems in regard to the conditions of the existing municipal roads exist widely through out the town. The municipal records in this context are also explicit and felt – explanatory. Please see the details of the road types and conditions of the road / street wise of each ward as given in annexure

Ward / Street / lane level solutions :

1. Improvements to about – streets, on the trains of conditions (Annexure -) are needed.

4.5 STREET LIGHTS

4.5.1 Existing Status

The Municipality has provided totally 5241 streetlights of various categories. The details of which are given in Table No 3.5.1

Table No 4.10: Street Lights with in the Municipal Area

Sl.No.	Types of Lights	Nos.	% age to total
1.	40W Tube Lights	4432	84.6
2.	250W Sodium Vapor Lamps	735	14.0
3.	250W Mercury Lights	73	1.4
4.	High Mask Lamp	1	-
Total		5241	100.0

Source : Vision Plan : Vellore City Municipal Corporation (2004)

On an average there is one street light for every 27m of road length which is found to be slightly in excess of the general norms of 1 light for every 30m of road length. Except in the newly developed areas like Poonthottam area the street lighting is found to be adequate.

However the major problem is the replacement for the fused bulbs as well as wornout fittings. In order to save energy, 27 numbers of timer switches have been fixed to the maintain and operate street light provisions. The municipality is regularly in touch with EB in order to provide new street lights in needy locations of the town.

4.5.2 Future Requirements

The fused bulbs and worn out fittings have to be replaced periodically Roads without streetlights have to be provided with at least tube lights on a priority basis. Underground electricity power cable can be considered to be laid.

4.5.3 Strategies

- i) To adequately illuminate the newly developed areas and important locations.
- ii) To get the participation of the welfare association in O & M activities.
- iii) Further, the strategic plan will include the provision of underground electricity cables by 2011 AD or even before.

4.5.4 Tasks

- i) Adequate no. of street lights in the nature of replacing the fused bulbs will be provided as requested by the public and councilors
- ii) Over time all tube light shall be replaced by sodium vapor light & in specific areas by Mercury vapor lamps.

4.5.5 Street Light Indicators

- | | |
|-------------------------------------|-----------|
| 1. Spacing of street lights | 25 – 30 M |
| 2. No. of street lights / skm | 450 |
| 3. No. of street lights / 1000 pop. | 30 |

4.5.6 Proposals of vision plan 2004

Under vision plan of Vellore City Municipal Corporation, 10 high mast lights at the cost Rs.60Lakhs and 50 number of timers at the cost of Rs.5Lakhs have been proposed.

4.6 EDUCATIONAL INSTITUTIONS

4.6.1 Existing Status

The local body has to maintain the sites and building of Municipal schools whereas payment of salary for teachers and staff is made by the State Govt. According to Annual report 2004-05 there are as many as educational institutions belonging to the Municipality, the details of which are shown in Fig.3.6.1

Table 4.11: Existing status of the school

Type of schools	No	Student's benefited by nutrition non meal scheme	Number of personnel in non meal number
Higher Secondary School	2	642	6
High School	3	500	7
Middle School & Elementary school	36	3281	107
Total	41	4423	120

The year 2004 – 2005 has incurred an expenditure of the 25.5 Lakhs on Nutrition noon meal scheme in Vellore Town.

4.6.2 Future Requirements

- i) No demand for additional schools
- ii) In fact there were demands to close the school at Saidapet.
- iii) To provide adequate facilities to the existing educational institutions.

Vision plan (2004) proposes to provide facilities and ammenities to needy schools at the estimated east of Rs. 47 Lakhs.

4.6.3 Health

a. Existing Status

The famous CMC hospital is located in the town, which caters not only those within the state but also those from outside the State. In addition, the following dispensaries maintained by the municipalities are also available, as shown below:

Type	Number
Allopathic	2
Sidha	3
Unani	2
Maternity & Child Welfare	6
Total	13

During the years 2004 – 2005, 104630 persons have availed benefits from the above dispensaries against 96894 persons in the last years 2003 – 2004. O&M cost including medicine cost of the above facilities shored at Rs.31-94 Lakhs (41.61 Lakhs in 2003 – 2004).

b. Issues

- i) Maintenance is poor in almost all the medical institutions
- ii) Additional health facilities required.

c. Future Needs & Tasks

- i) Need for providing five new dispensaries in wards 5, 21, 28, 30, 40.

FUTURE VISION OF VELLORE AS IDENTIFIED BY CCP

The infrastructures and facilities listed in Chapter 4 refer to the short term, felt need requirements of Vellore. It is a planning methodology that 'people's needs' are to be satisfied as the 'plan is for people' in a sustainable method. However, a long-term look of a growth of a town is also essential to sustain the growth of a town as the time roll by. As the plan is "by people, for people, to people" getting to knew of their ultimate 'shape' (Vision) of their town wants to be is vital factor in planning.

To assess their 'Vision' as part of this project, structured questions were posed to the 'stakeholders' of the town. The assessment related to how to generate resources, management pre-requisites of town's development. The following table contains the views expressed as "vision" for the stakeholders of the town. The findings were subjected to SWOT analyzes to assess the 'Vision' statement. The major components that are analyzed are:

5.1 Future Vision for the Town

As a first priority, a consultative process was evolved involving all the elected councilors who are the responsible representatives of the public to reflect the collective wish of their respective ward citizens and the line agencies who contribute to their respective sectors of development to build the city.

In the two open meetings, one for the councilors and other for the line agencies, presided over by chairman of the town council and in the presence of municipal commissioner and all concerned from this Municipality, the participants deliberated at lengths the issues relating to the town, the town's present status and its future. For the purpose of consolidating their considered views, they have given in writing in the questionnaires provided for this purpose.

It was thus evolved that the vision for the town would be **“to make it a major commercial center in the region with adequate comfort and solace for habitation”**.

The town at present is a service town for the hinterland in the region. For most of the agricultural commodities produced in the region and the inputs required for the production, this town acts as a collection and distribution center.

The requirements at area level and town level expressed by the councilors and other stakeholders including the public at the consultative meetings at the town level held recently on 27.06.06 for conversion of CCP to Business plan mostly relate to building a city with a target of fulfilling the vision evolved already, through there are diversified feelings that the Vellore town is loosing certain service/ administrative functions.

5.2 Urban Governance

The organization has to be developed in such a way that it is responsive to the citizens needs with an understanding of the aspiration of the people and provide the service and facilities to an acceptable and at least minimum satisfactory level in a transparent mode of operation.

5.3 Municipal Finance

The organizational resources have to be managed in a way to meet the strategic and corporate plan capital and other requirements through an optimal assessment method of raising resources, so that the citizens are conscious and willing to pay and contribute as and when required. This is to be done with a well thought out finance and operating plan considering the short term and long term capital and O&M requirements.

5.4 Economic Development

The secondary sector activities are limited to light industries in the town. The small leather industries and beedi rolling cottage industries are more prevalent in the town. Further, the town already acts as a major service centre for the hinterland. Therefore, the economic development for the town is to be oriented in this direction.

5.5 Land use

The master plan in use was prepared more than 20 years before. The revision of Master plan for which survey works are in progress is expected to be completed shortly. It is expected that the revised master plan keeps in view the growth dynamics of the town.

5.6 Traffic and Transportation

The town is located in the major road and rail corridor of Chennai- Bangalore. Because of its location in the regional setting, a high amount of traffic is seen on the roads leading to the towns in the hinterlands. These are the highly congested roads within the town. These roads as well as other local roads within the town has to be made dust free and less congested.

5.7 Essential services

Basic services such as Water supply, sewerage, sanitation, street lighting, solid waste management will be provided to the satisfaction of the citizens, so that it meets the social, economic, environmental norms and needs.

5.8 Environment

The town's land, hill, water, air and the heritage elements will be kept environmentally acceptable through concerned efforts to mitigate pollution and contamination of them by wastes, dust and noise. The efforts in this direction will ensure sustaining the good environment of the town.

5.9 Privatisation

For proper efficiency in managing services and commercial ventures of sizable capital investment, private sector has to be involved, where the local body will play a role of facilitator or enabler.

5.10 Community Participation and Development

Community participation will be of utmost importance in the development of the town and accordingly the efforts in planning for the town over short and long terms will be oriented.

5.11 Vision Statement

A dedicated and conscious attempt for greater mobilization of financial resources and careful planning and management of the same will be the municipal vision of the town. Further, the vision for the local body would include an asset creation exercise for enhancing the level of services provision and build an environment for healthy living and economic development.

ASSETS MANAGEMENT PLAN

INTRODUCTION

The local bodies like families and individuals, persons certain assets and properties. In order to retain and strengthen the same as to earn income or provide needful service out of them, they should maintain and preserve them atmost. The exercise to maintain and preserve them is what we may call Asset Management Plan (AMP). These assets may be of movable and immovable items. Specifically the roads, parks, water supply sources and river pumping stations, storm water drains, sewerage lines, street lights, lands, buildings, markets, shopping complexes. Etc... are immovable assets and vehicles and others can come under movable assets.

As to draw AMP, we need to have information on the conditions, costs, values, extent of area in case of land or building, performance and management/ maintenance standards if any.

6.1 INVENTORY OF ASSETS

The basic aspects of the assets the AMP should have are types of assets in terms of quantity and quality, location and vocational distribution of assets, procurement age of the assets, life cycle of the assets. Almost all assets either increase or decrease in their values through the time and space and use. Thus the values as particularly the value updating are yet other aspects of AMP.

Annexure III indicates conditions, types and location of bore well and hand pump streetwise/ ward wise while annexure IV states the conditions and types of roads and length of each road street wise. It is understood that 50 – 60 % of bore well and hand pumps are functional. Some of the streets in wards 17 to 32 have been provided sintex tanks. Annexure V shows the storm water drains ward/ streetwise in terms of type, length and conditions (good, fair, bad). Of the total number of streets 15% street drains (ward numbers 36, 38, 40, 41, 43, 45, 47) are bad, 18% of street drains are fair (ward

17, 18, 20, 23, 24, 26, 28, 29, 31, 32, 38) and the remaining 409 streets drains are good.

Table 6.1: the Assets of the water supply system in Vellore town

s.no	Name of the head works	Assets (No)			
		Pump sets	Auxiliary pump sets	Infiltration wells	Bore wells
1.	2.	3.	4.	5.	6.
1	Palar Head works				
	75 HP	3	-	7	-
	10 HP	-	5	-	-
	7.5 HP	-	2	-	-
2	Karuganuputhur Head works				
	177 HP	2	-	6	9
	10 HP	-	4	-	-
	7.5 HP	-	2	-	-
	5 HP	-	9	-	-
3	Otteri Lake Head works	-	-	5	16
	12.5 HP	1	-	-	-
	10 HP	8	-	-	-
	5 HP	10	-	-	-
	3 HP	1	-	-	-
	Booster P.S 150 HP	2	-	-	-
4	Ponnai Head works				
	90 HP	3	-	8	5
	12.5 HP	-	3		
	10 HP	-	5		
	7 HP	-	5		
	Booster P.S 75 HP	3			
	Filter bed tank	1			
		1			
	Total	35	35	26	30

Source: Records of Vellore City Municipal Corporation Engg. Services 2005

Table 6.2: Number and type of vehicle under SWM: Vellore

s.no	Type of vehicles	No. of vehicles
1	Tricycles	31
2	Mini lorries	7
3	Compost yard at Saduperi (acre)	7.91

Table 6.3: Building of Schools, Hospitals and Parks

S.No	Buildings	No.
1	Municipal school buildings	42
2	Municipal dispensary/ maternity buildings	24
3	Municipal Parks	8
4	Parks in undeveloped lands	6
5	Burial Grounds	5

Table 6.4: Shops and Buildings of the Corporation

S.No	Buildings	No.
1	Nethaji Market	729
2	Sarathi Malaigai	256
3	Arcot road shops	12
4	Bangalore road	39
5	A.K.M.L. Angadi	29
6	Infentary road	20
7	Katpadi road	12
8	Kagithapattarai road	28
9	Burma bazzar	61
10	Bus stand	20
11	Commissary bazzar	7
12	Kalyana Mandapam	1
13	Car Stand	100
14	Centurion Bank	1
	Total	1315

7.1 CONSTRUCTION OF KALAYANAMANDAPAM CUM OFFICE COMPLEX

7.1.1 INTRODUCTION

Vellore is an important administration centre with the population of 1.25 lakhs as per 2001 census and it is a fast growing urban centre in the northern part of Tamilnadu. The hinterland of Vellore consisting of Ranipet, Ambur, Vaniambadi etc. It is a major commercial centre famous for the wholesale trade of Rice and Jaggery. It is an important transportation node with the major railway junction at the nearby Katpadi town, the town itself located at the intersection of N.H 46 and S.H 1. In recent times due to the establishment of educational institutions it becomes the educational centre for its hinterlands. All these factors make the town more vibrant in recent years.



Traveler's Bungalow which was present in this town is recently removed due to its bad condition. Erstwhile Traveler's Bungalow site is located in ward no 5, with T.S No. 512 & 527/2. The total extent of this site is approximately 50,000 sq.ft bounded by roads on three sides. Municipality felt that vacant site at Erstwhile Traveler's Bungalow is the prime location where Kalayanamandapam can be constructed in order to utilize the land for mobilizing resources for the local body.

7.1.2 NEED ASSESSMENT

Vellore town is not having sufficient community or marriage halls to fulfill the needs of the public. Traveler's bungalow which was present in this town is recently removed due to its bad condition. Erstwhile Traveler's Bungalow site is located in ward no 5, with T.S No. 512 & 527/2. The total extent of this site is approximately 50,000 sq.ft bounded by roads on three sides. Municipality felt that vacant site at Erstwhile Traveler's Bungalow is the prime location where Kalayanamandapam can be constructed in order to utilize the land for mobilizing resources for the local body.

7.1.3 COMPONENTS

The consultant suggested that along with the Kalayanamandapam office complex can also be constructed in order to generate sustainable revenue. It is proposed to construct in G+1 floors with Kalayanamandapam in ground floor and office complex in first floor. It is proposed that Kalayanamandapam can be constructed at a area of 15,000 sq.ft.

7.1.4 OPERATING PARAMETERS

The total project cost has to be sourced from the finance institutions such as TUFIDCO under the IDSMD Scheme for the about Rs.238.50 Lakhs. This cost involves the establishment cost such as construction marriage hall, office complex etc., The total estimated cost involves the operation and maintenance cost with the inflation.

7.1.5 EXPENSES

Development cost for the project includes 2% of the total project cost as O&M charges and 4% of the total project cost as inflation charges. Thus the total project cost is Rs.238.50 Lakhs.

Table 7.1: Distribution of Development Components

S.No	Development Component	Rs. In Lakhs
1	Establishment Cost	225.00
Development costs (a)		225.00
1	O&M Charges @ 2% of (a)	4.50
2	Inflation @ 4% of (a)	9.00
Over heads (b)		13.50
GRAND TOTAL (a+b)		238.50

The total cost is to be borrowed from TUFIDCO, TUUIFSL & Similar agencies at the interest rate of 12.5% per annum for a repayment period of about 20yrs.

Table 7.2: Repayment Schedule – Cash Inflow

REPAYMENT SCHDULE - CASH INFLOW						Rs in lakhs	
No. of years for Repayent: 20						Repayment starting year: 2012	
Moratorium period: 5 Years							
Repayment starting year: 2008							
Loan	Repayment year	Principal	Interest	Total	Balance	Year	Total Repayment
238.50	2007	0.00	0.00	0.00	238.50	2007	0.00
	2008	12.55	29.81	42.37	225.95	2008	42.37
	2009	12.55	28.24	40.80	213.39	2009	40.80
	2010	12.55	26.67	39.23	200.84	2010	39.23
	2011	12.55	25.11	37.66	188.29	2011	37.66
	2012	12.55	23.54	36.09	175.74	2012	36.09
	2013	12.55	21.97	34.52	163.18	2013	34.52
	2014	12.55	20.40	32.95	150.63	2014	32.95

	2015	12.55	18.83	31.38	138.08	2015	31.38
	2016	12.55	17.26	29.81	125.53	2016	29.81
	2017	12.55	15.69	28.24	112.97	2017	28.24
	2018	12.55	14.12	26.67	100.42	2018	26.67
	2019	12.55	12.55	25.11	87.87	2019	25.11
	2020	12.55	10.98	23.54	75.32	2020	23.54
	2021	12.55	9.41	21.97	62.76	2021	21.97
	2022	12.55	7.85	20.40	50.21	2022	20.40
	2023	12.55	6.28	18.83	37.66	2023	18.83
	2024	12.55	4.71	17.26	25.11	2024	17.26
	2025	12.55	3.14	15.69	12.55	2025	15.69
	2026	12.55	1.57	14.12	0.00	2026	14.12
		238.50	282.43	536.63			536.63

The total repayment made at the end of 2026 is about Rs.536.63 Lakhs for a total loan amount of Rs.238.50 Lakhs for the base year 2007.

7.1.6 REVENUE

It is proposed that Kalayanamandapam is occupied 150 days in a year. Out of 150 days 100 days are used for marriage function and rest of the days are used for other functions. Kalyanamandapam can be rented for Rs. 20,000 per day for marriages and Rs. 10,000 for other functions. Therefore in a year nearly Rs. 25 lakhs of revenue can be generated. Also in first floor it can be rented for any office purpose. It is assumed that a base rent of Rs. 10,000 per month is fixed based on the prevailing market value. It will fetch a total revenue of Rs. 1.20 lakhs per annum. Base rate arrived at this year will be revised on every consecutive 3 years of 10% through out the repayment period. The total recovery period arrived at 2026 of will be Rs.652 Lakhs. The surplus amount out of this project at the end of 2026 is Rs.116.24 Lakhs.

7.1.7 DEBT SERVICES

The total project cost is carried by loan. Debt servicing will start with the interest in the year 2008 (of Rs.29.81 lakhs). The total debt serving for the project works out at Rs.536.63 lakhs for a loan amount of Rs.238.50 Lakhs and total debt services are 238:537(round off).

7.1.8 CASH FLOW

In this project the cash flow is in surplus from 2022 at an amount of Rs. 9.14 lakhs and the Recovery & Repayment ratio starts with 0.62 in the year 2008 and for the project is 1.22. Meanwhile the rate of debt charges and recovery remains under 0.88 indicating the project revenue is surplus over the debt servicing.

Table 7.3: Cash Outflow

CASH OUTFLOW										Rs in lakhs										
RECOVERY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue from Dormitories	0.00	26.20	26.20	26.20	28.82	28.82	28.82	31.70	31.70	31.70	34.87	34.87	34.87	38.36	38.36	38.36	42.20	42.20	42.20	46.41
TOTAL	0.00	26.20	26.20	26.20	28.82	28.82	28.82	31.70	31.70	31.70	34.87	34.87	34.87	38.36	38.36	38.36	42.20	42.20	42.20	46.41

Table 7.4: Cash flow statement

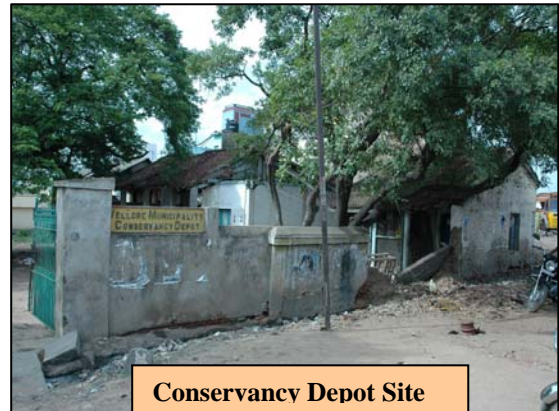
CASH- FLOW STATEMENT										Rs. In Lakhs											
Particulars	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
<u>RECOVERY</u>																					
Revenue from Dormitories	0.00	26.20	26.20	26.20	28.82	28.82	28.82	31.70	31.70	31.70	34.87	34.87	34.87	38.36	38.36	38.36	42.20	42.20	42.20	46.41	652.86
TOTAL (A)	0.00	26.20	26.20	26.20	28.82	28.82	28.82	31.70	31.70	31.70	34.87	34.87	34.87	38.36	38.36	38.36	42.20	42.20	42.20	46.41	652.86
<u>REPAYMENT</u>																					
Debt charges	0.00	42.37	40.80	39.23	37.66	36.09	34.52	32.95	31.38	29.81	28.24	26.67	25.11	23.54	21.97	20.40	18.83	17.26	15.69	14.12	536.63
TOTAL (B)	0.00	42.37	40.80	39.23	37.66	36.09	34.52	32.95	31.38	29.81	28.24	26.67	25.11	23.54	21.97	20.40	18.83	17.26	15.69	14.12	536.63
Surplus /Deficit	0.00	-16.17	-14.60	-13.03	-8.84	-7.27	-5.70	-1.25	0.32	1.89	6.63	8.20	9.77	14.82	16.39	17.96	23.37	24.94	26.50	32.29	116.24
CUMULATIVE SURPLUS/ DEFICIT	0.00	-16.17	-30.76	-43.79	-52.63	-59.89	-65.59	-66.84	-66.52	-64.63	-58.00	-49.81	-40.04	-25.22	-8.82	9.14	32.50	57.44	83.94	116.24	

Recovery/ Repayment (A/B)	0.00	0.62	0.64	0.67	0.77	0.80	0.83	0.96	1.01	1.06	1.23	1.31	1.39	1.63	1.75	1.88	2.24	2.44	2.69	3.29	1.22
Debt Charges /Devt. Charges(B/A)	0.00	1.62	1.56	1.50	1.31	1.25	1.20	1.04	0.99	0.94	0.81	0.76	0.72	0.61	0.57	0.53	0.45	0.41	0.37	0.30	0.82

7.2 ESTABLISHMENT OF FISH MARKET

7.2.1 INTRODUCTION

Vellore is a District Head Quarters town and also a major commercial centre famous for wholesale trade of Rice and Jaggery. Commuters from different places around 50km radius visit this place daily. Agricultural commodity such as cereals, grains and fruits are purchased and routed through Vellore acting as a market place for those villages.



7.2.2 NEED ASSESSMENT

At present, Fish market is located along Anna Bazaar road at a total extent of 21,000 sq.ft in Ward no. 3 with T.S. No. 146/17, 146/4c & 146/11. But the present location is more congested due to the nearness of vegetable market and town bus stand. Also the environment of Fish market is in a bad shape there is an objection from public to shift the fish market in better location with better infrastructure facilities. It was assessed from the survey, that Fish market can be relocated to Conservancy Depot site with all needed facilities. Conservancy Depot is located along Bangalore road in ward no. 3 in T.S. No. 2167/1 at a extent of 0.49 acres. At present Conservancy Depot site is used as a parking area for municipality vehicles creating huge loss of revenue to the local body. By implementing this project, long standing demand of public can be fulfilled and at the same time land is utilized in a better manner.

7.2.3 COMPONENTS

Consultant suggested that Fish Market can be constructed in G+2 floors at an extent of 42,000 sq.ft with 70 shops in ground floor to sale fishes, 70 shops in first floor to sale meat and cold storage unit in second floor. It is proposed to construct each shop with an area of 200 sq.ft under the prevailing construction cost at a rate of Rs. 500 per sq.ft. It is estimated that nearly Rs. 225 lakhs of capital is required to implement this project.

7.2.4 OPERATING PARAMETERS

The total project cost has to be sourced from the finance institutions such as TUFIDCO under the IDSMD Scheme deducting Rs. 7 lakhs received as deposits from 140 shop owners at a rate of Rs. 5000 per shop. Therefore total loan to be raised is reduced to Rs.215.60 Lakhs. It involves the establishment cost such as construction of 140 shops operation and maintenance cost with the inflation.

7.2.5 EXPENSES

The loan amount is divided for construction of G+2 floors with all infrastructure facilities. Development cost for the project includes 2% of the total project cost as O&M charges and 4% of the total project cost as inflation charges. Thus the total project cost is Rs.222.60 Lakhs.

Table 7.5: Distribution of Development Components

S.No	Development Component	Rs. In Lakhs
1	Establishment Cost	210.00
Development costs (a)		210.00
1	O&M Charges @ 2% of (a)	4.20
2	Inflation @ 4% of (a)	8.40
Over heads (b)		12.60
GRAND TOTAL (a+b)		222.60

The total cost is to be borrowed from TUFIDCO, TUUIFSL & Similar agencies at the interest rate of 12.5% per annum for a repayment period of about 20yrs.

Table 7.6: Repayment Schedule – Cash Inflow

REPAYMENT SCHEDULE - CASH INFLOW						Rs in lakhs	
No. of years for Repayment: 20						Repayment starting year: 2012	
Moratorium period: 5 Years							
Repayment starting year: 2008							
Loan	Repayment year	Principal	Interest	Total	Balance	Year	Total Repayment
215.60	2007	0.00	0.00	0.00	215.60	2007	0.00
	2008	11.35	26.95	38.30	204.25	2008	38.30
	2009	11.35	25.53	36.88	192.91	2009	36.88
	2010	11.35	24.11	35.46	181.56	2010	35.46
	2011	11.35	22.69	34.04	170.21	2011	34.04
	2012	11.35	21.28	32.62	158.86	2012	32.62
	2013	11.35	19.86	31.21	147.52	2013	31.21
	2014	11.35	18.44	29.79	136.17	2014	29.79

	2015	11.35	17.02	28.37	124.82	2015	28.37
	2016	11.35	15.60	26.95	113.47	2016	26.95
	2017	11.35	14.18	25.53	102.13	2017	25.53
	2018	11.35	12.77	24.11	90.78	2018	24.11
	2019	11.35	11.35	22.69	79.43	2019	22.69
	2020	11.35	9.93	21.28	68.08	2020	21.28
	2021	11.35	8.51	19.86	56.74	2021	19.86
	2022	11.35	7.09	18.44	45.39	2022	18.44
	2023	11.35	5.67	17.02	34.04	2023	17.02
	2024	11.35	4.26	15.60	22.69	2024	15.60
	2025	11.35	2.84	14.18	11.35	2025	14.18
	2026	11.35	1.42	12.77	0.00	2026	12.77
		215.60	255.32	485.10			485.10

The total repayment made at the end of 2026 is about Rs.485.10 Lakhs for a loan amount of Rs.215.60 lakhs from the base year 2007.

7.2.6 REVENUE

The shops in the complex are left to lease on monthly basis and the total revenue for all the 140 shops on an average will be around Rs.2,10000/ month. The total amount generated will be Rs.622.96 Lakhs at the end of 2026. This is assessed based on the prevailing market rate. Base rate arrived at this year will be revised on every consecutive 3 years of 10% through out the repayment period. The surplus amount out of this project at the end of 2026 is Rs.137.86 Lakhs.

7.2.7 DEBT SERVICES

Debt servicing will start with the interest in the year 2008 (of Rs.26.95 lakhs). The total interest paid for the project works out to be Rs.255 lakhs for a loan amount of Rs.215.60 Lakhs and total debt services are 215:485(round off).

7.2.8 CASH FLOW

In this project the cash flow is in surplus from 2014 at an amount of Rs. 0.46 lakhs and the Recovery & Repayment ratio starts with 0.65 in the year 2008 and for the project is 1.28. Meanwhile the rate of debt charges and recovery remains under 0.84 indicating the project revenue is surplus over the debt servicing.

Table 7.7: Cash Outflow

CASH OUTFLOW										Rs in lakhs										
RECOVERY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue from shops	0.00	25.00	25.00	25.00	27.50	27.50	27.50	30.25	30.25	30.25	33.28	33.28	33.28	36.60	36.60	36.60	40.26	40.26	40.26	44.29
TOTAL	0.00	25.00	25.00	25.00	27.50	27.50	27.50	30.25	30.25	30.25	33.28	33.28	33.28	36.60	36.60	36.60	40.26	40.26	40.26	44.29

Table 7.8: Cash flow statement

CASH- FLOW STATEMENT											Rs. In Lakhs										
Particulars	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
<u>RECOVERY</u>																					
Revenue from shops	0	25	25	25	27.5	27.5	27.5	30.25	30.25	30.25	33.28	33.28	33.28	36.6	36.6	36.6	40.26	40.26	40.26	44.29	622.96
TOTAL (A)	0	25	25	25	27.5	27.5	27.5	30.25	30.25	30.25	33.28	33.28	33.28	36.6	36.6	36.6	40.26	40.26	40.26	44.29	622.96
<u>REPAYMENT</u>																					
Debt charges	0	38.3	36.88	35.46	34.04	32.62	31.21	29.79	28.37	26.95	25.53	24.11	22.69	21.28	19.86	18.44	17.02	15.6	14.18	12.77	485.1
TOTAL (B)	0	38.3	36.88	35.46	34.04	32.62	31.21	29.79	28.37	26.95	25.53	24.11	22.69	21.28	19.86	18.44	17.02	15.6	14.18	12.77	485.1
Surplus /Deficit	0	- 13.3	- 11.88	- 10.46	- 6.54	- 5.12	- 3.71	0.46	1.88	3.3	7.74	9.16	10.58	15.33	16.74	18.16	23.24	24.66	26.08	31.52	137.86
CUMULATIVE SURPLUS /DEFICIT	0	- 13.3	- 25.18	- 35.64	- 42.18	- 47.3	- 51.01	- 50.54	- 48.66	- 45.36	- 37.62	- 28.46	- 17.88	- 2.55	14.19	32.36	55.6	80.26	106.34	137.86	
Recovery /Repayment(A/B)	0	0.65	0.68	0.71	0.81	0.84	0.88	1.02	1.07	1.12	1.3	1.38	1.47	1.72	1.84	1.99	2.37	2.58	2.84	3.47	1.28
Debt Charges /Devt. Charges(B/A)	0	1.53	1.48	1.42	1.24	1.19	1.13	0.98	0.94	0.89	0.77	0.72	0.68	0.58	0.54	0.5	0.42	0.39	0.35	0.29	0.78

7.3 UNDERGROUND SEWERAGE SYSTEM

7.3.1 INTRODUCTION

Vellore is an undulated topography. There is no separate drainage, STWD, Sewerage system. The Natural course of drainage system serves through out the town. It is proposed to have a UGD system based on contour falling; the entire town is divided into 2 sewer zones with one main pumping station at Muthumandapam, one sub-pumping station at Vasanthapuram and one Lift pumping station at David nagar. Zone I is located on the southern and eastern part of the municipality. Zone II covers the North and western part of the municipality.

7.3.2 NEED ASSESSMENT

All the rain water takes the natural course and drain water, storm water, sullage and sewer together. The sullage from northern parts of the town is collected from the main drains along Arani road and katpadi road which is then taken across palari river to its northern bank by means of pumping and finally let into the sewage farm of about 20 acres located at Virugampattu Village. The sullage from the southern portion of the town is collected through various kanars (hill streams) channeling through salvanpet, velapadi, suriyakulam which then runs parallel to the railway line along the western municipal limit and bye-pass road and crosses the katpadi road and let into palari river. This causes an unhygienic and health hazards and flash floods. It was a felt need to segregate sewer separated from drain to check mixed drain.

7.3.3 COMPONENTS

In order to provide under ground sewerage system involves construction of sewer lines, house service connections, bedding, construction of main pumping station, sewage treatment plant, Laying of pumping Mains & construction of STP. It was roughly worked out that the total estimated cost for the project is about Rs.7001 Lakhs and the service providers are asked to pay the initial deposits at a rate of Rs. 5000 for domestic and Rs. 20000 for non-domestic use. The estimated connections will be about 25000 domestic connections and 4000 commercial connections. The total estimated deposits will be of Rs.2050 Lakhs.

7.3.4 OPERATING PARAMETERS

About 30% of the total Project cost is been provided as grant by TUNIFSL for the service project. The deposits obtained for the service connections in the first & second phase is excluded from the project cost to arrive total amount to be raised as a loan. It is proposed to obtain Rs.3465.70 Lakhs as a loan from financial institutions such as TNUIFSL at the interest rate of 8.25% per annum for a repayment period of about 20yrs in which moratorium period is of 5 yrs. This project is phased in two phases and the loan amount obtained from the finance agencies are taken in phases as per the requirement.

7.3.5 EXPENSES

The core activity involved in this project are construction of sewer lines, house service connections, bedding, construction of main pumping station, laying of main pumping station and construction of STP. Development costs for the project involves Petty Supervision & Contingency @ 2.5 % and Unforeseen item @ about 2.5 % of the total project cost & Price Escalation @ 6 % compounding for 3 years and Centage @ 18.5 % the total project cost. So the total project cost is expected to be Rs.70.01 Crores.

Table 7.9: Distribution of Development Components

S.No	Development Component	Rs. In Lakhs
Development costs		
1	Collection System	3046.000
2	Pumping Station and Pumping Machineries	340.520
3	Pumping Main	477.380
4	Sewage Treatment Plant with WSP Technology	662.290
5	House Service Connections	609.000
sub total (A)		5135.190
Over heads		
1	Petty Supervision & Contingency @ 2.5 %	128.380
2	Unforeseen Item @ about 2.5 %	128.110
sub total (C)		5391.680
3	Price Escalation @ 6 % compounding for 3 years	516.340
sub total (D)		5908.020
4	Centage @ 18.5 %	1092.980
GRAND TOTAL		7001.00

7.3.6 PHASING

The loan is obtained in 2 phases, Phase I accounts to Rs. 3185.99 lakhs and Phase II accounts to Rs. 3815.01 lakhs. For Phase I loan is obtained during 2007 and repayment of loan ends in 2026 and for Phase II loan is obtained during 2008 and repayment ends in 2027. Phase I having a grant component of Rs. 550.80 lakhs and deposits of Rs. 1350 lakhs. Phase II having a grant component of Rs.934.50 lakhs & Rs.700 lakhs as deposits.

Table 7.10: Development Components in phasing

S.No	PROJECT COST			Rs. In lakhs
Miscellaneous		Phase 1	Phase 2	TOTAL
Development costs				
1	Collection System	1186	1860	3046
2	Pumping Station and Pumping Machineries	259.34	81.18	340.52
3	Pumping Main	446.56	30.82	477.38
4	Sewage Treatment Plant with WSP Technology	353.64	308.65	662.29
5	House Service Connections	315	294	609
sub total (A)		2560.54	2574.65	5135.19
Over heads				
1	Petty Supervision & Contingency @ 2.5 %	64.01	64.37	128.38
2	Unforeseen Item @ about 2.5 %	64.05	64.06	128.11
sub total (C)		2688.6	2703.08	5391.68
3	Price Escalation @ 6 % compounding for 3 years		516.34	516.34
sub total (D)		2688.6	3219.42	5908.02
4	Centage @ 18.5 %	497.39	595.59	1092.98
GRAND TOTAL		3185.99	3815.01	7001.00

7.3.7 REVENUE

The revenue generated from this project is by getting service charges at the rate of Rs.5000/ domestic connection and Rs. 20000/ commercial connection. The total amount obtained as deposits will be Rs.2050 Lakhs. Revenue also includes service charges for each connection it accounts to Rs. 2760 lakhs per year. Base rate has been arrived for the initial 3 years by considering the prevailing market rate and it is proposed to increase 10% for the consecutive 3 years through out the repayment period. The total recovery arrived at 2026 by means of service charges is about Rs. 7248.10 lakhs.

Table 7.11: Repayment Schedule – Cash Inflow

REPAYMENT SCHEDULE - CASH INFLOW						Rs in lakhs							
No. of years for Repayment: 20						No. of years for Repayment: 20						Repayment starting year: 2008	
Moratorium period: 5 Years						Moratorium period: 5 Years							
Repayment starting year: 2008						Repayment starting year: 2009							
Loan	Repayment year	Principal	Interest	Total	Balance	Loan	Repayment year	Principal	Interest	Total	Balance	Year	Total Repayment
1285.19	2007	0.00	0.00	0.00	1285.19							2007	0.00
	2008	67.64	0.00	67.64	1217.55	2180.51	2008	0.00	0.00	0.00	2180.51	2008	67.64
	2009	67.64	0.00	67.64	1149.91		2009	114.76	0.00	114.76	2065.74	2009	182.41
	2010	67.64	0.00	67.64	1082.27		2010	114.76	0.00	114.76	1950.98	2010	182.41
	2011	67.64	0.00	67.64	1014.63		2011	114.76	0.00	114.76	1836.22	2011	182.41
	2012	67.64	83.71	151.35	946.98		2012	114.76	0.00	114.76	1721.45	2012	266.11
	2013	67.64	78.13	145.77	879.34		2013	114.76	142.02	256.78	1606.69	2013	402.55
	2014	67.64	72.55	140.19	811.70		2014	114.76	132.55	247.32	1491.93	2014	387.50
	2015	67.64	66.97	134.61	744.06		2015	114.76	123.08	237.85	1377.16	2015	372.45
	2016	67.64	61.38	129.03	676.42		2016	114.76	113.62	228.38	1262.40	2016	357.41
	2017	67.64	55.80	123.45	608.78		2017	114.76	104.15	218.91	1147.64	2017	342.36
	2018	67.64	50.22	117.87	541.13		2018	114.76	94.68	209.44	1032.87	2018	327.31
	2019	67.64	44.64	112.29	473.49		2019	114.76	85.21	199.98	918.11	2019	312.26
	2020	67.64	39.06	106.70	405.85		2020	114.76	75.74	190.51	803.34	2020	297.21
	2021	67.64	33.48	101.12	338.21		2021	114.76	66.28	181.04	688.58	2021	282.16
	2022	67.64	27.90	95.54	270.57		2022	114.76	56.81	171.57	573.82	2022	267.12
	2023	67.64	22.32	89.96	202.93		2023	114.76	47.34	162.10	459.05	2023	252.07
	2024	67.64	16.74	84.38	135.28		2024	114.76	37.87	152.64	344.29	2024	237.02
	2025	67.64	11.16	78.80	67.64		2025	114.76	28.40	143.17	229.53	2025	221.97
	2026	67.64	5.58	73.22	0.00		2026	114.76	18.94	133.70	114.76	2026	206.92
		1285.19	669.65	1954.85			2027	114.76	9.47	124.23	0.00	2027	124.23
								2180.51	1136.16	3316.67			5271.51

The total repayment made at the end of 2026 is about Rs.5271.51 Lakhs for a total loan amount of Rs.3465.71 Lakhs for the base year 2007.

7.3.7.1 Assumptions

It is assumed that the total deposits collected for the service connections will be added in the principle amount in order to reduce the loan amount obtained from the finance institutions. Thus we take only the service charges collected in each year can be calculated as revenue. Since the installation period is 3 years the service charges will be collected from the year 2010. The surplus amount out of this project at the end of 2026 is Rs. 1976.58 Lakhs.

7.3.8 DEBT SERVICES

The interest rate 8.25% will be calculated as per phases and in the first phase the principle starts in the year 2008 (of Rs.67.64 lakhs) the interest from 2012 will Rs.83.71 lakhs. The total loan amount paid for the first phase will be Rs.1954.85 lakhs. In the second phase the principle starts at 2009 (of Rs.114.76 lakhs) and the interest from 2013 (of Rs.142.02 lakhs). The total loan amount paid for the second phase will be Rs.3316.67 lakhs. The total debt serving for the project works out at Rs.5271.51 Lakhs for a loan amount of Rs.3465.70 lakhs (including the grants) and total debt services are 3465 : 5271 (rounded off).

7.3.9 CASH FLOW

From the cash flow statement, the cash flow remains deficit till 2020 after then it is having surplus revenue each year. During 2015, the project experiences a maximum deficit of Rs. 263 lakhs. At the end of 2027 project ends with the surplus revenue of Rs. 1976.58 lakhs at a Recovery-Repayment ration of 1.37.

Table 7.12: Cash Outflow

CASH OUTFLOW											Rs in lakhs										
RECOVERY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Service Charges	0.00	0.00	0.00	276.00	276.00	276.00	317.40	317.40	317.40	365.01	365.01	365.01	419.76	419.76	419.76	482.73	482.73	482.73	555.13	555.13	555.13
TOTAL	0.00	0.00	0.00	276.00	276.00	276.00	317.40	317.40	317.40	365.01	365.01	365.01	419.76	419.76	419.76	482.73	482.73	482.73	555.13	555.13	555.13

CASH OUTFLOW											Rs in lakhs										
RECOVERY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Service Charges	0.00	0.00	0.00	276.00	276.00	276.00	317.40	317.40	317.40	365.01	365.01	365.01	419.76	419.76	419.76	482.73	482.73	482.73	555.13	555.13	555.13
Total (A)	0.00	0.00	0.00	276.00	276.00	276.00	317.40	317.40	317.40	365.01	365.01	365.01	419.76	419.76	419.76	482.73	482.73	482.73	555.13	555.13	555.13
Repayment																					
Debt charges	0	67.64	182.41	182.41	182.41	266.11	402.55	387.5	372.45	357.41	342.36	327.31	312.26	297.21	282.16	267.12	252.07	237.02	221.97	206.92	124.23
Total (B)	0	67.64	182.41	182.41	182.41	266.11	402.55	387.5	372.45	357.41	342.36	327.31	312.26	297.21	282.16	267.12	252.07	237.02	221.97	206.92	124.23
Surplus / Deficit	0	- 67.64	- 182.41	93.59	93.59	9.89	-85.15	-70.1	-55.05	7.6	22.65	37.7	107.5	122.55	137.6	215.61	230.66	245.71	333.16	348.21	430.9
Cumulative Surplus / Deficit	0	- 67.64	- 250.05	- 156.45	-62.86	-52.97	- 138.12	- 208.22	- 263.28	- 255.67	- 233.02	- 195.32	-87.82	34.73	172.33	387.94	618.6	864.3	1197.47	1545.68	1976.58
Recovery / Repayment (A/B)	0	0	0	1.51	1.51	1.04	0.79	0.82	0.85	1.02	1.07	1.12	1.34	1.41	1.49	1.81	1.92	2.04	2.5	2.68	4.47
Debit charges / Devt. charges (B/A)	0	0	0	0.66	0.66	0.96	1.27	1.22	1.17	0.98	0.94	0.9	0.74	0.71	0.67	0.55	0.52	0.49	0.4	0.37	0.22

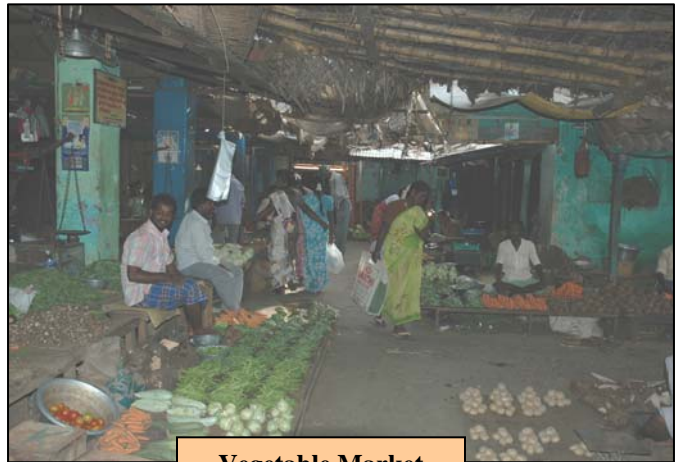
7.4 VEGETABLE MARKET

7.4.1 INTRODUCTION

Vellore is a market center serving around 20 to 30 kms radius of villages around the town. Agricultural commodity such as cereals, grains and fruits are purchased and routed through Vellore, having high rural commuters between villages and Vellore.

7.4.2 NEED ASSESSMENT

The marketing activity of Vellore is very active. The shops that are along the main road caters commodities such as clothing, grocery, grains and general merchant through service activity such as tailoring and Xerox. The existing market is located in ward no. 3 with T.S. No. 149/3A and 146/2 at a total



Vegetable Market

extent of 3 acres. It was assessed from the survey, that vegetable market location along Long bazaar road from bus stand is the potential area for commercial use. There are already 749 shops facing the main road located in Ground Floor. As per the survey conducted and from the interest of Local Body in augmenting revenue, it is proposed to go in for Modernized Complex for Market / Shops in G+1 floors in the existing vegetable Market site with all infrastructure facilities.

7.4.3 COMPONENTS

In existing market site, it is proposed to have Modernized Complex in G+ 1 floor with 750 shops. In that ground floor is used to sale vegetables; first floor is for Fruits and Flowers. Each shop is designed to have a approximate working space of 200 sq.ft at a construction cost of Rs.1000/sq.ft. Total estimated cost for the construction of these shops is about Rs.795 Lakhs. The shops will be rented on monthly basis for Rs.3000 per shop and the total estimated revenue will be Rs.270 Lakhs per annum.

7.4.4 OPERATING PARAMETERS

The total project cost has to be sourced from the finance institutions such as TUFIDCO under the IDSMD Scheme for about Rs.795 Lakhs deducting the deposit amount of Rs. 75 lakhs at a rate of Rs. 10,000 from each shop owners. It involves the establishment cost such as laying of staircase, construction of 750 shops. The total estimated cost involves the operation and maintenance cost with the inflation.

7.4.5 EXPENSES

Development cost for the project includes 2% of the total project cost as O&M charges and 4% of the total project cost as inflation charges. Thus the total project cost is Rs.795 lakhs.

Table 7.14: Distribution of Development Components

S.No	Development Component	Rs. In Lakhs
1	Establishment Cost	750.00
Development costs (a)		750.00
1	O&M Charges @ 2% of (a)	15.00
2	Inflation @ 4% of (a)	30.00
Over heads (b)		45.00
GRAND TOTAL (a+b)		795.00

The loan is to be borrowed from TUFIDCO, TUUIFSL & Similar agencies at the interest rate of 12.5% per annum for a repayment period of about 20yrs.

Table 7.15: Repayment Schedule – Cash Inflow

REPAYMENT SCHEDULE - CASH INFLOW						Rs in lakhs	
No. of years for Repayment: 20						Repayment starting year: 2012	
Moratorium period: 5 Years							
Repayment starting year: 2008							
Loan	Repayment year	Principal	Interest	Total	Balance	Year	Total Repayment
720.00	2007	0.00	0.00	0.00	720.00	2007	0.00
	2008	37.89	90.00	127.89	682.11	2008	127.89
	2009	37.89	85.26	123.16	644.21	2009	123.16
	2010	37.89	80.53	118.42	606.32	2010	118.42
	2011	37.89	75.79	113.68	568.42	2011	113.68
	2012	37.89	71.05	108.95	530.53	2012	108.95
	2013	37.89	66.32	104.21	492.63	2013	104.21

	2014	37.89	61.58	99.47	454.74	2014	99.47
	2015	37.89	56.84	94.74	416.84	2015	94.74
	2016	37.89	52.11	90.00	378.95	2016	90.00
	2017	37.89	47.37	85.26	341.05	2017	85.26
	2018	37.89	42.63	80.53	303.16	2018	80.53
	2019	37.89	37.89	75.79	265.26	2019	75.79
	2020	37.89	33.16	71.05	227.37	2020	71.05
	2021	37.89	28.42	66.32	189.47	2021	66.32
	2022	37.89	23.68	61.58	151.58	2022	61.58
	2023	37.89	18.95	56.84	113.68	2023	56.84
	2024	37.89	14.21	52.11	75.79	2024	52.11
	2025	37.89	9.47	47.37	37.89	2025	47.37
	2026	37.89	4.74	42.63	0.00	2026	42.63
		720.00	852.63	1620.00			1620.00

The total repayment made at the end of 2026 is about Rs.1620 Lakhs for a loan amount of Rs.720 Lakhs from the base year 2007.

7.4.6 REVENUE

The shops in the complex are left to lease on the monthly basis and the total revenue for all the 750 shops on an average will be around Rs.22.50 lakhs / month. The total recovery arrived at 2026 will be Rs.6727 Lakhs. This is assessed based on the prevailing market rate. Base rate arrived at this year will be revised on every consecutive 3 years of 10% through out the repayment period.

The surplus amount out of this project at the end of 2026 is Rs.5107.97 Lakhs.

7.4.7 DEBT SERVICES

Debt servicing will start with the interest in the year 2008 (of Rs.90 lakhs). The total interest paid for the project works out to be Rs.852 lakhs for a loan amount of Rs.720 Lakhs and total debt services are 720:1620(round off).

7.4.8 CASH FLOW

In this project, cash flow is in surplus through out the repayment period and the Recovery & Repayment ratio starts with 2.11 in the year 2008 and for the project is 4.15. Meanwhile the rate of debt charges and recovery remains under 0.24 indicating the project revenue is surplus over the debt servicing.

Table 7.16: Cash Outflow

CASH OUTFLOW										Rs in lakhs								
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	0.00	270.00	270.00	270.00	297.00	297.00	297.00	326.70	326.70	326.70	359.37	359.37	359.37	395.31	395.31	395.31	434.84	434.84
	0.00	270.00	270.00	270.00	297.00	297.00	297.00	326.70	326.70	326.70	359.37	359.37	359.37	395.31	395.31	395.31	434.84	434.84

Table 7.17: Cash flow statement

CASH- FLOW STATEMENT										Rs. In Lakhs								
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
0	270.00	270.00	270.00	297.00	297.00	297.00	326.70	326.70	326.70	359.37	359.37	359.37	395.31	395.31	395.31	434.84	434.84	434.84
0	270.00	270.00	270.00	297.00	297.00	297.00	326.70	326.70	326.70	359.37	359.37	359.37	395.31	395.31	395.31	434.84	434.84	434.84
0	127.89	123.16	118.42	113.68	108.95	104.21	99.47	94.74	90.00	85.26	80.53	75.79	71.05	66.32	61.58	56.84	52.11	47.37
0	127.89	123.16	118.42	113.68	108.95	104.21	99.47	94.74	90.00	85.26	80.53	75.79	71.05	66.32	61.58	56.84	52.11	47.37
0	142.11	146.84	151.58	183.32	188.05	192.79	227.23	231.96	236.70	274.11	278.84	283.58	324.25	328.99	333.73	378.00	382.73	387.47
0	142.11	288.95	440.53	623.84	811.89	1004.68	1231.91	1463.87	1700.57	1974.68	2253.52	2537.10	2861.36	3190.35	3524.08	3902.07	4284.81	4672.70
0	2.11	2.19	2.28	2.61	2.73	2.85	3.28	3.45	3.63	4.21	4.46	4.74	5.56	5.96	6.42	7.65	8.35	9.18

7.5 CONSTRUCTION OF DORMITORY

7.5.1 INTRODUCTION

Vellore is a District Head Quarters town and also a major commercial centre famous for wholesale trade of Rice and Jaggery. Commuters from different places around 50km radius visit this place daily. Vellore is an important administration centre with the population of 1.25 lakhs as per 2001 census and it is a fast growing urban centre in the northern part of Tamilnadu. The world famous CMC hospital with 1800 beds and 2000 daily outpatients makes Vellore as an internationally famous health centre for more than a century now.

7.5.2 NEED ASSESSMENT

At present, Fish market is located along Anna Bazaar road at a total extent of 21,000 sq.ft in Ward no. 3 with T.S. No. 146/17, 146/4c & 146/11. But the present location is more congested due to the nearness of vegetable market and town bus stand. Also the



Fish Market

environment of Fish market is in a bad shape and also objection from public to shift fish market to a better location with better infrastructure facilities. Hence local body has taken steps to shift it to Conservancy Depot site. Also the site where fish market exists is a budding location for development. Because of presence of CMC hospital Vellore needs better temporary housing facilities for those who come from different parts of the country. Therefore municipality felt that by constructing Dormitory in place of fish market will definitely fetch huge revenue to the local body and fulfills the need of commuters.

7.5.3 COMPONENTS

Consultant suggested that Dormitory with better infrastructure facilities can be constructed with G+ 1 floor at an extent of 12,500 sq.ft with 25 rooms in ground floor and 25 rooms in first floor. It is proposed to construct each Dormitory with an area of 500 sq.ft under the prevailing construction cost at a rate of Rs. 1000 per sq.ft. Each

dormitory is designed to have one hall, one bed room with attached toilet and kitchen. It is estimated that nearly Rs. 254.40 lakhs of capital is required to implement this project.

7.5.4 OPERATING PARAMETERS

The total project cost has to be sourced from the financial institutions such as TUFIDCO under the IDSMD Scheme for about Rs. 254.40 Lakhs. This cost involves the establishment cost for 50 rooms. The total estimated cost involves the operation and maintenance cost with the inflation.

7.5.5 EXPENSES

Development cost for the project includes construction cost of dormitory and 2% of the total project cost as O&M charges and 4% of the total project cost as inflation charges. Thus the total project cost arrived is Rs.254.40 Lakhs.

Table 7.18: Distribution of Development Components

S.No	Development Component	Rs. In Lakhs
1	Establishment Cost	240.00
Development costs (a)		240.00
1	O&M Charges @ 2% of (a)	4.80
2	Inflation @ 4% of (a)	9.60
Over heads (b)		14.40
GRAND TOTAL (a+b)		254.40

The total cost is to be borrowed from TUFIDCO, TUUIFSL & Similar agencies at the interest rate of 12.5% per annum for a repayment period of about 20yrs.

Table 7.19: Repayment Schedule – Cash Inflow

REPAYMENT SCHEDULE - CASH INFLOW						Rs in lakhs	
No. of years for Repayent: 20						Repayment starting year: 2012	
Moratorium period: 5 Years							
Repayment starting year: 2008							
Loan	Repayment year	Principal	Interest	Total	Balance	Year	Total Repayment
254.40	2007	0.00	0.00	0.00	254.40	2007	0.00
	2008	13.39	31.80	45.19	241.01	2008	45.19

	2009	13.39	30.13	43.52	227.62	2009	43.52
	2010	13.39	28.45	41.84	214.23	2010	41.84
	2011	13.39	26.78	40.17	200.84	2011	40.17
	2012	13.39	25.11	38.49	187.45	2012	38.49
	2013	13.39	23.43	36.82	174.06	2013	36.82
	2014	13.39	21.76	35.15	160.67	2014	35.15
	2015	13.39	20.08	33.47	147.28	2015	33.47
	2016	13.39	18.41	31.80	133.89	2016	31.80
	2017	13.39	16.74	30.13	120.51	2017	30.13
	2018	13.39	15.06	28.45	107.12	2018	28.45
	2019	13.39	13.39	26.78	93.73	2019	26.78
	2020	13.39	11.72	25.11	80.34	2020	25.11
	2021	13.39	10.04	23.43	66.95	2021	23.43
	2022	13.39	8.37	21.76	53.56	2022	21.76
	2023	13.39	6.69	20.08	40.17	2023	20.08
	2024	13.39	5.02	18.41	26.78	2024	18.41
	2025	13.39	3.35	16.74	13.39	2025	16.74
	2026	13.39	1.67	15.06	0.00	2026	15.06
		254.40	301.26	572.40			572.40

The total repayment made at the end of 2026 is about Rs.572.40 Lakhs for a total loan amount of Rs.254.40 Lakhs for the base year 2007.

7.5.6 REVENUE

Dormitory is designed for 50 rooms with 25 rooms in ground floor and 25 rooms in first floor. It is proposed to rent a dormitory at Rs. 200 per day. Assuming that in a day 38 rooms are filled out of 50 (75% occupancy rate). The revenue generated per day is around Rs. 7600. Therefore annually Rs. 27.74 lakhs of revenue can be mobilized out of this project. Base rate arrived at this year will be revised on every consecutive 3 years of 10% through out the repayment period. The total recovery arrived at 2026 will be Rs.691.24 Lakhs. The surplus amount out of this project at the end of 2026 is Rs.118.84 Lakhs.

7.5.7 DEBT SERVICES

Debt servicing will start with the interest in the year 2008 (of Rs.31.80 lakhs). The total debt serving for the project works out to be Rs.572.40 lakhs in a loan amount of Rs.254.40 Lakhs and total debt services are 255:572(round off).

7.5.8 CASH FLOW

In this project the cash flow is in surplus from 2022 at an amount of Rs. 5.96 lakhs and the Recovery & Repayment ratio starts with 0.61 in the year 2008 and for the project is 1.21. Meanwhile the rate of debt charges and recovery remains under 0.83 indicating the project revenue is surplus over the debt servicing.

Table 7.20: Cash Outflow

CASH OUTFLOW										Rs in lakhs								
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
es	0.00	27.74	27.74	27.74	30.51	30.51	30.51	33.57	33.57	33.57	36.92	36.92	36.92	40.61	40.61	40.61	44.68	44.68
	0.00	27.74	27.74	27.74	30.51	30.51	30.51	33.57	33.57	33.57	36.92	36.92	36.92	40.61	40.61	40.61	44.68	44.68

Table 7.21: Cash flow statement

CASH- FLOW STATEMENT										Rs. In Lakhs								
007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
.00	27.74	27.74	27.74	30.51	30.51	30.51	33.57	33.57	33.57	36.92	36.92	36.92	40.61	40.61	40.61	44.68	44.68	44.68
.00	27.74	27.74	27.74	30.51	30.51	30.51	33.57	33.57	33.57	36.92	36.92	36.92	40.61	40.61	40.61	44.68	44.68	44.68
.00	45.19	43.52	41.84	40.17	38.49	36.82	35.15	33.47	31.80	30.13	28.45	26.78	25.11	23.43	21.76	20.08	18.41	16.73
.00	45.19	43.52	41.84	40.17	38.49	36.82	35.15	33.47	31.80	30.13	28.45	26.78	25.11	23.43	21.76	20.08	18.41	16.73
.00	-17.45	-15.78	-14.10	-9.65	-7.98	-6.31	-1.58	0.09	1.77	6.80	8.47	10.14	15.51	17.18	18.86	24.59	26.27	27.95
.00	-17.45	-33.23	-47.33	-56.98	-64.96	-71.27	-72.85	-72.76	-70.99	-64.20	-55.73	-45.59	-30.08	-12.90	5.96	30.55	56.82	84.75
.00	0.61	0.64	0.66	0.76	0.79	0.83	0.95	1.00	1.06	1.23	1.30	1.38	1.62	1.73	1.87	2.22	2.43	2.64
.00	1.63	1.57	1.51	1.32	1.26	1.21	1.05	1.00	0.95	0.82	0.77	0.73	0.62	0.58	0.54	0.45	0.41	0.37

7.6 DORMITORY CUM LODGE

7.6.1 INTRODUCTION

Vellore is a District Head Quarters town and also a major commercial centre famous for wholesale trade of Rice and Jaggery. Commuters from different places around 50km radius visit this place daily. Vellore is an important administration centre with the population of 1.25 lakhs as per 2001 census and it is a fast growing urban centre in the northern part of Tamilnadu. The world famous CMC hospital with 1800 beds and 2000 daily outpatients makes Vellore as an internationally famous health centre for more than a century now.

7.6.2 NEED ASSESSMENT

Dog Killing site located in ward no. 2 along old katpadi road and it is having a total extent of 39,383 sq.ft excluding access road from the existing main road. Since this site is not utilized by the local body now it becomes dumping ground for rubbishes. Since it is along old katpadi



Dog Killing Site

road it is having great potential for development. Therefore municipality decided to construct a Dormitory cum lodge with better infrastructure facilities can yield good revenue to local body. Since this town is having less number of lodges this project will certainly fulfills the requirement of commuters who come from different parts of the country.

7.6.3 COMPONENT COURSES

It is suggested that Dormitory cum lodge with better infrastructure facilities can be constructed in G+ 1 floor at an extent of 20,000 sq.ft with 40 rooms in ground floor for dormitory and 50 rooms in first floor for lodging. It is proposed to construct each Dormitory with an area of 500 sq.ft under the prevailing construction cost at a rate of Rs. 1000 per sq.ft. Similarly each lodge is designed to have a adequate space of 250 sq.ft per room with all facilities. Each dormitory is designed to have one hall, one bed room with attached toilet and kitchen. It is estimated that nearly Rs. 132.71 lakhs of capital is required to implement this project.

7.6.4 OPERATING PARAMETERS

The total project cost has to be sourced from the financial institutions such as TUFIDCO under the IDSMD Scheme for about Rs. 132.71 Lakhs. This cost involves the establishment cost for dormitory and lodge. The total estimated cost involves the operation and maintenance cost with the inflation.

7.6.5 EXPENSES

Development cost for the project includes construction cost of dormitory and 2% of the total project cost as O&M charges and 4% of the total project cost as inflation charges. Thus the total project cost arrived is Rs.132.71 Lakhs.

Table 7.22: Distribution of Development Components

S.No	Development Component	Rs. In Lakhs
1	Establishment Cost	125.20
Development costs (a)		125.20
1	O&M Charges @ 2% of (a)	2.50
2	Inflation @ 4% of (a)	5.01
Over heads (b)		7.51
GRAND TOTAL (a+b)		132.71

The total cost is to be borrowed from TUFIDCO, TUUIFSL & Similar agencies at the interest rate of 12.5% per annum for a repayment period of about 20yrs.

Table 7.23: Repayment Schedule – Cash Inflow

REPAYMENT SCHEDULE - CASH INFLOW						Rs in lakhs	
No. of years for Repayent: 20						Repayment starting year: 2012	
Moratorium period: 5 Years							
Repayment starting year: 2008							
Loan	Repayment year	Principal	Interest	Total	Balance	Year	Total Repayment
132.71	2007	0.00	0.00	0.00	132.71	2007	0.00
	2008	6.98	16.59	23.57	125.73	2008	23.57
	2009	6.98	15.72	22.70	118.74	2009	22.70
	2010	6.98	14.84	21.83	111.76	2010	21.83

	2011	6.98	13.97	20.95	104.77	2011	20.95
	2012	6.98	13.10	20.08	97.79	2012	20.08
	2013	6.98	12.22	19.21	90.80	2013	19.21
	2014	6.98	11.35	18.34	83.82	2014	18.34
	2015	6.98	10.48	17.46	76.83	2015	17.46
	2016	6.98	9.60	16.59	69.85	2016	16.59
	2017	6.98	8.73	15.72	62.86	2017	15.72
	2018	6.98	7.86	14.84	55.88	2018	14.84
	2019	6.98	6.98	13.97	48.89	2019	13.97
	2020	6.98	6.11	13.10	41.91	2020	13.10
	2021	6.98	5.24	12.22	34.92	2021	12.22
	2022	6.98	4.37	11.35	27.94	2022	11.35
	2023	6.98	3.49	10.48	20.95	2023	10.48
	2024	6.98	2.62	9.60	13.97	2024	9.60
	2025	6.98	1.75	8.73	6.98	2025	8.73
	2026	6.98	0.87	7.86	0.00	2026	7.86
		132.71	157.16	298.60			298.60

The total repayment made at the end of 2026 is about Rs.548.55Lakhs for a total loan amount of Rs.243.8Lakhs for the base year 2007.

7.6.6 REVENUE

Dormitory cum lodge is designed for 90 rooms with 40 rooms in ground floor and 50 rooms in first floor. It is proposed to rent a dormitory at Rs. 200 per day. Assuming that in a day 30 rooms are filled out of 50 (75% occupancy rate). The revenue generated per day is around Rs. 6000. Therefore annually Rs. 21.90 lakhs of revenue can be mobilized out of this project. Lodges are assumed to rent Rs. 100 per day. Assuming that in a day 38 rooms are filled out of 50 (75% occupancy rate). The revenue generated per day is around Rs. 3800. Therefore annually Rs. 13.87 lakhs of revenue can be mobilized out of this project. Base rate arrived at this year will be revised on every consecutive 3 years of 10% through out the repayment period. The total recovery arrived at 2026 will be Rs.891.33 Lakhs. The surplus amount out of this project at the end of 2026 is Rs.592.73 Lakhs.

7.6.7 DEBT SERVICES

Debt servicing will start with the interest in the year 2008 (of Rs.16.59 lakhs). The total debt serving for the project works out to be Rs.298.60 lakhs for a loan amount of Rs.132.71 Lakhs and total debt services are 133:299(round off).

7.6.8 CASH FLOW

In this project the cash flow is surplus throughout the entire repayment period and the Recovery & Repayment ratio starts with 1.52 in the year 2008 and for the project is 2.99. Meanwhile the rate of debt charges and recovery remains under 0.34 indicating the project revenue is surplus over the debt servicing.

Table 7.24: Cash Outflow

CASH OUTFLOW										Rs in lakhs								
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1	0.00	35.77	35.77	35.77	39.35	39.35	39.35	43.28	43.28	43.28	47.61	47.61	47.61	52.37	52.37	52.37	57.61	57.61
	0.00	35.77	35.77	35.77	39.35	39.35	39.35	43.28	43.28	43.28	47.61	47.61	47.61	52.37	52.37	52.37	57.61	57.61

Table 7.25: Cash flow statement

CASH- FLOW STATEMENT										Rs. In Lakhs								
07	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
00	35.77	35.77	35.77	39.35	39.35	39.35	43.28	43.28	43.28	47.61	47.61	47.61	52.37	52.37	52.37	57.61	57.61	57.61
00	35.77	35.77	35.77	39.35	39.35	39.35	43.28	43.28	43.28	47.61	47.61	47.61	52.37	52.37	52.37	57.61	57.61	57.61
00	23.57	22.70	21.83	20.95	20.08	19.21	18.34	17.46	16.59	15.72	14.84	13.97	13.10	12.22	11.35	10.48	9.60	8.73
00	23.57	22.70	21.83	20.95	20.08	19.21	18.34	17.46	16.59	15.72	14.84	13.97	13.10	12.22	11.35	10.48	9.60	8.73
00	12.20	13.07	13.94	18.39	19.27	20.14	24.95	25.82	26.69	31.89	32.77	33.64	39.27	40.15	41.02	47.13	48.00	48.88
00	12.20	25.27	39.21	57.60	76.87	97.00	121.95	147.77	174.46	206.36	239.12	272.76	312.04	352.19	393.21	440.34	488.34	537.22
00	1.52	1.58	1.64	1.88	1.96	2.05	2.36	2.48	2.61	3.03	3.21	3.41	4.00	4.28	4.61	5.50	6.00	6.60
00	0.66	0.63	0.61	0.53	0.51	0.49	0.42	0.40	0.38	0.33	0.31	0.29	0.25	0.23	0.22	0.18	0.17	0.15

7.7 SOLID WASTE MANAGEMENT

7.7.1 INTRODUCTION

Vellore is the municipality of about 11.57sq.Km and maximum of the town is under the urban use. As per 2001 census, the total population of the town is about 1,77,413 persons. On an average about 0.4Kg of wastes is generated per capita per day. At the town level on an average about 80MT waste is generated and varies at rate of 5MT/Day. The town is not provided with proper disposal yard and it is required to propose a new one for the development of the town. The memorandum is submitted and accepted in which the remaining amount is been paid by the municipality from its own source.

7.7.2 NEED ASSESSMENT

The present compost yard is at Sadhuperi with an extent of 4.5 acres of land at a distance of 7kms from the town. Current practice of Solid waste management is simply dumping in an open yard by transferring wastes from two transit points located at Sarpanmedu and near bypass road. As there are no composting the waste remains as waste thus generating environmental Solid waste problems as well as stinky environment. It is very close to existing residential colonies and there is a stiff resistance from this colony people on the use of this site for composting. Also the present site is full now even to a height of 2m there is no possibility for further dumping in this location. Under the circumstance, the Local body was to push through to identify a new compost yard with an extent of 10 acres at Ammanakuppam.

7.7.3 COMPONENT COURSES

The project basically involves 3 phases in which improvement of collection & Transportation is in the first part, setting of compost plant and improvement of land fill site is in the next consecutive level. From the current practice, no revenue is generated from the sale of manure and sale of recyclable waste which is generated out of the solid waste collected from the town. The proposed project cost could be equated from the revenue gained out of sale of the compost. Thus the total revenue generated out will be around Rs.657.85 Lakhs at the end of 2026.

7.7.4 OPERATING PARAMETERS

This project cost is calculated with the works involved such as Improvement of collection & Transportation, setting up of compost Yard, Improvement of land fill site. It involves a grant amount of Rs.14 lakhs and local body contribution of Rs.7 lakhs for the improvement of collection. Also for the purchase of compost yard there is an SFC grant of Rs.7 lakhs and local body contribution of Rs.6.73 lakhs. Deducting all the above grants and contribution net loan amount arrived is Rs. 171.17 lakhs. This amount is proposed to be sourced from the finance institutions such as TUFIDCO or under the IDSMD Scheme.

7.7.5 EXPENSES

This project activity has Improvement of Collection & Transportation, Setting up of Compost plant, Improvement of land fill site are executed from the total amount of Rs.210.10 Lakhs.

Table 7.26: Distribution of Development Components

S.No	PROJECT COST- in Lakhs	
	Development Cost	TOTAL
1	Primary Collection	18.51
2	Implements	5.00
3	Vermi Compost Shed	8.00
4	Secondary Collection	77.50
5	Compost Yard	89.00
6	Health care & Safety for Employees	12.09
	Total	210.10

Table 7.27: Repayment Schedule – Cash Inflow

REPAYMENT SCHDULE - CASH INFLOW						Rs in lakhs		Repayment starting year: 2012
No. of years for Repayment: 20								
Moratorium period: 5 Years								
Repayment starting year: 2009								
Loan	Repayment year	Principal	Interest	Total	Balance	Year	Total Repayment	
171.18	2007	0.00	0.00	0.00	171.18	2008	0.00	
	2008	9.01	0.00	9.01	162.17	2009	9.01	
	2009	9.01	0.00	9.01	153.16	2010	9.01	
	2010	9.01	0.00	9.01	144.15	2011	9.01	
	2011	9.01	0.00	9.01	135.14	2012	9.01	
	2012	9.01	11.15	20.16	126.13	2013	20.16	
	2013	9.01	10.41	19.42	117.12	2014	19.42	
	2014	9.01	9.66	18.67	108.11	2015	18.67	
	2015	9.01	8.92	17.93	99.10	2016	17.93	
	2016	9.01	8.18	17.19	90.09	2017	17.19	
	2017	9.01	7.43	16.44	81.08	2018	16.44	
	2018	9.01	6.69	15.70	72.07	2019	15.70	
	2019	9.01	5.95	14.96	63.07	2020	14.96	
	2020	9.01	5.20	14.21	54.06	2021	14.21	
	2021	9.01	4.46	13.47	45.05	2022	13.47	
	2022	9.01	3.72	12.73	36.04	2023	12.73	
	2023	9.01	2.97	11.98	27.03	2024	11.98	
	2024	9.01	2.23	11.24	18.02	2025	11.24	
	2025	9.01	1.49	10.50	9.01	2026	10.50	
	2026	9.01	0.74	9.75	0.00	2027	9.75	
		171.18	89.19	260.37			260.37	

The total repayment made at the end of 2026 is about Rs.260.37 Lakhs for a total loan amount of Rs. 171.18 Lakhs for the base year 2008.

7.7.6 REVENUE

After the project got completed the revenue can be generated by selling the manure produced and by sale of recyclable waste. It is assumed that about 10% of the total garbage is converted into manure i.e.2190 Tons per year taking a base rate of Rs. 1000 per ton. Also recyclable waste accounts to 5% of total garbage. For calculation

purpose 0.25 tons of wastes are sold as a recyclable waste per day. Therefore revenue generated by means of selling recyclable waste in a year is Rs. 4.56 lakhs considering Rs. 5000 per ton. Base rate has been arrived for the initial 3 years by considering the prevailing market rate and it is proposed to increase 10% for the consecutive 3 years through out the repayment period. The total recovery arrived at 2026 by means of sale of manure & recyclable waste is about Rs.26.46 Lakhs per annum.

7.7.7 DEBT SERVICES

Debt servicing for this project starts with principle in the year 2008 (of Rs.9.01 Lakhs) and the interest from 2012 (of Rs.11.15 Lakhs). The total debt serving for the project works out at Rs.260.37 Lakhs on a loan amount of Rs.171.18 Lakhs (including the grants) and total debt services are 171 : 260 (rounded).

7.7.8 CASH FLOW

In this project we have a surplus Cash flow throughout the repayment period and the recovery vs repayment ratio starts at 2.93 in the year 2008 and those of the project it is 2.53 where as the rate of debt charges and recovery remains under 0.40 indicating the project revenue is surplus over the debt servicing.

Table 7.28: Cash Outflow

CASH OUTFLOW										Rs in lakhs								
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	0.00	21.9	21.9	21.9	24.09	24.09	24.09	26.50	26.50	26.50	29.15	29.15	29.15	32.06	32.06	32.06	35.27	35.27
e	0.00	4.5	4.5	4.5	4.95	4.95	4.95	5.45	5.45	5.45	5.99	5.99	5.99	6.59	6.59	6.59	7.25	7.25
	0.00	26.40	26.40	26.40	29.04	29.04	29.04	31.94	31.94	31.94	35.14	35.14	35.14	38.65	38.65	38.65	42.52	42.52

Table 7.29: Cash flow statement

CASH- FLOW STATEMENT										Rs. In Lakhs								
7	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
0	21.90	21.90	21.90	24.09	24.09	24.09	26.50	26.50	26.50	29.15	29.15	29.15	32.06	32.06	32.06	35.27	35.27	35.27
0	4.50	4.50	4.50	4.95	4.95	4.95	5.45	5.45	5.45	5.99	5.99	5.99	6.59	6.59	6.59	7.25	7.25	7.25
0	26.40	26.40	26.40	29.04	29.04	29.04	31.94	31.94	31.94	35.14	35.14	35.14	38.65	38.65	38.65	42.52	42.52	42.52
0	9.01	9.01	9.01	9.01	20.16	19.42	18.67	17.93	17.19	16.44	15.70	14.96	14.21	13.47	12.73	11.98	11.24	10.50
0	9.01	9.01	9.01	9.01	20.16	19.42	18.67	17.93	17.19	16.44	15.70	14.96	14.21	13.47	12.73	11.98	11.24	10.50
0	17.39	17.39	17.39	20.03	8.88	9.62	13.27	14.02	14.76	18.70	19.44	20.18	24.44	25.18	25.93	30.54	31.28	32.02
0	17.39	34.78	52.17	72.20	81.08	90.71	103.98	118.00	132.76	151.45	170.89	191.07	215.51	240.70	266.62	297.16	328.44	360.40
0	2.93	2.93	2.93	3.22	1.44	1.50	1.71	1.78	1.86	2.14	2.24	2.35	2.72	2.87	3.04	3.55	3.78	4.05
0	0.34	0.34	0.34	0.31	0.69	0.67	0.58	0.56	0.54	0.47	0.45	0.43	0.37	0.35	0.33	0.28	0.26	0.25

BUSINESS PLAN – PROJECT PROFILE

Introduction:

It is been clear from the vision statement collected at the instance of CCP, the stakeholders anticipated that Vellore town could be a industrial cum transportation node and a tourist center. To achieve this, investments need to be routed at appropriate projects. As the vision statement do not directly lad to a specific project consorted efforts are to be plowed in to achieve the vision. Business Plan is one such efforts to review the projects that are identified in CCP and later implemented and yet to formulate additional innovative projects. The Business Plan looks the local body as a resource center rather than only service provider and tries to emulate projects that are feasible to attract private investments.

Consultative Process:

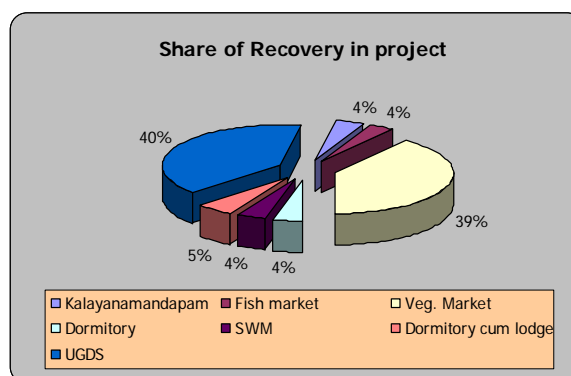
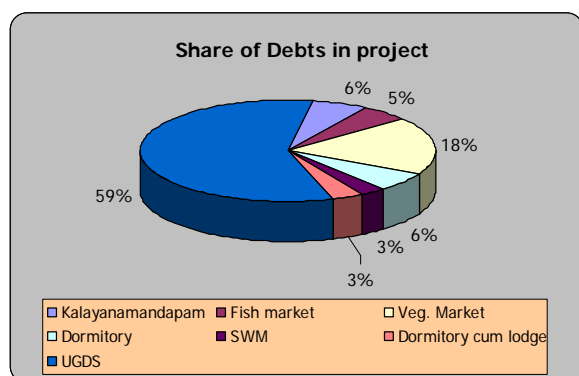
To execute this assignment, a stakeholders meeting was called to assess the new innovative projects that are to be included in the Business Plan preparation. Meeting was held in Vellore during June 2006. It was headed by the Municipal Chairman and Commissioner of Vellore town and it includes the participants like Councilors of all the wards, Municipality officials, key stakeholders, NGOs and various organizations etc. The projects that are listed by the stakeholders are assessed for implementation. The consultants also went around to identify innovative projects in the market. A key decision taken by way of consultation is included in the report. The projects that are considered under Business Plan are as follows:

7.8. Status of Business Plan Projects

Under this assignment 7 projects are identified in Vellore City Municipal Corporation. Each project is backed with cash flow statement describing recoveries out of the project and repayment of loan (Principle + Interest) over a period of time is worked out elaborately considering the interest rate and moratorium period which is applicable for obtaining loan. Table 7.31 describes the cash flow statement worked out for this business plan. At the end of 2027, Rs. 9044.61 lakhs of money has to be repaid including principle & interest for the loan amount Rs. 5198.68 lakhs at 8.25 % rate of interest for service and 12.5% for commercial projects including a moratorium period of 5 years and 1 year respectively. A total recovery out of business plan projects is Rs. 16937.16 lakhs at the end of year 2026. Therefore at the end of the repayment year business plan projects ends at a surplus of Rs. 8016.78 lakhs.

Table. 7.30. Loan Details of Business Plan Projects

Projects	Loan Raised	Recovery	Debts	Surplus / Deficit
Kalayanamandapam	238.50	652.86	536.63	116.24
Fish market	215.60	622.96	485.10	137.86
Veg. Market	720.00	6727.97	1620.00	5107.97
Dormitory	254.40	691.24	572.40	118.84
SWM	171.77	657.85	260.37	397.48
Dormitory cum lodge	132.71	891.33	298.60	592.73
UGDS	3465.70	6692.96	5147.28	1545.68
Total	5198.68	16937.16	8920.38	8016.78

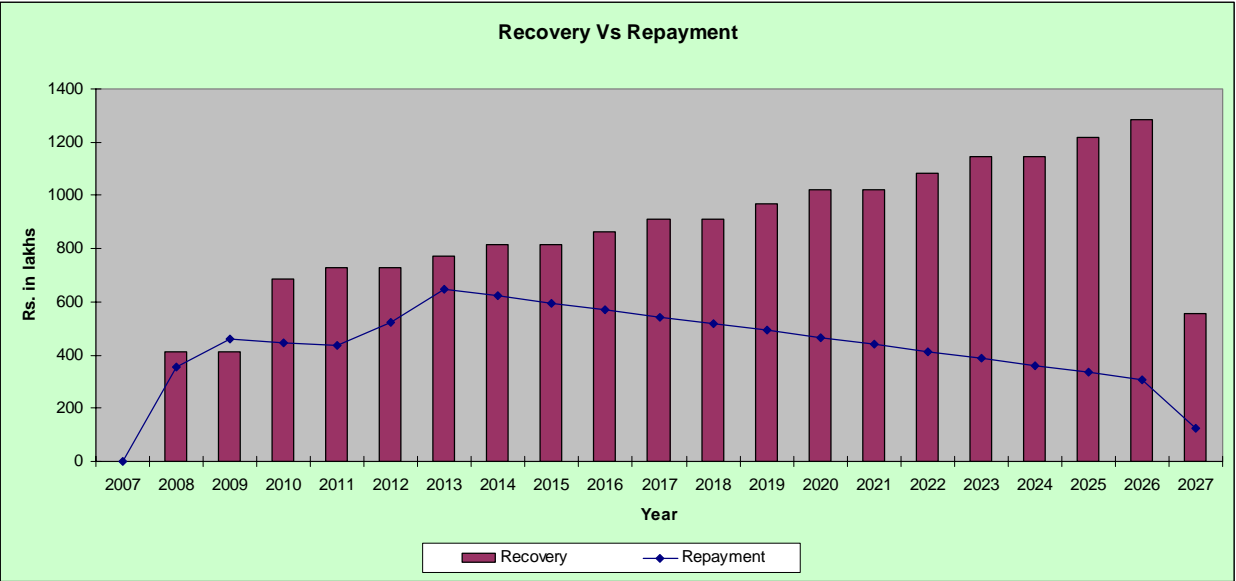


Out of seven identified projects construction of UGD takes nearly 66 percent of the total loan amount. Improvement of Vegetable market also shares 14% of loan amount accounts to Rs. 243.80 lakhs. Even then recoveries from market tops the list by bagging 39% of total recoveries (Rs. 6727 lakhs) during the repayment period. It is followed by UGD of Rs. 6692 lakhs by means of user charges during the repayment period.

Table. 7.31. Cash Flow Statement for the Business Plan Projects

Year	Recovery	Repayment	Cumulative Surplus / Deficit
2007	0.00	0.00	0.00
2008	411.11	353.97	57.14
2009	411.11	458.46	-47.35
2010	687.11	448.19	238.92
2011	728.22	437.92	290.30
2012	728.22	522.51	205.71
2013	769.62	647.93	121.69
2014	814.84	621.87	192.97
2015	814.84	595.81	219.04
2016	862.45	569.74	292.71
2017	912.20	543.68	368.52
2018	912.20	517.62	394.58
2019	966.95	491.55	475.39
2020	1021.67	465.49	556.18
2021	1021.67	439.43	582.24
2022	1084.63	413.37	671.27
2023	1144.82	387.30	757.52
2024	1144.82	361.24	783.58
2025	1217.23	335.18	882.05
2026	1283.44	309.11	974.33
2027	555.13	124.23	430.90
TOTAL	17492.30	9044.61	8447.69

During the entire repayment period recoveries are more than the repayment for the loan raised except during 2009 where it is having a deficit of Rs. 47 lakhs, maximum surplus is achieved during the year 2026 (ie. Rs. 974 lakhs). In 2008 surplus of Rs. 57.14 lakhs is the least compared to a repayment period of 20 years.



VELLORE CORPORATION FINANCE

8.0 Vellore Corporation Finance

The finances of ULBs are operated under the general account of "Income and Expenditure". Some times these accounts are classified depending on the sources as "revenue" and "capital". Therefore, the outgoing items relate to "revenue expenditure" and "capital expenditure" and, the incoming to "revenue receipt" and "capital receipt". However, for a medium sized municipality like Vellore, the capital expenditure is not to be sizable, which otherwise may effect the municipal finance heavily, the "revenue" and "capital" (receipt and expenditure) are not dealt separately. Therefore, municipal finance is classified as "Income" and "Expenditure".

8.1 Revenue receipts

Under this head taxes, fees, grants, income from properties and special services are included. The amount under most of these heads is growing however their share to the revenue receipts in respective years is unstable. Revenue receipts accounts to Rs.924 lakhs in 2000-01 grown to Rs. 1391 lakhs in 2005-06 with 10 percent average annual growth rate over past 6 years.

i) Taxes - own sources - Taxes are collected by the Municipality and also by other agencies. Municipality collects property tax and profession tax. In 2005-06, the tax receipts accounted for Rs. 403 Lakhs.

ii) Taxes - Assigned Revenue - Taxes collected by other agencies include entertainment tax, duty on transfer of property, taxes on carts and animals which amounted to Rs. 126 lakhs in 2005-06.

Table 8.1 Revenue Receipts: 2000-01 to 2005-06, Vellore

(Rs in lakhs)

Sl. No.	Code No.	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
		Actuals					Budget
INCOME STATEMENT							
1	Property Tax	320.46	330.16	330.47	333.19	263.50	317.67
2	Other Taxes						
	a. Professional Tax	49.57	56.75	60.11	66.80	82.04	86.15
	b. Other Taxes (excluding Professional Tax)	2.93	3.86	2.52	8.18	1.50	2.50
3	Assigned Revenue	92.31	72.15	236.21	112.06	99.26	126.27
4	Devolution Fund	134.75	153.61	298.98	411.93	332.34	306.59
5	Service Charges and Fees						
	a. Water Charges	34.90	38.40	34.61	36.91	34.04	25.00
	b. Service Charges and Fees (excluding Water Charges)	50.86	41.69	58.46	84.25	80.72	90.41
6	Grants and Contributions	0.00	0.00	91.78	42.20	36.31	40.00
7	Sale and Hire Charges	101.17	109.88	126.68	156.06	171.70	173.00
8	Other Income	76.82	71.84	84.38	99.80	109.44	121.68
9	Deposits & Advances	60.56	98.45	117.57	101.14	95.22	102.00
	Total Income	924.33	976.79	1441.77	1452.52	1306.07	1391.27

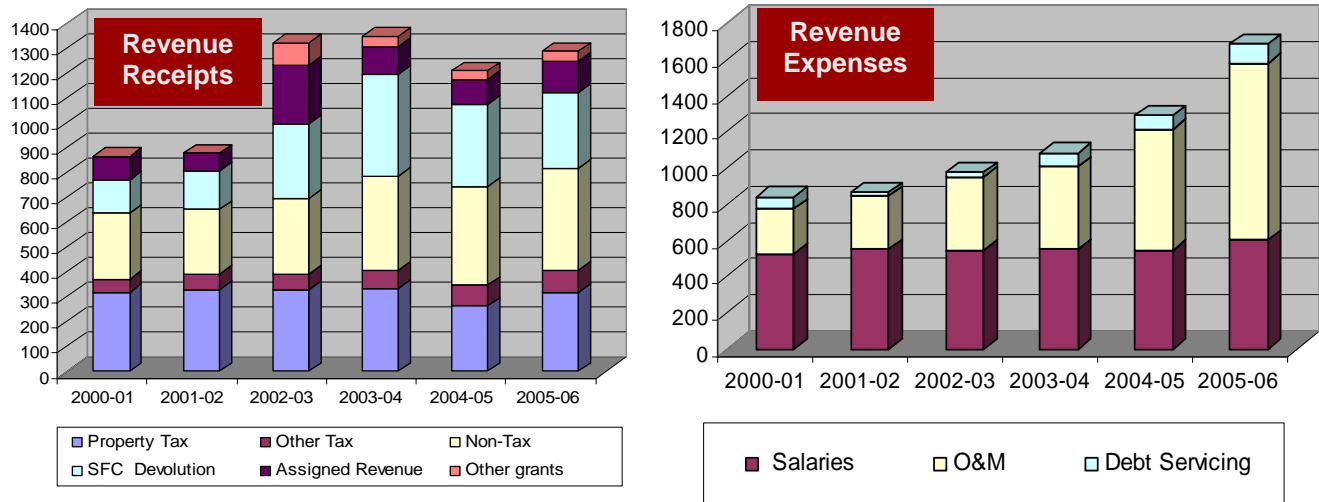
Table 8.2 Revenue Receipts as percentage of Total Revenue Receipts

(in %)

Sl. No.	Code No.	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Average
		Actuals					Budget	
INCOME STATEMENT								
1	Property Tax	34.67	33.80	22.92	22.94	20.18	22.83	26.22
2	Other Taxes							
	a. Professional Tax	5.36	5.81	4.17	4.60	6.28	6.19	5.40
	b. Other Taxes (excluding Professional Tax)	0.32	0.40	0.17	0.56	0.11	0.18	0.29
3	Assigned Revenue	9.99	7.39	16.38	7.71	7.60	9.08	9.69
4	Devolution Fund	14.58	15.73	20.74	28.36	25.45	22.04	21.15
5	Service Charges and Fees							
	a. Water Charges	3.78	3.93	2.40	2.54	2.61	1.80	2.84
	b. Service Charges and Fees (excluding Water Charges)	5.50	4.27	4.05	5.80	6.18	6.50	5.38
6	Grants and Contributions	0.00	0.00	6.37	2.91	2.78	2.88	2.49
7	Sale and Hire Charges	10.95	11.25	8.79	10.74	13.15	12.43	11.22
8	Other Income	8.31	7.35	5.85	6.87	8.38	8.75	7.59
9	Deposits & Advances	6.55	10.08	8.15	6.96	7.29	7.33	7.73
	Total Income	100.00	100.00	100.00	100.00	100.00	100.00	100.00

iii) Non-tax Revenue - This head includes income from Fees, Properties, Special services & Miscellaneous. This head amounts to Rs. 410 lakhs in the year 2005-06.

iv) Grants & Contributions - Following 74th CAA grants in aid of revenue expenditure got boosted, since '97-98'; the effect of the CAA is substantially felt in UBLs resource. It accounts to Rs. 306 lakhs during the year 2004-05 also grants and contribution accounts for Rs 40 Lakhs in 2004-05.



8.2 Revenue Expenditure

Vellore City Municipal Corporation uses the resources for general administration, operation and maintenance of services along with public works, obligatory, discretionary and remunerative and education. Revenue expenditure during 2000-01 was Rs.870 lakhs and in 2005-06 it accounts to Rs. 1746 lakhs. It has grown nearly two times over 6 years.

i) Personal Cost - This constitutes one of the major components of expenditure accounting for Rs. 603 lakhs during 2005-06 with the share of 49% to total expenses. It goes on increasing from Rs. 524 lakhs in 2000-01 to Rs. 603 lakhs in 2005-06 at an average growth of 2 percent each year.

ii) Operating Expenses - This head includes the O&M of core services with the consolidated amount of Rs. 760 lakhs in 2005-06 at a share of 27 percent of total expenses. It achieve a rapid pace over past 6 yrs. In an average it takes a growth of 43% of total expenses each year.

iii) Finance Expenses - This is an important head in which nearly Rs. 106 lakhs of money spend during 2005-06. It takes a share of 5% of total expenses in an average.

Table 8.3 Break – up of Revenue Expenditure: 1999-00 to 2003-04
(Rs in Lakhs)

Sl. No.	Code No.	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
		Actual					Budget
EXPENDITURE STATEMENT							
1	Personnel Cost	524.76	549.97	547.97	552.36	547.73	603.30
2	Terminal and Retirement Benefits	117.93	118.84	151.07	166.77	182.34	210.00
3	Operating Expenses	128.74	173.50	247.85	285.17	476.27	760.30
4	Administrative Expenses	0.63	2.27	3.79	3.31	4.15	5.00
5	Finance Expenses						
	a. Interest on Loans	68.26	20.31	26.38	74.47	79.01	106.50
6	Deposits & Advances	29.95	45.27	59.17	43.74	52.40	61.00
	Total Expenses	870.27	910.16	1036.23	1125.82	1341.90	1746.10

Table 8.4 Revenue Expenditure as percentage of Total Revenue Expenses
(in %)

Sl. No.	Code No.	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Average
		Actual					Budget	
EXPENDITURE STATEMENT								
1	Personnel Cost	60.30	60.43	52.88	49.06	40.82	34.55	49.67
2	Terminal and Retirement Benefits	13.55	13.06	14.58	14.81	13.59	12.03	13.60
3	Operating Expenses	14.79	19.06	23.92	25.33	35.49	43.54	27.02
4	Administrative Expenses	0.07	0.25	0.37	0.29	0.31	0.29	0.26
5	Finance Expenses							
	a. Interest on Loans	7.84	2.23	2.55	6.61	5.89	6.10	5.20
6	Deposits & Advances	3.44	4.97	5.71	3.89	3.90	3.49	4.23
	Total Expenses	100.00	100.00	100.00	100.00	100.00	100.00	100.00

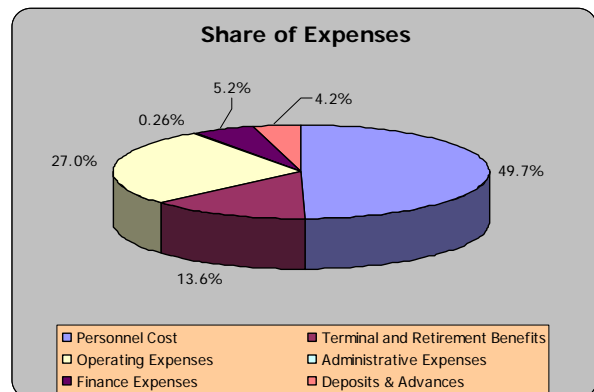
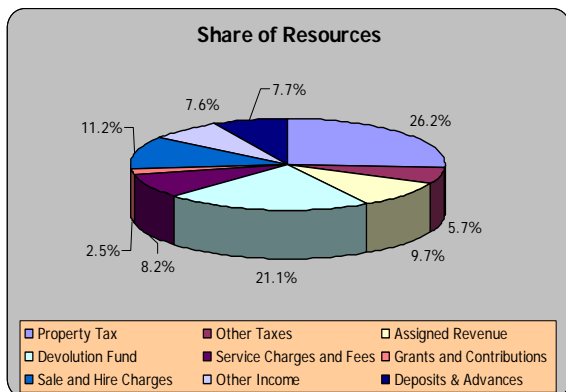
The debt and overdue of the municipality in terms of outstanding Principal is from Government of Tamil Nadu, MUDF/ TNUDF and TUFIDCO to the tune of Rs. 549 lakhs in the year 2003-04.

Table 8.5. Loan Outstanding – Vellore Town (Rs. in Lakhs)

Sl. No.	Loan Particulars	Total Amount Drawn	Loan Period	Rate of Interest	Total Principal & Interest Repaid	Outstanding as on March 31, 2004
All financial figures in Rs. Lakhs						
1	Government Of Tamil Nadu	1043.30	40	13.50	84.74	195.97
2	MUDF / TNUDF	65.45	20	13.50	79.28	13.74
3	Others (Specify) – Special Road Works	368.22	40	12.00	36.99	331.23
4	Others (Specify) - Idsmt	80.00	20	8.00	139.14	8.61
	Total	1556.97			340.15	549.55

8.3 Share of Income & Expenditure – Vellore City Municipal Corporation

When aggregated under major heads of income and expenditure it shows (Table 8.2 & 8.4) major incomes are from property tax and devolution fund which together accounts for about 32% of total revenue of the municipality (Table 7.4). It is followed by Assigned revenue at a contribution of 21% to total revenue of the ULB. Property tax is the single largest resource of the Vellore town with the average share of 25% to total revenue over past six years. On expenditure side about 49% spends on personal cost and 27% on operating expenses. It is followed by the expenses on Terminal & Retirement benefits with the average share of 13% to total expenses.

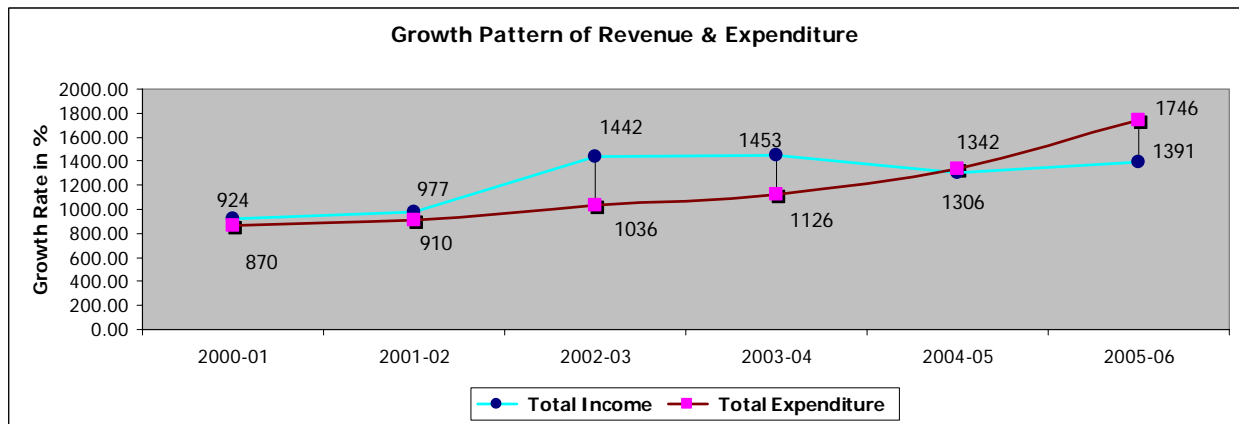
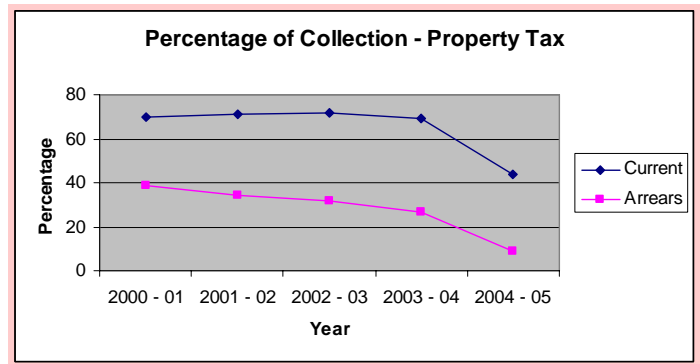


8.4 Trend of Income & Expenditure – Vellore City Municipal Corporation

Income increased at an average of 10 % over past few years in other hand expenses increases at a trend of 15 % growths during 2000-01 to 2005-06. All the revenue heads shows a positive trend except water charges shows a negative trend of 5%. Income & Expenditure trend of the municipality is shown in the following fig.

Table 8.6. Income and Expenditure under Major heads Growth Trend 2000-01 to 2005-06 (in %)

Sl. No.	Code No.	2001-02	2002-03	2003-04	2004-05	2005-06	Average
		Actual				Budget	
INCOME STATEMENT							
1	Property Tax	3.03	0.09	0.82	-20.92	20.56	0.72
2	Other Taxes						
	a. Professional Tax	14.48	5.92	11.13	22.81	5.01	11.87
	b. Other Taxes (excluding Professional Tax)	31.74	-34.72	224.60	-81.66	66.67	41.33
3	Assigned Revenue	-21.84	227.39	-52.56	-11.42	27.21	33.76
4	Devolution Fund	14.00	94.64	37.78	-19.32	-7.75	23.87
5	Service Charges and Fees						
	a. Water Charges	10.03	-9.87	6.65	-7.78	-26.56	-5.51
	b. Service Charges and Fees (excluding Water Charges)	-18.03	40.23	44.12	-4.19	12.00	14.83
6	Grants and Contributions	--	--	-54.02	-13.96	10.16	-19.27
7	Sale and Hire Charges	8.61	15.29	23.19	10.02	0.76	11.57
8	Other Income	-6.48	17.46	18.27	9.66	11.18	10.02
9	Deposits & Advances	62.57	19.42	-13.97	-5.85	7.12	13.86
	Total Income	5.68	47.60	0.75	-10.08	6.52	10.09
EXPENDITURE STATEMENT							
1	Personnel Cost	4.80	-0.36	0.80	-0.84	10.15	2.91
2	Terminal and Retirement Benefits	0.77	27.12	10.39	9.34	15.17	12.56
3	Operating Expenses	34.77	42.85	15.06	67.01	59.64	43.87
4	Administrative Expenses	260.32	66.96	-12.66	25.38	20.48	72.09
5	Finance Expenses						
	a. Interest on Loans	-70.25	29.89	182.30	6.10	34.79	36.57
6	Deposits & Advances	51.15	30.70	-26.08	19.80	16.41	18.40
	Total Expenses	4.58	13.85	8.65	19.19	30.12	15.28

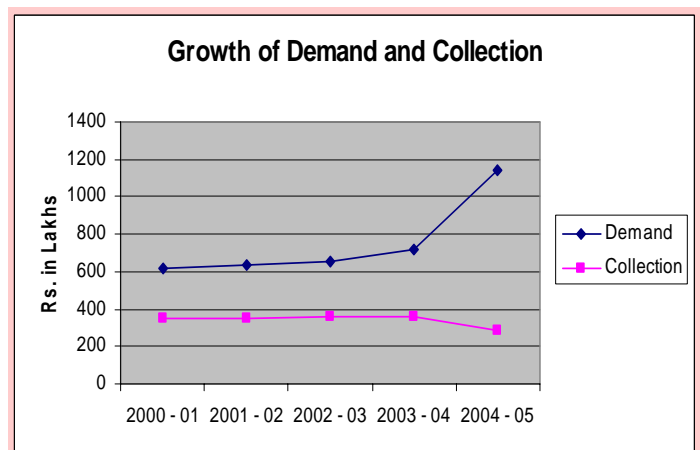


8.5 Demand Collection Balance Scenario

It is seen from the Income and Expenditure statement that the major source of income for the municipality is through the taxes. The DCB of major sources of incomes are from (i) Property Taxes (ii) Professional Taxes and (iii) Water Taxes.

i) Property tax

In 2004-05, the total demand for property tax (including arrears and current) stood at Rs.380 lakhs of which Rs. 159 lakhs has been collected. The collection performance was 41% and, on an average around 45% of property tax has been collected yearly.



Coming to arrears and current demand collection, 28% and 63% has been collected on an average in last five years. (Table 8.7)

Table 8.7. DCB for Property Tax of Vellore 2000-01 to 2004-05

Sl. No.	Particulars	2000-01	2001-02	2002-03	2003-04	2004-05
Figures Rs. In lakhs						
I. Property Tax - Demand, Collection and Balance						
	Total Number of Assessments	22471	23139	23637	24273	25633
	Growth in Assessments	--	2.97	2.15	2.69	5.60
A.	Demand					
	1. Arrears	258.46	268.74	276.99	313.61	609.86
	2. Current	357.77	367.97	376.34	400.66	533.40
	3. Total	616.23	636.71	653.33	714.27	1143.26
B.	Collection					
	1. Arrears	99.66	98.05	88.08	84.25	53.76
	2. Current	247.82	259.97	270.28	277.06	231.97
	3. Total	347.48	358.02	358.36	361.31	285.73
C.	Balance					
	1. Arrears	158.80	170.69	188.91	229.36	556.10
	2. Current	109.95	108.00	106.06	123.60	301.43
	3. Total	268.75	278.69	294.97	352.96	857.53
D.	Collection Analysis					
	1. Arrears (%)	38.56	36.49	31.80	26.86	8.82
	2. Current (%)	69.27	70.65	71.82	69.15	43.49
	3. Total (%)	56.39	56.23	54.85	50.58	24.99

ii) Profession tax

The total demand under this item in 2004-05 was RS. 56 lakhs and the amount collected was only RS. 25 lakhs, with a collection performance of 44%. On an average nearly 40% of profession tax has been collected an average the growth was 0.9%. (Table 8.8).

The arrear amount in 2004-05 was Rs.27 lakhs, while the current demand was Rs.28 lakhs of which's 1.3 lakhs and Rs.23 lakhs have been collected by the Municipality, which accounts for 4% and 82% respectively. On an average, the collection performance for arrears and current demand is 2% and, 87% respectively.

Table 8.8. DCB for Professional Tax of Vellore 2000-01 to 2004-05

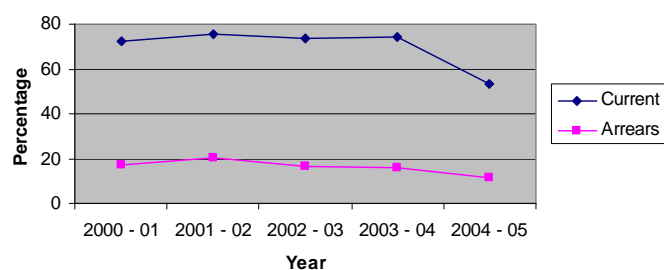
Sl. No.	Particulars	2000-01	2001-02	2002-03	2003-04	2004-05
Figures Rs. In lakhs						
II. Profession Tax - Demand, Collection and Balance						
	Total Number of Assesses	4650	4775	4850	4675	4827
	Growth in Assessments	--	2.69	1.57	-3.61	3.25
A.	Demand					
	1. Arrears	67.31	76.61	79.37	83.58	88.75
	2. Current	53.74	56.56	58.59	69.85	88.77
	3. Total	121.05	133.17	137.96	153.43	177.52
B.	Collection					
	1. Arrears	5.12	8.86	10.04	8.58	5.74
	2. Current	44.45	47.89	50.07	60.22	76.30
	3. Total	49.57	56.75	60.11	68.80	82.04
C.	Balance					
	1. Arrears	62.19	67.78	69.33	75.00	83.01
	2. Current	9.29	8.67	8.52	9.63	12.47
	3. Total	71.48	76.45	77.85	84.63	95.48
D.	Collection Analysis					
	1. Arrears (%)	7.61	11.57	12.65	10.27	6.47
	2. Current (%)	82.71	84.67	85.46	86.21	85.95
	3. Total (%)	40.95	42.61	43.57	44.84	46.21

iii) Water Charges

The total demand in 2004-05 was Rs.99 lakhs and Rs.50 lakhs have been collected (50% of demand) and on an average this component has been found to be increasing at 4% yearly.

The collection performance was at 41% and 60% for arrears and current demand respectively. (Table 8.9)

Percentage of Collection - Water Charges



Growth of Demand and Collection

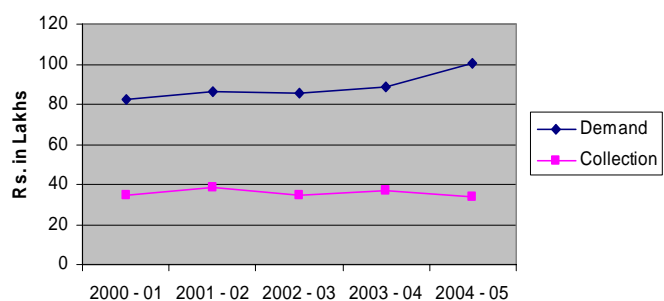


Table 8.9. DCB of Water Charges of Vellore 2000-01 to 2004-05

Sl. No.	Particulars	2000-01	2001-02	2002-03	2003-04	2004-05
Figures Rs. In lakhs						
III. Water Charges - Demand, Collection and Balance						
	Total Number of Assessments	10483	11089	11644	12072	12440
	Growth in Assessments	--	5.78	5.00	3.68	3.05
A.	Demand					
	1. Arrears	43.92	47.93	48.12	50.56	51.29
	2. Current	38.50	38.59	37.35	37.68	55.32
	3. Total	82.42	86.52	85.47	88.24	106.61
B.	Collection					
	1. Arrears	7.16	9.57	7.41	9.27	5.09
	2. Current	27.44	28.83	27.20	27.64	28.95
	3. Total	34.60	38.40	34.61	36.91	34.04
C.	Balance					
	1. Arrears	36.76	38.36	40.71	41.29	46.20
	2. Current	11.06	9.76	10.15	10.04	26.37
	3. Total	47.82	48.12	50.86	51.33	72.57
D.	Collection Analysis					
	1. Arrears (%)	16.30	19.97	15.40	18.33	9.92
	2. Current (%)	71.27	74.71	72.82	73.35	52.33
	3. Total (%)	41.98	44.38	40.49	41.83	31.93

8.6 Assessment of Performance of Municipal Finance

From the actual, Vellore revenue account stand for about 6 crores in the year 2005-2006. This includes OB of about 5.4 crores and the trend shows an increasing amount of revenue which is favorable to the municipality for any investment. The Operating Ratio (RE / RI) shows less than 1 for all the years between 2000-01 to 2005-06 except in 2001-02 which has crossed 1 mark (Table 8.10). In the same year, DS to income was 23% but in rest of the years are under control and very much comfortable in the year 2005-06 which was 1.80 percentage to income.

Table 8.10. Performance of Vellore Corporation Finance, 2000-01 to 2004-05

(Figures Rs. In lakhs)

Sl. No.	Account Head	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
		Actuals					Budget
1	Revenue Account Status (Incl. OB)	103.68	170.31	575.85	902.55	866.72	511.89
2	Operating Ratio (Rev. Expen./Rev. Inc.)	0.94	0.93	0.72	0.78	1.03	1.26
3	Debt Servicing - Percentage of Income (%)	7.38	2.08	1.83	5.13	6.05	7.65

8.7 Financial Operational Plan (FOP)

The Financial Operating Plan (FOP) is essentially a multi-year forecast of finances of the urban local body. The FOP can be generated for a short-medium term of 5-8 years and also for a long-term for 20 years period. In this context, the FOP is envisaged with short-term period of 5 years (2006-07 to 2010-11) and a long-term period of 20 years (2006-07 to 2025-26). A salient feature of the FOP is that all outstanding dues including debt and non-debt liabilities have been taken into account. It needs mention that the identified investments are phased from the year 2006-07.

The FOP is essentially a financial forecast, developed on the basis of the growth trends of various components of income and expenditure, based on the time-series data. It is noteworthy that several assumptions need to be made while forecasting the finances of the ULBs. The immense care have been taken to adopt various assumptions based on the current growth trends, contribution pattern of various revenue drivers and utilization pattern of various expenditure drivers. In addition, various quantifiable assets and liabilities of the ULBs were also taken into account and phased out over a period of time. The following section provides an insight into the various assumptions made, necessary logic and justifications for such assumptions.

8.7.1 Assumptions:

The financial forecast for the horizon period has been made based on the analysis of the growth trend, sectoral contribution (for receipts/income) and utilization (for expenses) and other externalities likely to impact the forecast like pay commission revisions, flow of devolution fund, etc. The FOP is prepared for a short-term & long-term horizon periods with sustainable level of capital investments in both the terms. Following are some of the assumptions adopted while projecting the FOP of Vellore town.

8.7.2 Revenue Receipts / Income: **It has been projected under the following heads:**

- Property Tax
- Other Taxes
 - Professional Tax
 - Other Taxes (excluding Professional Tax)
- Assigned Revenue
- Devolution Fund

- Service Charges and Fees
 - Water Charges
 - Service Charges and Fees (excluding Water Charges)
- Grants and Contributions
- Sale and Hire Charges

Property Tax:

Property tax accounts for an amount of about Rs. 317 lakhs in the year 2005-06. It accounts on an average for about 26 percent of the total income of the municipality. Property tax is one of the major revenue sources of the Vellore City Municipal Corporation. The projection for future is based on the forecast demand and the current demand of year 2005-06 is taken as the base. Its trend for the past 5 years shows at 3 percent increase and it is assumed to grow at the rate of 2.0 percent per year for the projected period.

Further, it is also assumed that the general ARV revision (which was due last year) would be undertaken during the year 2005-06. The other assumptions underlying projection of revenue from property tax are presented in the table below:

Table 8.11. Assumptions for the Financial Projections - Property Tax

Sl. No.	Items/Particulars	Assumption	Basis
1.	ARV Revision	<ul style="list-style-type: none"> ▪ Next revision during the year 2006-07 ▪ Increase at a rate of 30 percent per revision 	<ul style="list-style-type: none"> ▪ Revision once in 5-years as per the Act
2.	Growth in Assessments	<ul style="list-style-type: none"> ▪ Increase annually ▪ Existing trend or maximum of 5% p.a. for ULB 	<ul style="list-style-type: none"> ▪ Existing or nominal growth
3.	Collection Performance	<ul style="list-style-type: none"> ▪ Existing trend or maximum of 95 percent 	<ul style="list-style-type: none"> ▪ Average collection performance (both current & arrear demand) ▪ Current demand - 75-85 percent ▪ Arrear demand - 50-60 percent

Professional Tax:

Professional tax is one of the major revenue sources among the other taxes levied by the ULB. The projection for future is based on the forecast demand and the current demand of year 2005-06 is taken as the base. Further, it may be noted that the last revision was done during 2002-03 and thus the next revision is assumed after 10-12 years (2014-15). The professional tax scored at Rs. 86.15 lakhs (2005-06) having an average growth less than one percent. It is assumed that this would grow at the rate of 5 percent for the projected period.

The other assumptions underlying projection of revenue from professional tax are presented in the table below:

Table 8.12. Assumptions for the Financial Projections - Professional Tax

Sl. No.	Items/Particulars	Assumption	Basis
1.	Revision	<ul style="list-style-type: none">▪ Next revision during the year 2014-15▪ Increase at a rate of 30 percent	<ul style="list-style-type: none">▪ Revision generally once in 10-12 years
2.	Growth in Assessments	<ul style="list-style-type: none">▪ Increase annually▪ Existing trend or maximum of 7 % p.a. for ULB	<ul style="list-style-type: none">▪ Existing or nominal growth
3.	Collection Performance	<ul style="list-style-type: none">▪ Existing trend or maximum of 90 percent	<ul style="list-style-type: none">▪ Average collection performance (both current & arrear demand)▪ Current demand - 70-80 percent▪ Arrear demand - 45-50 percent

Water Charges:

The projection of water charges for future is based on the forecast demand and the current demand of year 2005-06 is taken as the base. The water charges scored at Rs. 25 lakhs (2005-06) having an average growth of 4 percent. It is assumed that this would grow at the rate of 2 percent for the projected period. The other assumptions underlying projection of revenue from professional tax are presented in the table below:

Table 8.13. Assumptions for the Financial Projections - Water Charges

Sl. No.	Items/Particulars	Assumption	Basis
1.	Revision	<ul style="list-style-type: none">▪ Next revision during the year 2005-06▪ Increase at a rate of 20 percent per revision	<ul style="list-style-type: none">▪ Revision allowed once in 3 years as per the Act
2.	Growth in Assessments	<ul style="list-style-type: none">▪ Increase annually▪ Existing trend or maximum of 3 % p.a. for ULB	<ul style="list-style-type: none">▪ Existing or nominal growth
3.	Collection Performance	<ul style="list-style-type: none">▪ Existing trend or maximum of 85 percent	<ul style="list-style-type: none">▪ Average collection performance▪ Current demand - 75-85 percent▪ Arrear demand - 50-55 percent

Devolution Funds:

Devolution funds are projected based on the formula adopted by the GoTN to devolve SFC grants. The State's official projection of Sales Tax for next 10 years is considered as the base. As per the formula, about 8 percent of the State's Sales tax would be devolved for the local bodies (both urban and rural). About 42 percent of the total amount available for the devolution would be devolved to the urban local bodies at the following rate:

- Municipal Corporations -31percent
- Municipalities - 34 percent
- Town Panchayats - 35 percent

Further, it may be observed that the base population figure considered for SFC devolution is the latest Census figures and accordingly, the SFC devolution per capita has been calculated for ULB, at the State level. This per capita devolution has been adopted to project the SFC devolutions for the Vellore town, keeping the population of the ULB as per the 2001 Census as the base.

Other Revenue Receipts / Income:

The assumptions for forecast of other revenue items are presented in the table below. The growth rate under each item of receipt is adopted based on the average trend of all the ULBs under different categories. In case of abnormalities in the growth trend, a nominal growth rate has been adopted.

Table 8.14. Assumptions for the Financial Projections - Other Revenue Receipts

Sl. No.	Items/Particulars	Unit	Assumptions for Forecast
1.	Other Taxes (excluding Professional Tax)	Percent	8.00
2.	Assigned Revenue	Percent	8.00
3.	Service Charges and Fees (excluding Water and Sewer Charges)	Percent	10.00
4.	Grants and Contributions	Percent	5.00
5.	Sale and Hire Charges	Percent	5.00
6.	Other Income	Percent	15.00

8.7.3 Revenue Expenditure: It has been projected under the following heads:

- Personnel Cost
 - Salaries
 - Others
- Terminal and Retirement Benefits
- Operating Expenses
- Repairs and Maintenance
- Program Expenses
- Administrative Expenses
- Finance Expenses
 - Finance Expenses (excluding Interest n Loans)
 - Interest on Loans
- Phasing of Non-Debt Liability

Personnel Cost (including Salaries and Other Establishment Expenditure):

The present average growth in establishment expenditure is about 1-6 percent per annum. However, for the future, the annual growth rate in Personnel Cost is arrived based on the increase in following sub-components:

- Net salary increase - 3 percent per annum
- Revision of DA - 4 to 5 percent per annum
- Others (new recruitments, etc) - 2 to 3 percent per annum

Accordingly, the Personnel Cost is assumed to be growing at the rate of 10 percent per annum.

Other Expenditure:

The assumptions for forecast of other revenue expenditure items are presented in the table below. The growth rate under each item of expenditure is adopted based on the average trend in this local body over last five years. In case of abnormalities in the growth trend, a nominal growth rate has been adopted.

Table 8.15. Assumptions for the Financial Projections – Other Revenue Expenses

Sl. No.	Items/Particulars	Unit	Assumptions for Forecast
1.	Terminal and Retirement Benefits	Percent	10.00
2.	Operating Expenses	Percent	10.00
3.	Repairs and Maintenance	Percent	8.00
4.	Program Expenses	Percent	10.00
5.	Administrative Expenses	Percent	10.00
6.	Finance Expenses (excluding Interest on Loans)	Percent	10.00

It is noteworthy that the revenue expenditure item 'Depreciation' is not considered for financial projection, as it is just a notional item

Finance Expenses - Debt Servicing:

Debt servicing component has been dealt separately in detail as per the terms and conditions of the loan. The debt servicing of both existing proposed loans have been taken into consideration. While calculating the debt servicing, the principal repayment and interest payable on the loans have been calculated separately. The interest on loans has been considered as the revenue expenditure item while the principal repayment has been taken as cash-flow item. However, for calculating the Debt-Service Coverage (DSC) ratio, both principal repayment and interest payable on the loans have been taken into account.

8.7.4 Financial Operational Plan: (Including Business Plan Projects)

Based on the above assumptions, FOP has been formulated for a short term period of 2006-07 to 2010-11 and in that the total revenue receipt has been estimated to reach to Rs. 2993 lakhs in 2010-11 from Rs.1391 lakhs in 2005-06. The total revenue expenditure has been increased from Rs.1252 lakhs (2005-06) to Rs. 2554 Lakhs (2010-11). It is observed that in all the years Operating ration (RE/RI) remains well within operating feasibility of (less than 1) except during 2004-05 and 2005-06 Operating ratio reaches the value of 0.97 and 0.90 respectively. The debt serving over the total revenue is well within 25 percent indicating ease of the municipal finance in repayment of loan (Table 8.16). But in 2009-10, debt servicing ratio reaches the maximum of 19 percent. For a Long term period of 2006-07 to 2025-26, total revenue receipt has been estimated to reach to Rs. 10981 lakhs in 2025-26 from Rs.1391 lakhs in 2005-06. The total revenue expenditure has been increased from Rs.1252 lakhs (2005-06) to Rs. 9151 Lakhs (2025-26). It is observed that in all the years Operating ration (RE/RI) remains within operating feasibility of (less than 1). The debt serving over the total revenue is well within 18 percent indicating ease of the municipal finance in repayment of loan (Table 8.17).

8.7.5 Summary Status:

Key Indicators	Minimum	Maximum	Average
Existing (2000-01 to 2005-06)			
OR (Ratio)	0.51	0.97	0.74
DSR (%)	1.83	7.66	5.02
Short-Term (2006-07 to 2010-11)			
OR (Ratio)	0.85	0.94	0.87
DSR (%)	0.01	19.43	13.21
Long-Term (2006-07 to 2025-26)			
OR (Ratio)	0.82	0.90	0.85
DSR (%)	2.81	18.08	9.27

Table. 8.16. Financial Operational Plan (FOP) – Short Term Period (2006-07 to 2010-11)

Figures Rs. In lakhs

Sl. No.	Account Head	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
		Actuals =====>					Est.	Short-term Projections =====>				
	Opening Balance	49.62	103.68	170.31	575.85	902.55	866.72	1005.42	1248.90	1528.67	1680.88	2100.38
	Revenue Receipts											
1	Property Tax	320.46	330.16	330.47	333.19	263.50	317.67	468.10	477.47	487.02	496.76	506.69
2	Other Taxes											
	a. Professional Tax	49.57	56.75	60.11	66.80	82.04	86.15	46.63	48.96	51.40	53.97	56.67
	b. Other Taxes (excluding Professional Tax)	2.93	3.86	2.52	8.18	1.50	2.50	2.70	2.92	3.15	3.40	3.67
3	Assigned Revenue	92.31	72.15	236.21	112.06	99.26	126.27	136.37	147.28	159.06	171.79	185.53
4	Devolution Fund	134.75	153.61	298.98	411.93	332.34	306.59	405.08	445.26	489.13	532.71	580.16
5	Service Charges and Fees											
	a. Water Charges	34.90	38.40	34.61	36.91	34.04	25.00	50.14	51.15	52.17	63.85	65.13
	b. Service Charges and Fees (excluding Water Charges)	50.86	41.69	58.46	84.25	80.72	90.41	99.45	109.40	120.34	132.37	145.61
6	Grants and Contributions	0.00	0.00	91.78	42.20	36.31	40.00	42.00	44.10	46.31	48.62	51.05
7	Sale and Hire Charges	101.17	109.88	126.68	156.06	171.70	173.00	181.65	190.73	200.27	210.28	220.80
8	Other Income	76.82	71.84	84.38	99.80	109.44	121.68	139.93	160.92	185.06	212.82	244.74
9	Deposits & Advances	60.56	98.45	117.57	101.14	95.22	102.00	117.30	134.90	155.13	178.40	205.16
10	Recoveries from Projects	0.00	0.00	0.00	0.00	0.00	0.00	0.00	411.11	411.11	687.11	728.22
	Total Revenue Receipts	924.33	976.79	1441.77	1452.52	1306.07	1391.27	1689.36	2224.18	2360.14	2792.08	2993.44
	Revenue Expenditure											
1	Personnel Cost	524.76	118.84	151.07	166.77	182.34	210.00	663.63	729.99	802.99	883.29	971.62
2	Terminal and Retirement Benefits	117.93	173.50	247.85	285.17	476.27	435.00	231.00	254.10	279.51	307.46	338.21
3	Operating Expenses	128.74	173.50	247.85	285.17	476.27	435.00	478.50	526.35	578.99	636.88	700.57
4	Administrative Expenses	0.63	2.27	3.79	3.31	4.15	5.00	5.50	6.05	6.66	7.32	8.05
5	Finance Expenses											
	a. Interest on Loans	68.26	20.31	26.38	74.47	79.01	106.50	0.08	0.08	0.07	0.06	0.06
	b. Debt service on new investments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	353.97	458.46	448.19	437.92
6	Deposits & Advances	29.95	45.27	59.17	43.74	52.40	61.00	67.10	73.81	81.19	89.31	98.24
	Total Revenue Expenditure	870.27	533.69	736.11	858.63	1270.44	1252.50	1445.81	1944.35	2207.87	2372.52	2554.67
	Revenue Surplus / Deficit	54.06	443.10	705.66	593.89	35.63	138.77	243.54	279.83	152.28	419.56	438.77
	Principle Payment (Earlier Loan)	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.06	0.06	0.06	0.06
	Net Surplus / Deficit	54.06	443.10	705.66	593.89	35.63	138.70	243.48	279.77	152.21	419.50	438.71
	Closing Balance	103.68	546.78	875.97	1169.74	938.18	1005.42	1248.90	1528.67	1680.88	2100.38	2539.09

Key Financial Indicators

Account Head	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
	Actual =====>					Est.	Short-term Projections =====>				
Status of Accounts (incl. OB, PP and CC but exc. Dep)	103.68	546.78	875.97	1169.74	938.18	1005.42	1248.90	1528.67	1680.88	2100.38	2539.09
Operating Ratio (Rev. Expen./Rev. Inc.)	0.94	0.55	0.51	0.59	0.97	0.90	0.86	0.87	0.94	0.85	0.85
Cash Debt-Service Coverage Ratio (DSCR)	1.52	26.92	33.21	15.71	11.87	9.43	8404.16	4.32	3.67	4.69	5.80
DS/TR (Debt Service/Total Revenue)	7.38	2.08	1.83	5.13	6.05	7.66	0.01	15.92	19.43	16.06	14.63

Table. 8.17. Financial Operational Plan (FOP) – Long Term Period (2006-07 to 2025-26)

Figures Rs. In lakhs

Sl. No.	Account Head	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
		Long-term Projections=====>														
	Opening Balance	2539.09	3016.37	3392.23	3806.77	4213.12	4674.87	5491.11	6306.72	7207.36	8166.14	9132.02	10542.33	12040.12	13575.36	15271.47
	Revenue Receipts															
1	Property Tax	671.87	685.31	699.02	713.00	727.26	1024.61	1045.10	1066.01	1087.33	1109.07	1470.63	1500.04	1530.04	1560.65	1591.86
2	Other Taxes															
	a. Professional Tax	59.51	62.48	65.61	68.89	72.33	107.80	115.35	123.42	132.06	141.30	151.19	161.78	173.10	185.22	198.19
	b. Other Taxes (excluding Professional Tax)	3.97	4.28	4.63	5.00	5.40	5.83	6.30	6.80	7.34	7.93	8.56	9.25	9.99	10.79	11.65
3	Assigned Revenue	200.37	216.40	233.72	252.41	272.61	294.42	317.97	343.41	370.88	400.55	432.59	467.20	504.58	544.94	588.54
4	Devolution Fund	634.89	694.79	760.34	832.07	910.56	996.46	1090.47	1193.34	1305.92	1429.12	1563.94	1711.49	1872.95	2049.64	2243.00
5	Service Charges and Fees															
	a. Water Charges	66.43	81.31	82.94	84.60	103.55	105.62	107.73	139.62	142.42	145.26	177.80	181.36	184.99	226.42	230.95
	b. Service Charges and Fees (excluding Water Charges)	160.17	176.18	193.80	213.18	234.50	257.95	283.75	312.12	343.33	377.67	415.43	456.97	502.67	552.94	608.23
6	Grants and Contributions	53.60	56.28	59.10	62.05	65.16	68.41	71.83	75.43	79.20	83.16	87.31	91.68	96.26	101.08	106.13
7	Sale and Hire Charges	231.84	243.43	255.60	268.38	281.80	295.89	310.68	326.22	342.53	359.65	377.64	396.52	416.35	437.16	459.02
8	Other Income	281.45	323.67	372.22	428.06	492.26	566.10	651.02	748.67	860.97	990.12	1138.64	1309.43	1505.85	1731.72	1991.48
9	Deposits & Advances	235.93	271.32	312.02	358.82	412.65	474.54	545.73	627.58	721.72	829.98	954.48	1097.65	1262.30	1451.64	1669.39
10	Recoveries from Projects	728.22	769.62	814.84	814.84	862.45	912.20	912.20	966.95	1021.67	1021.67	1084.63	1144.82	1144.82	1217.23	1283.44
	Total Revenue Receipts	3328.26	3585.10	3853.83	4101.30	4440.52	5109.84	5458.12	5929.57	6415.36	6895.48	7862.86	8528.19	9203.89	10069.43	10981.88
	Revenue Expenditure															
1	Personnel Cost	1068.78	1175.66	1293.23	1422.55	1564.80	1721.29	1893.41	2082.76	2291.03	2520.13	2772.15	3049.36	3354.30	3689.73	4058.70
2	Terminal and Retirement Benefits	372.03	409.23	450.15	495.17	544.69	599.15	659.07	724.98	797.47	877.22	964.94	1061.44	1167.58	1284.34	1412.77
3	Operating Expenses	770.63	847.69	932.46	1025.71	1128.28	1241.11	1365.22	1501.74	1651.91	1817.10	1998.81	2198.69	2418.56	2660.42	2926.46
4	Administrative Expenses	8.86	9.74	10.72	11.79	12.97	14.27	15.69	17.26	18.99	20.89	22.97	25.27	27.80	30.58	33.64
5	Finance Expenses															
	a. Interest on Loans	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
	b. Debt service on new investments	522.51	647.93	621.87	595.81	569.74	543.68	517.62	491.55	465.49	439.43	413.37	387.30	361.24	335.18	309.11
6	Deposits & Advances	108.07	118.87	130.76	143.83	158.22	174.04	191.44	210.59	231.65	254.81	280.29	308.32	339.15	373.07	410.38
	Total Revenue Expenditure	2850.92	3209.17	3439.23	3694.89	3978.73	4293.55	4642.47	5028.89	5456.55	5929.59	6452.54	7030.40	7668.64	8373.32	9151.07
	Revenue Surplus / Deficit	477.34	375.92	414.60	406.41	461.80	816.29	815.65	900.68	958.81	965.89	1410.32	1497.80	1535.25	1696.11	1830.81
	Principle Payment (Earlier Loan)	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.03	0.03	0.01	0.01	0.01	0.01	0.00	0.00
	Net Surplus / Deficit	477.28	375.86	414.54	406.35	461.75	816.24	815.61	900.64	958.78	965.88	1410.31	1497.79	1535.24	1696.11	1830.81
	Closing Balance	3016.37	3392.23	3806.77	4213.12	4674.87	5491.11	6306.72	7207.36	8166.14	9132.02	10542.33	12040.12	13575.36	15271.47	17102.29

Key Financial Indicators

Account Head	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
	Long-term Projections=====>														
Status of Accounts (incl. OB, PP and CC but exc. Dep)	3016.37	3392.23	3806.77	4213.12	4674.87	5491.11	6306.72	7207.36	8166.14	9132.02	10542.33	12040.12	13575.36	15271.47	17102.29
Operating Ratio (Rev. Expen./Rev. Inc.)	0.86	0.90	0.89	0.90	0.90	0.84	0.85	0.85	0.85	0.86	0.82	0.82	0.83	0.83	0.83
Cash Debt-Service Coverage Ratio (DSCR)	5.77	5.23	6.12	7.07	8.20	10.10	12.18	14.66	17.54	20.78	25.50	31.09	37.58	45.56	55.33
DS/TR (Debt Service/Total Revenue)	15.70	18.08	16.14	14.53	12.83	10.64	9.48	8.29	7.26	6.37	5.26	4.54	3.92	3.33	2.81

8.7.6. Financial Operational Plan: (Excluding Business Plan Projects)

Based on the FOP formulated excluding the identified projects in the business plan it is evident that ULBs revenue resources is fall short by Rs. 728 lakhs in short term and Rs. 1283 lakhs in long term period. By way of projecting the revenue base of the local body it is estimated that total revenue receipt is estimated to reach to Rs. 2265 lakhs in 2010-11 from Rs.1391 lakhs in 2005-06.

The total revenue expenditure is also increased from Rs.1252 lakhs (2005-06) to Rs. 2116 Lakhs (2010-11). It is observed that in all the years operating ration (RE/RI) remains well within operating feasibility of (less than 1) except during 2004-05 and 2005-06 Operating ratio reaches the value of 0.97 and 0.90 respectively. The debt serving over the total revenue is well within 10 percent indicating ease of the municipal finance in repayment of loan (Table 8.18). For a Long term period of 2006-07 to 2025-26, total revenue receipt has been estimated to reach to Rs. 9698 lakhs in 2025-26 from Rs.1391 lakhs in 2005-06. The total revenue expenditure has been increased from Rs.1252 lakhs (2005-06) to Rs. 8841 Lakhs (2025-26). It is observed that in all the years Operating ration (RE/RI) remains well within operating feasibility of (less than 1). The debt serving over the total revenue is well within 1 percent indicating ease of the municipal finance in repayment of loan (Table 8.19).

8.7.7. Summary Status:

Key Indicators	Minimum	Maximum	Average
Existing (2000-01 to 2005-06)			
OR (Ratio)	0.51	0.97	0.74
DSR (%)	1.83	7.66	5.02
Short-Term (2006-07 to 2010-11)			
OR (Ratio)	0.86	0.93	0.89
DSR (%)	0.1		0.1
Long-Term (2006-07 to 2025-26)			
OR (Ratio)	0.89	0.95	0.91
DSR (%)	nil		

Table. 8.18. Financial Operational Plan (FOP) – Short Term Period (2006-07 to 2010-11) - (Excluding Business Plan Projects)

Figures Rs. In lakhs

Sl. No.	Account Head	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
		Actuals =====>					Est.	Short-term Projections =====>				
	Opening Balance	49.62	103.68	170.31	575.85	902.55	866.72	1005.42	1248.90	1471.53	1671.10	1851.68
	Revenue Receipts											
1	Property Tax	320.46	330.16	330.47	333.19	263.50	317.67	468.10	477.47	487.02	496.76	506.69
2	Other Taxes											
	a. Professional Tax	49.57	56.75	60.11	66.80	82.04	86.15	46.63	48.96	51.40	53.97	56.67
	b. Other Taxes (excluding Professional Tax)	2.93	3.86	2.52	8.18	1.50	2.50	2.70	2.92	3.15	3.40	3.67
3	Assigned Revenue	92.31	72.15	236.21	112.06	99.26	126.27	136.37	147.28	159.06	171.79	185.53
4	Devolution Fund	134.75	153.61	298.98	411.93	332.34	306.59	405.08	445.26	489.13	532.71	580.16
5	Service Charges and Fees											
	a. Water Charges	34.90	38.40	34.61	36.91	34.04	25.00	50.14	51.15	52.17	63.85	65.13
	b. Service Charges and Fees (excluding Water Charges)	50.86	41.69	58.46	84.25	80.72	90.41	99.45	109.40	120.34	132.37	145.61
6	Grants and Contributions	0.00	0.00	91.78	42.20	36.31	40.00	42.00	44.10	46.31	48.62	51.05
7	Sale and Hire Charges	101.17	109.88	126.68	156.06	171.70	173.00	181.65	190.73	200.27	210.28	220.80
8	Other Income	76.82	71.84	84.38	99.80	109.44	121.68	139.93	160.92	185.06	212.82	244.74
9	Deposits & Advances	60.56	98.45	117.57	101.14	95.22	102.00	117.30	134.90	155.13	178.40	205.16
	Total Revenue Receipts	924.33	976.79	1441.77	1452.52	1306.07	1391.27	1689.36	1813.07	1949.03	2104.97	2265.22
	Revenue Expenditure											
1	Personnel Cost	524.76	118.84	151.07	166.77	182.34	210.00	663.63	729.99	802.99	883.29	971.62
2	Terminal and Retirement Benefits	117.93	173.50	247.85	285.17	476.27	435.00	231.00	254.10	279.51	307.46	338.21
3	Operating Expenses	128.74	173.50	247.85	285.17	476.27	435.00	478.50	526.35	578.99	636.88	700.57
4	Administrative Expenses	0.63	2.27	3.79	3.31	4.15	5.00	5.50	6.05	6.66	7.32	8.05
5	Finance Expenses											
	a. Interest on Loans	68.26	20.31	26.38	74.47	79.01	106.50	0.08	0.08	0.07	0.06	0.06
6	Deposits & Advances	29.95	45.27	59.17	43.74	52.40	61.00	67.10	73.81	81.19	89.31	98.24
	Total Revenue Expenditure	870.27	533.69	736.11	858.63	1270.44	1252.50	1445.81	1590.38	1749.40	1924.33	2116.75
	Revenue Surplus / Deficit	54.06	443.10	705.66	593.89	35.63	138.77	243.54	222.69	199.63	180.64	148.47
	Principle Payment (Earlier Loan)	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.06	0.06	0.06	0.06
	Net Surplus / Deficit	54.06	443.10	705.66	593.89	35.63	138.70	243.48	222.63	199.57	180.58	148.41
	Closing Balance	103.68	546.78	875.97	1169.74	938.18	1005.42	1248.90	1471.53	1671.10	1851.68	2000.09

Key Financial Indicators

Account Head	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
	Actuals =====>					Est.	Short-term Projections =====>				
Status of Accounts (incl. OB, PP and CC but exc. Dep)	103.68	546.78	875.97	1169.74	938.18	1005.42	1248.90	1471.53	1671.10	1851.68	2000.09
Operating Ratio (Rev. Expen./Rev. Inc.)	0.94	0.55	0.51	0.59	0.97	0.90	0.86	0.88	0.90	0.91	0.93
Cash Debt-Service Coverage Ratio (DSCR)	1.52	26.92	33.21	15.71	11.87	9.43	8404.16	10742.70	12785.95	14882.90	16930.50
DS/TR (Debt Service/Total Revenue)	7.38	2.08	1.83	5.13	6.05	7.66	0.01	0.01	0.01	0.01	0.01

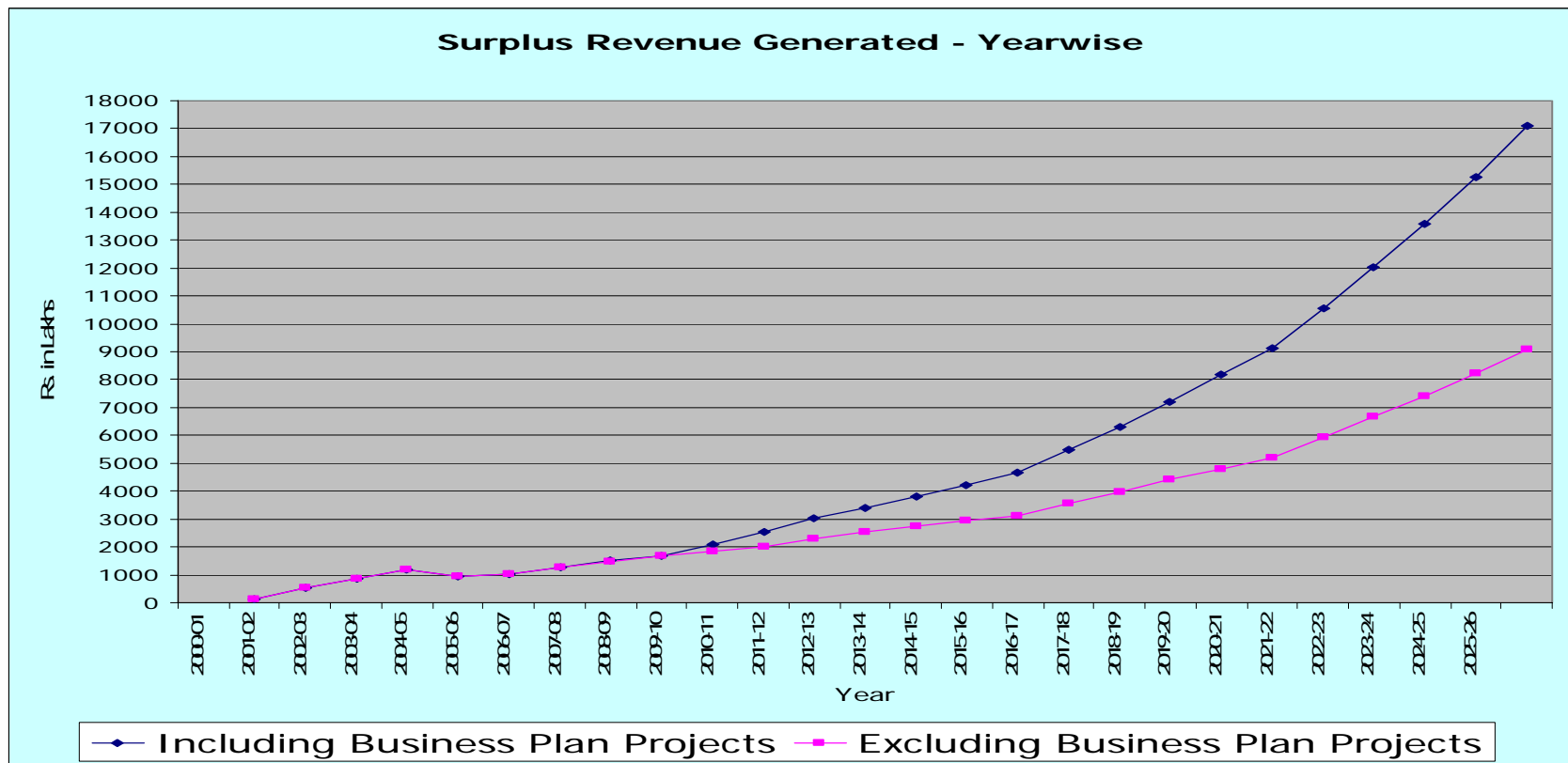
Table. 8.19. Financial Operational Plan (FOP) – Long Term Period (2006-07 to 2025-26) - (Excluding Business Plan Projects)

Figures Rs. In lakhs

Sl. No.	Account Head	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
		Long-term Projections=====>														
Opening Balance		2000.09	2271.65	2525.82	2747.39	2934.70	3103.74	3551.46	3972.49	4397.74	4800.34	5183.99	5923.03	6663.30	7414.96	8229.02
Revenue Receipts																
1	Property Tax	671.87	685.31	699.02	713.00	727.26	1024.61	1045.10	1066.01	1087.33	1109.07	1470.63	1500.04	1530.04	1560.65	1591.86
2	Other Taxes															
	a. Professional Tax	59.51	62.48	65.61	68.89	72.33	107.80	115.35	123.42	132.06	141.30	151.19	161.78	173.10	185.22	198.19
	b. Other Taxes (excluding Professional Tax)	3.97	4.28	4.63	5.00	5.40	5.83	6.30	6.80	7.34	7.93	8.56	9.25	9.99	10.79	11.65
3	Assigned Revenue	200.37	216.40	233.72	252.41	272.61	294.42	317.97	343.41	370.88	400.55	432.59	467.20	504.58	544.94	588.54
4	Devolution Fund	634.89	694.79	760.34	832.07	910.56	996.46	1090.47	1193.34	1305.92	1429.12	1563.94	1711.49	1872.95	2049.64	2243.00
5	Service Charges and Fees															
	a. Water Charges	66.43	81.31	82.94	84.60	103.55	105.62	107.73	139.62	142.42	145.26	177.80	181.36	184.99	226.42	230.95
	b. Service Charges and Fees (excluding Water Charges)	160.17	176.18	193.80	213.18	234.50	257.95	283.75	312.12	343.33	377.67	415.43	456.97	502.67	552.94	608.23
6	Grants and Contributions	53.60	56.28	59.10	62.05	65.16	68.41	71.83	75.43	79.20	83.16	87.31	91.68	96.26	101.08	106.13
7	Sale and Hire Charges	231.84	243.43	255.60	268.38	281.80	295.89	310.68	326.22	342.53	359.65	377.64	396.52	416.35	437.16	459.02
8	Other Income	281.45	323.67	372.22	428.06	492.26	566.10	651.02	748.67	860.97	990.12	1138.64	1309.43	1505.85	1731.72	1991.48
9	Deposits & Advances	235.93	271.32	312.02	358.82	412.65	474.54	545.73	627.58	721.72	829.98	954.48	1097.65	1262.30	1451.64	1669.39
Total Revenue Receipts		2600.04	2815.47	3038.99	3286.45	3578.07	4197.64	4545.92	4962.62	5393.70	5873.82	6778.23	7383.37	8059.07	8852.20	9698.44
Revenue Expenditure																
1	Personnel Cost	1068.78	1175.66	1293.23	1422.55	1564.80	1721.29	1893.41	2082.76	2291.03	2520.13	2772.15	3049.36	3354.30	3689.73	4058.70
2	Terminal and Retirement Benefits	372.03	409.23	450.15	495.17	544.69	599.15	659.07	724.98	797.47	877.22	964.94	1061.44	1167.58	1284.34	1412.77
3	Operating Expenses	770.63	847.69	932.46	1025.71	1128.28	1241.11	1365.22	1501.74	1651.91	1817.10	1998.81	2198.69	2418.56	2660.42	2926.46
4	Administrative Expenses	8.86	9.74	10.72	11.79	12.97	14.27	15.69	17.26	18.99	20.89	22.97	25.27	27.80	30.58	33.64
5	Finance Expenses															
	a. Interest on Loans	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
6	Deposits & Advances	108.07	118.87	130.76	143.83	158.22	174.04	191.44	210.59	231.65	254.81	280.29	308.32	339.15	373.07	410.38
Total Revenue Expenditure		2328.41	2561.24	2817.36	3099.08	3408.98	3749.87	4124.85	4537.33	4991.06	5490.16	6039.18	6643.09	7307.40	8038.14	8841.95
Revenue Surplus / Deficit		271.63	254.23	221.63	187.37	169.09	447.77	421.07	425.28	402.64	383.65	739.05	740.28	751.67	814.06	856.48
Principle Payment (Earlier Loan)		0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.03	0.03	0.01	0.01	0.01	0.01	0.00	0.00
Net Surplus / Deficit		271.57	254.17	221.57	187.31	169.04	447.72	421.03	425.25	402.60	383.65	739.04	740.27	751.66	814.06	856.48
Closing Balance		2271.65	2525.82	2747.39	2934.70	3103.74	3551.46	3972.49	4397.74	4800.34	5183.99	5923.03	6663.30	7414.96	8229.02	9085.50

Key Financial Indicators

[illegible]



By way of implementing the suggested projects in the Business plan the local body attain a position were they could sustain their revenue base in long run and in turn civic services could be improved by means of their own resources without getting engrossed in debts.

