#### Mr. Chairman,

I am presenting to the Standing Committee, the estimates of receipt and income and expenditure pertaining to the Budgets 'A', (Fund code 11, 12, 60, 70), 'B' (Fund code 21, 22, 23) and 'G' (Fund code 40) for the financial year 2011-12 in pursuance of Sections 125 and 126 E of the M.M.C. Act, 1888. I am profoundly delighted to present Budget Estimates of Brihanmumbai Mahanagarpalika as the Municipal Commissioner for the first time.

On taking over as Chief of the Municipal administration of this leading metropolis, not only in the country but in the entire world, in January, 2011 as Municipal Commissioner of Brihanmumbai Mahanagarpalika, I had two stiff challenges before me. One, to finalize the long pending Municipal balance sheets for the years 2007-08 to 2009-10 as early as possible and submit before the Corporation and the other, to bring out the M.C.G.M. from the current critical financial position and to stabilize the municipal finance.

# 2. The closing of Municipal Annual Accounts and pending balance sheets since 2007-08.

When I assumed the office, there were news item in the media that M.C.G.M. has not prepared balance sheets since 2007-08 and as such there is a blatant violation of the financial discipline and the thousands of transactions have come to a standstill.

Under JNNURM, Govt. of India mandated Municipal reforms as a precondition to disburse financial assistance to Urban Local Bodies. It mandated adoption of accrual based double entry accounting, adoption

1

2011-12

of National Municipal Accounts Manual and initiative in e-governance such as, computerization of accounts, billing and collection of property tax, Citizen Facilitation Centre (C.F.C.) etc. Urban Local Bodies were required to declare their suitable time-frame to implement these reforms within seven years.

M.C.G.M. decided and declared to adopt all three reforms with effect from 01.04.2007 simultaneously. In the area of e-governance, instead of piecemeal computerization, M.C.G.M. decided to automate its operations by introduction of Enterprise Resource Planning (E.R.P.) software so as to have integrated computerization of the backend operations. FICO – the Finance and Control Module was one of the critical module of this software, as it integrates with all special modules such as, project cycle management, material management, fleet management, estate management, citizen services, collection and expenditure and human resource management.

E.R.P. necessitates an exercise in business process re-engineering which is a time consuming activity. Simultaneous implementation of all three reforms required a large scale decentralization of the Municipal Accounting Systems, re-engineering of the business processes, large scale training to the staff in new processes as well as in accounting, provision of computer hardware, valuation of assets and liabilities etc. This also necessitated new controls and validations in the processes.

Since 2007-08 was the first year of double entry accrual accounting system, it required reclassification of different accounts in different codes, valuation of receivables and assets and updation of property and water billing records completely.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

Preparation of a balance sheet based on new National Municipal Accounting Codes is a very comprehensive and complex exercise. It was even more difficult in case of M.C.G.M., since it performs many functions, not performed by other municipalities. National municipal accounting codes circulated by Govt. of India therefore required many additions based on needs of M.C.G.M. which took considerable amount of time. This led to delays in finalizing the accounts of the year 2007-08. It was not possible to finalize any balance sheet of subsequent years unless the balance sheet of 2007-08 was finalized.

Soon after joining on 3<sup>rd</sup> January 2011, I reviewed in detail as to how the accounts for three years could be closed in a time bound manner. Corporation discussed the issue regarding delay in closure of accounts in its meeting dated 05.01.2011, wherein I mentioned that I expect closing of accounts of 2007-08 by January 2011 and the accounts of 2008-09, 2009-10 and 2010-11 by end of March, May and July 2011 respectively.

Accounts of 2007-08 have already been submitted to Municipal Chief Auditor on 24.1.2011. I am confident of finalizing the accounts for remaining years as per the above time lines. Even though there is a procedural lapse in not finalizing the balance sheets in time, municipal revenue collections and expenditure were being reviewed on regular basis. Regular Municipal transactions are being carried out smoothly and Corporation had no difficulty in this regard as feared in various quarters.

New system of accounts will enable citizens and city fathers to have a more accurate understanding of the municipal finances and will introduce higher accountability in the system.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

I now wish to discuss the Budget Estimates 2011-12.

**3.** The size of the Budget Estimates and the abstracts of the revenue account and the capital account under 'A' (Fund code 11, 12, 60, 70), 'B' (Fund code 21, 22, 23), 'E' (Fund code 30), G (Fund code 40) and Tree Authority (Fund code 50) are given below and the details thereof are given in the Annexures I to V on pages 107 to 111.

# SIZE OF BUDGET ESTIMATES – 'A' (Fund code 11, 12, 60, 70), 'B' (Fund code 21, 22, 23), 'E' (Fund code 30), 'G' (Fund code 40) and TREE AUTHORITY (Fund code 50)

(Rs. in crores)

	Budget Estimates 2011-12		
Details	Income /	Expenditure	
	Receipts		
Revenue Income	15427.55		
Revenue Expenditure		13354.49	
Capital Receipts	5669.01		
Capital Expenditure		7695.70	
Total	21096.56	21050.19	
Excess of Income over Expenditure		46.37	
Size of Budget Estimates	21096.56	21096.56	

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

#### **REVENUE ACCOUNT – BUDGET ESTIMATES A, B, E, G** and TREE AUTHORITY (D . :..

		(Rs.in crores)
<b>—</b> 1		Budget
Fund	Particulars	Estimates
Code		2011-12
Opening	g Balance as on the 1st April	32.14
REVEN	IUE INCOME	
11	General Budget	10489.91
12	Health Budget	199.77
21	Improvement Schemes	28.16
22	Slum Clearance	1.30
23	Slum Improvement	12.13
30	Education Budget	531.37
40	Water Supply and Sewerage	3868.29
50	Tree Authority	18.44
60	Provident Fund	
70	Pension Fund	278.18
	Net Income	15427.55
REVENU	E EXPENDITURE ★	
11	General Budget	5458.30
12	Health Budget	1672.47
21	Improvement Schemes	128.97
22	Slum Clearance	4.16
23	Slum Improvement	147.65
30	Education Budget	1263.33
40	Water Supply and Sewerage	2378.47
50	Tree Authority	50.44
60	Provident Fund	58.69
70	Pension Fund	2192.01
	Net Expenditure	13354.49
	Revenue Surplus during the year	2073.06
Total fund	available after considering Opening Balance	2105.20
	Surplus transfer to Capital Account	2103.58
Closing Ba	lance as on the 31 <sup>St</sup> March	1.62

**★**Net of transfer to other budgets.

# CAPITAL ACCOUNT - BUDGET ESTIMATES A, B, E, G & TREE AUTHORITY

		(Rs.in crores)
Fund Code	Particulars	Budget Estimates 2011-12
Opening	Balance as on the 1 <sup>st</sup> April	223.80
Capital F	Receipts	
11	General Budget	3285.13
21	Improvement Schemes	150.16
23	Slum Improvement	11.68
30	Education Budget	163.96
40	Water Supply and Sewerage	2058.08
	Total	5669.01
	Transfer from Revenue Account	2103.58
	Total fund available for Capital Expenditure	7772.59
Capital H	Expenditure	
11	General Budget	3654.20
12	Health Budget	495.04
21	Improvement Schemes	85.14
23	Slum Improvement	
30	Education Budget	169.27
40	Water Supply and Sewerage	3289.15
50	Tree Authority	2.90
	Total	7695.70
Closing	Balance as on the 31 <sup>st</sup> March	300.69

7

#### 4. Financial position of the MCGM.

Corporation under Section 134(1) of the M.M.C. Act is not allowed to have a deficit budget. It is, therefore, necessary for Corporation to meet all its revenue and capital expenditure out of its revenue receipts and the sustainable amount of borrowings. Of late, capital expenditure of the Corporation, especially in 'A' Budget has increased manifold which is not sustainable unless revenue collection is improved, and/or new sources of revenue are added. To illustrate, the capital expenditure in Budget A, B and E has spiralled from Rs.1386 crores in 2007-08 to Rs.3462 crores in 2009-10, in a short period of just two years. Even after accounting for Rs.500 crores received as financial assistance from Central Govt. for BRIMSTOWAD Projects in 2010, the increase has been large and is unsustainable. Increased capital outlays overlooked the fact that high surpluses were the result of reduced liabilities on pay and pensions for want of revision of pay since 01.04.2005 which have to be paid for in the subsequent years. Establishment expenditure as a percentage of revenue was 43.23%, 39.83% and 45.47% in the years 2007-08, 2008-09 and 2009-10 respectively, while the same is estimated to be 59.9% in the year 2011-12. Year 2011-12 and 2012-13 have to absorb not only the increased amount on account of pay revision, but also the arrears required to be paid for the past years. As a result, revenue surplus for 2011-12 and subsequent years is going to be much less, which will seriously constrain both the expenditure on infrastructure and the level of annual borrowing by the Corporation in a sustained manner. As against this backdrop, there are large committed liabilities on capital works already awarded, particularly in the area of storm water drains work including BRIMSTOWAD and Mithi river works where there

have been large escalation in cost after award of works due to change in technology etc. Such changes after award of work are best avoided, as Corporation loses the benefit of competitive bidding and changed items are executed on fair item rates. These will be rectified, wherever possible. I have tried to provide higher provision for incomplete works so as to secure full benefits of the expenditure already incurred. This has necessitated increased borrowings for capital works in the coming fiscal year. In subsequent years, borrowing will have to be reduced to some extent, so that long term borrowing programme remains sustainable. In the meantime, efforts will be made to identify some new source of revenue and to improve revenue collection from the existing sources.

Table 1 gives the Revised Estimates for 2010-11 and the Budget Estimates for the year 2011-12.

Table - 1Revenue Account

(KS: III CIORES)						
Budget 'A', (Fund Code – 11, 12) Budget 'B' (Fund Code – 21, 22, 23) & Budget 'E' (Fund Code – 30)						
		2009-10		2010	)-11	2011-
Particulars						12
	B.E.	R.E.	Actuals	B.E.	R.E.	B.E.
Opening Balance						
as on 1 <sup>st</sup> April	0.24	919.39	919.39	0.83	972.97	0.26
Revenue Income	8472.70	8885.17	8546.94	9870.17	9522.99	11501.88
Revenue						
Expenditure	8441.16	8503.73	7378.36	9869.74	8198.70	10632.02
Surplus / deficit	31.54	381.44	1168.58	0.43	1324.29	869.86
during the year	(Surplus)	(Surplus)	(Surplus)	(Surplus)	(Surplus)	(Surplus)
Fund available						
including						
opening surplus	31.78	1300.83	2087.97	1.26	2297.26	870.12
Transfer to						
Capital Account	31.00	1300.00	1115.00		2297.00	869.00
Closing balance	0.78	0.83	972.97	1.26	0.26	1.12
as on 31 <sup>st</sup> March	(Surplus)	(Surplus)	(Surplus)	(Surplus)	(Surplus)	(Surplus)

8

(Rs in crores)

It will be seen from above table that, the Budget Estimate of revenue income of Rs.9870.17 crores is revised to Rs.9522.99 crores while the estimated revenue income for the ensuing year is Rs.11501.88 crores. In the Budget Estimates of 2010-11, the revenue expenditure was estimated at Rs.9869.74 crores. The Revised Estimate of revenue expenditure is Rs.8198.70 crores, leaving current year's revenue surplus at Rs.1324.29 crores. For the ensuing year, a provision of Rs.10632.02 crores is proposed for revenue expenditure leaving a revenue surplus of Rs.869 crores.

The Revised Estimates for the revenue income for the current year are less by Rs.347.18 crores as compared to the revenue income as per the Budget Estimates of 2010-11. This is mainly due to reduction in interest income. The anticipated income on account of the interest as per Budget Estimates 2010-11 was Rs.732.82 crores. In the Revised Estimates for 2010-11, it is estimated at Rs.369.12 crores showing the reduction of Rs.363.70 crores. However, there is increase in interest income in 'G' Budget, since expenditure of 'G' Budget is booked from a common account under Budget 'A' to begin with. These amounts will be adjusted among two budgets after the accounts are finalized. In the Budget Estimates for 2010-11, the income on account of contribution from Govt. in respect of Primary Education, Secondary Education, Road Grant, Entertainment Tax, N.A. Tax and other misc. grants was estimated at Rs.446.57 crores. However, in the Revised Estimates for 2010-11, it is estimated that only Rs.159.07 crores will be actually received from the Govt. This deficit in income is however, compensated to some extent as

MUNICIPAL CORPORATION OF GREATER MUMBAI

the gross income from Octroi which was anticipated to be Rs.4750.21 crores as per Budget Estimates 2010-11 is expected to reach upto Rs.5045 crores as per Revised Estimates on the basis of the improved collection of Octroi in January, 2011.

In the year 2010-11, the Revised Estimates of Revenue expenditure are Rs.8198.70 crores as against B.E. of Rs.9869.74 crores resulting in saving of Rs.1671.04 crores. Likewise, revised capital expenditure is estimated at Rs.3713.84 crores as against Budget Estimates of Rs.4865.59 crores. Revision in capital expenditure coupled with revenue surplus of Rs.2297 crores (Rs.972.97 crores of 2009-10 and Rs.1324.29 crores of 2010-11) being available for capital works, there is no need to raise internal loan of Rs.3000 crores this year as envisaged in the Budget Estimates 2010-11.

Budget Estimates of revenue income at Rs.11501.88 crores for 2011-12 exceed the estimated expenditure by Rs.869.86 crores, which is transferred to capital account.

For estimation of revenue income under Revised Estimates for 2010-11 and the Budget Estimates for 2011-12, I refer to Table 2 which gives the details of various sources of income with comparative position of Budget Estimates for 2009-10.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

Sr.	Particulars	B.E.	R.E.	B.E.	R.E.	B.E.
No.		2009-10	2009-10	2010-11	2010-11	2011-12
1.	Octroi (Net)	4300.00	4325.09	4650.21	4945.00	5700.00
2.	Property Tax	1419.66	1419.66	1540.00	1540.00	2000.00
3.	Receipts from					
	Development Plan	925.00	1212.73	1278.00	1311.73	1639.28
4.	Interest	413.67	583.65	732.82	550.12	521.53
5.	Grant-in-Aid from					
	Government	392.33	315.59	446.57	159.07	272.00
6.	Receipts from Roads					
	& Bridges	146.22	212.47	219.23	100.25	112.59
7.	Supervision Charges	300.00	240.00	300.00	250.00	250.00
8.	Solid Waste					
	Management	106.76	110.67	117.00	86.55	90.52
9.	Receipts from					
	Hospitals & Medical					
	Colleges	74.14	69.45	76.92	85.69	93.59
10.	Receipts from License					
	Deptt.	100.00	85.00	100.00	106.00	118.04
11.	Receipts from Markets					
	& Deonar Abattoir	36.54	69.25	83.26	43.33	63.84
12.	Other Receipts	258.38	241.61	326.16	345.25	640.49
	Total	8472.70	8885.17	9870.17	9522.99	11501.88

#### Table - 2

(Rs. in crores)

From the above table, it will be seen that in R.E. 2010-11, there is some rise in receipts from Octroi, Development Plan and to some extent from Licence Department. However, there is considerable decrease in the revenue anticipated by way of grant-in-aid from the Govt. and from other departments viz. roads and bridges and markets. This is mainly because the estimation was on higher side.

As far as Budget Estimates for the year 2011-12 are concerned, I am expecting the revenue of Rs.11501.88 crores from the various sources as listed in above Table 2. The main increase is expected from octroi. While considering this increase, I have taken into account the current inflation rate as well as the growth rate alongwith better

MUNICIPAL CORPORATION OF GREATER MUMBAI

enforcement. Similarly, higher revenue is expected from property tax, on account of better efforts at tax collection. Considering the actual income received during the year 2010-11 so far, the income from the Development Department of Rs.1639.28 crores is estimated for the year 2011-12. However, the income by way of grant-in-aid from the Govt. for Primary as well as Secondary Education, Road Grants, Entertainment Tax, N.A. Tax and other misc. receipts is estimated on realistic basis and an amount of Rs.272 crores is estimated for the year 2011-12 by way of grant-in-aid.

The general growth plus the revenue from anticipated increase in the octroi and to some extent from property tax and receipts from Development Plan Department will not be sufficient to meet the anticipated expenditure. As such, to partly meet the increasing expenditure on pensions, I propose to utilize the interest on the Pension Fund and to withdraw an amount of Rs.278.18 crores from the accumulated Pension Fund to meet the expenditure on account of arrears of pension.

**5.** I now discuss some of the important activities/services and facilities related to Budget 'A' and 'B'

# 5.1 Storm Water Drains

5.1.1 Improvement and desilting of Storm Water Drains

The nalla systems in Mumbai have been desilted, considering the invert levels of nallas before the onset of monsoon, to avert water logging and consequential inconvenience to the citizens in Mumbai City and Suburbs during monsoon.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

Sr. No.	Nalla System (Major Nallas)	Length of Nalla attended in Kms.	Quantity of silt removed before the monsoon of 2010 (Cu.M.)
1.	City (Major & Minor Nallas)	80.866	91025
2	City (Non-Man Entry SWD)	29.235	35675
3	Western Suburbs (Major Nallas)	111.160	186461
4	Eastern Suburbs (Major Nallas)	71.420	111564

Statement showing status of desilting works as on 20.6.2010

# 5.1.2 BRIMSTOWAD Project Works

As per the BRIMSTOWAD Report, the design criteria of rainfall intensity to 50 mm/ hour with run-off co-efficient as 1.00 has been revised and as per suggestions, various SWD improvement works have been taken in hand which mainly consist of construction of new drains / diversion, training, widening and deepening of nallas and construction of retaining walls, rehabilitation of old arch / box drain in city area and construction of storm water pumping stations etc. Remaining works under BRIMSTOWAD Project are divided in two phases i.e. phase-I (20 works) and phase-II (38 works). Accordingly, 11 works out of 20 works in phase-I are completed and out of remaining

MUNICIPAL CORPORATION OF GREATER MUMBAI

9 works, 2 works will be completed in 2010-11 and 3 works will be completed in 2011-12. Out of the 38 works in phase-II, 27 works are in progress and out of which 2 works will be completed in the year 2010-11, and 20 works will be completed in 2011-12.

One of the fundamental works to be undertaken in BRIMSTOWAD is restoration of decades old arch drain in city areas. Dilapidation of these drains is leading to collapse of roads etc.

Work of Condition assessment survey of arch drains in City area as shown below has been completed :-

1.	Double arch drain admeasuring 2030
	mtrs. in length and having size of 4.3
	mtr. X 3.1 mtr. leading towards
	Britannia Outfall
2.	Arch drain admeasuring 1500 mtr. in
	length and having size of 6 mtr. X 2.4
	mtr. on Patthe Bapurao Marg
3.	Double box drain admeasuring 1100
	mtrs. in length having size of 4.3mtr.
	X 3.1 mtr. on Dr.E.Moses Road
4.	Double arch drain admeasuring 810
	mtrs. in length and having size of
	2.5mtr. X 2.5 mtr. on Drainage
	Channel Road

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

14

2011-12

The work orders of actual rehabilitation of these drains have been issued this year and work has started from 1<sup>st</sup> October, 2010. It is expected that 15% of the total work will be completed by 31<sup>st</sup> March, 2011. As per the work order, these works will be completed in the year 2012-13. On completion of this work, there shall be no incidents of road subsidence, on these roads. Similarly, water logging will be minimized in the vicinity of Hindmata, Lalbaug, Reay Road, C.P.Tank, Alankar Cinema, Navjivan Junction, Curry Road, N.M.Joshi Marg, Mahalaxmi, Ganpatrao Kadam Marg, Shriram Mill etc.

The works under BRIMSTOWAD Project and other than BRIMSTOWAD Project expected to be completed by 31.03.2011 and by 31.03.2012 are as follows:-

Construction of nallas (inclusive of both sides) BRIMSTOWAD Project works and Other than BRIMSTOWAD Project works

Division	Upto 31.03.2011	From 01.04.2011 upto 31.03.2012
City	3950 Running Mtrs.	4730 Running Mtrs.
Eastern Subs.	14437 Running Mtrs.	18898 Running Mtrs.
Western Subs	22053 Running Mtrs.	8190 Running Mtrs.

MUNICIPAL CORPORATION OF GREATER MUMBAI

Division	From 01.04.2010 upto 31.03.2011		From 01.04.2011 upto 31.03.2012	
	BRIMSTOWAD Other than		BRIMSTOWAD	Other than
	Project	BRIMSTOWAD	Project	BRIMSTOWAD
		Project works		Project works
City		09	07	06
Eastern		10	10	19
Subs.				
Western	04	28	06	17
Subs				
TOTAL	04	47	23	42

#### Works that will be completed in 2010-11 and 2011-12

On completion of these works in 2010-11 and 2011-12, following nalla systems will be addressed to minimize flooding in their catchment areas –

#### City

- 1. Love Grove Outfall System,
- 2. Nariman Point Outfall System,
- 3. Nepeansea Outfall System,
- 4. Haji Ali Outfall System, etc.

#### Western Suburbs

- 1. Mogra Nalla System,
- 2. Irla Nalla System,
- 3. Oshiwara Nalla System,
- 4. Poisar River Nalla System, etc.

#### **Eastern Suburbs**

- 1. Mithi River Nalla System,
- 2. Deonar Nalla System,
- 3. Safed Pool Nalla System,
- 4. Lakshmi Baug Nalla System, etc.

MUNICIPAL CORPORATION OF GREATER MUMBAI

16

2011-12

A provision of Rs.274.70 crores is proposed under the Revenue Budget Estimates for the year 2011-12 for day to day maintenance of storm water drains. This includes a substantial provision of Rs.68 crores for desilting of nallas and transportation of silt etc.

A provision of Rs.1240 crores is proposed in the Budget Estimates 2011-12 for carrying out capital works including certain priority works as per the recommendations of BRIMSTOWAD Report. The details thereof are as follows :

Particulars	Rs. in
	Crores
Construction / reconstruction	
/improvement /remodeling/	
construction of retaining wall/	
widening of Storm Water	
Drains- BRIMSTOWAD	680.22
Project	
Construction / reconstruction	
/improvement /remodeling /	
construction of retaining wall /	559.78
widening of Storm Water	
Drains- Works other than	
BRIMSTOWAD Project works	
Total:	1240.00

#### **Storm Water Drain Pumping Stations**

Works	of	desi	gning	and	construct	tion	of
storm	wa	ter	pum	ping	stations	5 8	and

MUNICIPAL CORPORATION OF GREATER MUMBAI

comprehensive operation and maintenance at sea outfalls at 4 places i.e. Haji Ali, Love Grove, Cleave Land Bunder and Irla have been undertaken. Out of these, work of construction of storm water drain pumping station at Haji Ali and Irla are nearing completion and these pumping stations are commissioned in the monsoon of 2010.

Water logging in areas like C.P.Tank, Alankar Cinema, Navjivan Junction, Gilder Lane, Mumbai Central (West), Nagpada, Mumbai Central (East), area in the vicinity of Nair Hospital and Juhu Vile Parle Development Scheme, Milan Subway are already minimized due to pumping station at Haji Ali and Irla. Love Grove and Cleave Land Bunder pumping stations will be completed before monsoon of 2012 and will water logging at Mahalaxmi, reduce Dr.E.Moses Road, Drainage Channel Road, Ganpatrao Kadam Marg, Shriram Mill and Hindmata, Elphinston Road, Fitwala Road, Area in the vicinity of G-South Ward.

Expenditure to the tune of Rs.184.17 crores has been incurred up to 2009-10 under BRIMSTOWAD Project (Rs.88.58 crores

18

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

2011-12

19

for 11 completed works + Rs.95.59 crores for Haji Ali and Irla Pumping Stations).

Estimated expenditure of the works to be completed in the year 2010-11 would be Rs.72.40 crores (Rs.20.40 crores for 4 works + Rs.52 crores for Haji Ali and Irla Pumping Stations).

The work orders for construction of pumping stations at Love Grove, Cleave Land Bunder have been issued and these works will be started in the year 2010-11. Efforts will be made to complete these works in the year 2012-13.

In addition, in 2011-12, pumping station at Britannia Outfall and Gazderbandh have been proposed to be taken up at the estimated cost of Rs.120 crores which will reduce water logging at Reay Road, Hindmata, Parel, Lalbaug, Kalachowky and Gazderbundh, Juhu Road, Green Street, Daulatnagar, Khiranagar. Provision of Rs.16.50 crores has been made for these works in 2011-12. Rest of the money will have to be made available in 2012-13.

The provision of Rs.122.50 crores has been proposed in Budget Estimate of 2011-12 for all pumping station works.

The estimated expenditure for the works to be completed in the year 2011-12 is Rs.209.50 crores (Rs.204.50 crores for 23 works to be completed + Rs.5 crores for Haji Ali and Irla Pumping Stations). The estimated expenditure during the year 2012-13 is about Rs.495.48 crores (Rs.490.48 crores for remaining works + Rs.5 crores for Haji Ali and Irla Pumping Stations).

The Govt. of India has agreed to provide financial assistance to the tune of Rs.1200 crores for BRIMSTOWAD Project works. Out of these Rs.1200 crores, uptil now Rs.1000 crores have been received by the M.C.G.M. Out of this amount, an expenditure to the tune of Rs.948.34 crores has been incurred so far. Balance amount of Rs.200 crores is expected to be received from the Govt. of India in the ensuing year.

5.1.3 Development of Mithi River The Government of Maharashtra has formed "Mithi River Development and Protection Authority" for development of

Mithi River. Total length of Mithi River is 17.8 km. out of which, length of 11.8 km. is under the jurisdiction of Brihanmumbai Mahanagarpalika whereas balance length of 6 km. is under jurisdiction of MMRDA.

2011-12

Based on recommendations of Fact Finding Committee under the chairmanship of Dr.Chitale and interim report of Central and Power Research Water Station (C.W.P.R.S.), the M.C.G.M. has undertaken development work in phase-II which includes the work of widening and work of construction of R.C.C. retaining wall on both sides of river and construction of service road along the sides of the river for river maintenance. In these works, 334000 cu.m. silt has been removed and 492000 cu.m. of rock has been excavated upto 31.10.2010. Out of 20 km. of retaining wall to be constructed by the M.C.G.M., construction work of retaining wall admeasuring 7.6 km. is completed. Also, out of deepening work recommended by CWPRS, the work of deepening of Mithi River upto 85 % has been completed.

For widening and training of Mithi River under jurisdiction of M.C.G.M. and other

2011-12

rivers/nallas system, and construction of retaining walls, a provision of Rs.71 crores is proposed in the Budget Estimates of 2011-12.

#### **Bridges on Mithi River**

Comprehensive development of storm water passage through Mithi river system envisages construction of 11 bridges, out of which 4 bridges are underway. Provision of Rs.18.26 crores has been provided for these works and these works are expected to be completed by 2012 May.

Although, rainfall in Mumbai was above its average level in the monsoon of 2010, no flood like situation was observed due to various SWD works carried out as per BRIMSTOWAD project and deepening and widening of Mithi River.

# 5.2 Roads, Bridges and Traffic Operations

5.2.1 Road is an important infrastructure. In accordance with the recommendations of the Standing Technical Advisory Committee (STAC) for roads, major changes have been made in the approach to road constructions, improvement and maintenance. With the

MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

increase in traffic intensity and loading, related norms have been upgraded and project approach has been adopted as per which road work also includes provision/ improvement of footpath, provision/ of augmentation utilities such as watermains, sewerlines, S.W. Drains etc. as per necessity, provision of traffic amenities, beautification etc. Trenching and its reinstatement procedures have also been modified to reduce frequent digging. New Technologies are being explored to effectively attend to road repair and maintenance.

On the backdrop of critical financial position of the MCGM, it was decided to focus on completion of the ongoing projects which are already taken in hand in the current year.

5.2.2 Improvement of Asphalt Roads and Programme of concretization of roads Considering the increasing traffic volume and loading, it is proposed to continue the policy of concretizing important roads and links in the ensuing year on need basis. This will help to solve the traffic problem and minimize the maintenance cost of the roads. For the ensuing year, a planned programme of improvement of Asphalt Roads as well as

MUNICIPAL CORPORATION OF GREATER MUMBAI

Cement Concrete Roads has been chalked out. These improvement works will be carried out in 2 phases. In the 1<sup>st</sup> phase, tenders are being invited for cement concrete and asphalt roads works costing

In the second phase, the 13 roads which were handed over by M.M.R.D.A. to M.C.G.M. after carrying out certain works under M.U.T.P. for further improvement and maintenance, will be taken in hand, mainly to improve the unattended portion of these roads. removal of bottlenecks and connecting missing links in respect of these roads to ensure free flow of traffic. Along with these, minor roads are planned to be taken up in this phase to ensure last mile connectivity.

#### **Cement Concrete Roads**

about Rs.500 crores.

Tenders are proposed to be invited for new cement concrete road works in 2011-12. First phase includes concretization of about 10.23 km roads in City, about 12.50 km. roads in Eastern Suburbs and about 7.50 km. roads in Western Suburbs. This phase also includes asphalt roads of about 7.43 km. in City, about 22.40 km. in Eastern Suburbs

2011-12

and about 12 km. in Western Suburbs. Designs of all these roads have been done after taking into account road traffic survey and spectrum etc. and as per directions of STAC, these designs have been submitted for peer review. Other suggestions of STAC like inclusion of quality manual criteria in tender, capacity enhancement training sessions for our supervising staff as well as other related officers etc. are being followed in letter and spirit.

Discussions are on with traffic police to ensure that these large scale works do not affect traffic flow in the city in the intervening period and also that traffic police NOCs are obtained prior to allotment of works so as to ensure minimum delay in execution and better planned project life cycle.

5.2.3 As compared to average rainfall in the last Spot repairs and repairs to potholes How Part 2010, and it lasted for the longer period than the usual monsoon period. According to Indian Meteorological Department, the rainfall recorded till 30<sup>th</sup> September, 2010 was 3169 mm in city

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

and 3328 mm in suburban area i.e. 52% more as compared to average rainfall and double as compared to the year 2009. This has resulted in heavy deterioration in the condition of roads. Major potholes and dotholes were created. A heavy expenditure had, therefore, to be incurred on attending the spot repairs and potholes during last year. It may also be noted that considerable expenditure on an average Rs.40 crores per year has been incurred on such spot/pot hole repairs during last four years. Despite this, the administration has to face the criticism from the media and from the public over the poor condition of roads especially on the eve of the Ganpati festivals and other festivals.

In order to avoid recurrence of such a situation in the next monsoon, a planned programme has been chalked out to undertake the works of attending spot Under repairs and potholes. this programme, in the ensuing year the Roads will undertake extensive department inspection of the roads and the dot holes observed on the roads that may develop into pot holes will be attended on war footing before onset of monsoon so that no potholes

are created from these dot holes during the monsoon. It is aimed that during the next year all the roads shall be as pothole free as possible.

5.2.4	To improve traffic signals in the city, World
Area Traffic	Bank assisted ATC project has been
Control	implemented in the city, covering 257 traffic
	junctions. It is proposed to extend this
	project to another 250 projects. For work
	related to Area Traffic Control under
	MUTP, a provision of Rs.9.50 crores is
	proposed. Also to assist traffic, timers are
	being installed in all junctions.
	For construction of bridges and subways for
	crossing the road as well as repairs and
	improvements, a provision of
	Rs.165.72 crores is proposed.
5.2.5	A provision of Rs.50 crores for construction
Bridges	of ROB at Jogeshwari (South) and
	Rs.45 crores for Jogeshwari (North) has
	been proposed in the Budget Estimates of
	2011-12.
5.2.6	I will like to flag another very important
Scientific management of underground utilities	issue for road infrastructure management
	and that is utilities placing under the roads.
	Administration has already requested STAC
	Ation of greater MUMBAI 27
WUNICIPAL CORPORA	ATION OF GREATER MUMBAL 2/

2011-12

to deliberate on this issue and administration is in receipt of guidelines from STAC on this important issue. In next fiscal year, Administration will try to initiate steps towards scientific management of underground utilities.

# 6. Health and Medical Services

6.1

Mumbai

Aarogya Abhiyan

Table below gives the financial summary of budget on health section :-

	B.E. 2010-11	R.E. 2010-11	B.E. 2011-12
Revenue Expenditure	1471.45	1273.83	1672.47
Capital Expenditure	419.94	399.02	495.04
Total	1891.39	1672.85	2167.51

(Rs. in crores)

28

2011-12

I have accorded due priority to the health sector and it has been my conscious effort to allocate substantial funds to various important aspects of the health care under 'मुंबई आरोग्य अभियान'. While the R.E. for 2010-11 of both Revenue and Capital Expenditure combined is Rs.1672.85 crores, the B.E. for the year 2011-12 is Rs.2167.51 crores. 'मुंबई आरोग्य अभियान' was

launched by the MCGM on World Health Day i.e. 7<sup>th</sup> April 2010. What began as a campaign for outreach services to slum population has since then grown into a comprehensive programme to provide quality health care in primary, secondary and tertiary sectors.

2011-12

It will be my endeavour to further strengthen the well established three tier health care system of M.C.G.M. comprising 163 Dispensaries, 182 Health Posts at the primary level, 16 Peripheral hospitals and 5 Specialised Hospitals at the secondary level and the 4 Teaching Hospitals at the helm providing tertiary health care services.

6.2 Dispensary Upgradation Programme With this objective in mind, I have proposed an allocation of **Rs.25** crores for modernization of and upgradation dispensaries. There are 163 dispensaries within the limits of MCGM with an objective of providing basic primary health care to the citizens in their neighborhood. However, no comprehensive and planned for modernization programme and upgradation of dispensaries had yet been taken.

# MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

30

Under the dispensary upgradation programme, our aim is to provide enhanced and uniform primary health care services to the citizens right in their neighbourhood, thereby also decongesting the major hospitals to a considerable extent.

The programme will adopt a three pronged strategy. First, it aims to sharpen the clinical skills of the doctors in the dispensaries. Second, the programme aims to upgrade diagnostic infrastructure in certain earmarked dispensaries. Upgradation of civil infrastructure and introduction of a common branded look to these dispensaries forms the third facet for which 56 dispensaries have been identified in Phase-I.

I hope these modernized and upgraded dispensaries will be able to provide improved primary health care to the citizens. The Health department has also undertaken a study to identify areas which require a dispensary as per the current norms. All efforts will be made to establish a dispensary in such localities once identified.

6.3 Peripheral Hospitals

16 Peripheral hospitals located in the suburbs of Mumbai cater to a population of about one crore and form the secondary of level health care infrastructure. Provisions have been made for commissioning of ICU ward at K.M.J. Phule hospital at Vikhroli and establishment of Trauma ward at Kurla Bhabha Hospital, Santacruz V.N. Desai Hospital and Govandi Shatabdi Hospital. Extensive repairs of Siddharth and Rajawadi hospitals have also been provided for in the budget.

2011-12

I have made a budget provision of Rs.10 crores to provide for facelift of peripheral hospitals

6.4 Peripheral Hospitals -Linkage System While efforts are being made to upgrade the physical infrastructure of these peripheral hospitals, a linkage system has recently been established between the tertiary and secondary health care service level which will ultimately go a long way in ensuring quality, specialized health care in the peripheral hospitals.

Under the linkage programme the three major hospitals i.e. KEM, Nair and LTMG, Sion hospitals are proposed to be linked

2011-12

with the peripheral hospitals. Areas or specialized services that the identified peripheral hospitals require for specialized linkage with the main hospitals are identified and doctors of the teaching hospitals are then linked with these peripheral hospitals by providing OPD and Surgical services during fixed days and for fixed times. The linkage established between Shatabdi hospital, Govandi and KEM and that between Sion hospital and SwatantryaVeer Savarkar hospital at Mulund have been enthusiastically received. The remaining 14 hospitals will be linked in a similar manner in the year 2011.

6.5 New / Redevelopment of Peripheral Hospitals In order to bridge the gap between demand for and existence of beds in public sector in the suburbs, efforts have been made in the previous years to redevelop existing hospitals and build new ones.

Major provisions proposed for reconstruction of hospitals and starting new hospitals in Western Suburbs are detailed below :-

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

Sr. No.	Name of Hospitals	Rs. in crores
1)	Redevelopment of Centenary Hospital at Kandivali Centenary	55.00
2)	Reconstruction of Cooper Hospital	100.00
3)	Redevelopment of Bhagvati Hospital (Phase-I)	12.00
4)	Development of Trauma Hospital at Jogeshwari(East)	40.00

While Centenary Hospital at Kandivali will provide for 300 new beds thereby addressing a felt need of the locality, Trauma Hospital at Jogeshwari(East) will provide for 266 new beds for trauma care services. New specialty of burn unit, strengthening of medical ICU and strengthening of premature baby ICU will be added to the reconstructed Cooper Hospital Complex along with an addition of 60 beds taking bed strength from existing 520 to 580.

Phase I of Cooper Hospital is expected to be commissioned by November 2011 while Trauma Hospital at Jogeshwari is expected to be ready for commissioning by March

2012. Phase I of Kandivali Shatabdi Hospital (OPD) will be ready for commissioning by November 2011, while the Phase II will be ready for commissioning by May 2012.

6.6 Teaching hospitals at the helm handle a Major Hospitals
 Major Hospitals
 Teaching hospitals at the helm handle a daily OPD of 12000 and have a bed strength of 4938 beds. Sustained efforts have been made to upgrade existing infrastructure, adding new one where necessary and equip these with state-of-the-art equipments.

6.7 The work of repairs and restoration of Seth
K.E.M. Hospital
G.S. Medical College is nearing completion and is ready for commissioning by April, 2011. The expenditure incurred on this project so far is about Rs.35 crores.

The restoration work of KEM Hospital is planned in phases so as to ensure smooth functioning of the hospital along side restoration work, phase I of which comprising of Rs.15.33 crores will be ready for commissioning by April, 2011. I have proposed a budget provision of Rs.30 crores for phase II of the same.

34

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

6.8

**Nair Hospital** 

The Emergency Medical Service Unit will be commissioned in Nair Hospital by April, 2011. This unit will treat all types of medical emergencies at this EMS Unit instantly, thereby reducing the response time in treating the patients reporting at casualties.

6.9 A 3 Tesla (3T) MRI machine was installed at Sion Hospital MRI machines have now been installed in all the three major hospitals of M.C.G.M. This State of Art (3T) MRI machine can conduct 15 to 17 scans in a typical 10 hours shift, thereby addressing a felt need in trauma and emergency care.

> Phase I of construction of new building in Sion Hospital Complex comprising Gr. + 2 floors at the cost of Rs.24.16 crores is nearing completion and will be commissioned by April 2011, which will equip the hospital with modern forensic medicine complex.

> I have proposed a R.E.(2010-11) of Rs.5 crores and B.E.(2011-12) of Rs.6 crores for Phase II of this new building comprising of 3rd, 4th & 5th floor.

> > 35

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

6.11 Liver 2011-12

Mumbai Aarogya Abhiyan also seeks to 6.10 **New Initiatives** address the existing gaps in the healthcare services.

Under this initiative, KEM Hospital has initiated a Liver Transplant Programme with **Transplant** an aim to bring the Liver Transplant Programme Programme within the reach of common man by making it available at affordable prices. Two State of Art Liver Transplant Modular Theatres have been established. Till date, 4 transplants have been done out of which 3 transplants have been successful. The successful implementation of this liver transplant programme is a matter of pride of M.C.G.M. as M.C.G.M. is the first Govt., Semi Govt. institute to implement this programme.

Also a comprehensive programme for early 6.12 **Breast Cancer** detection of breast cancer has recently been Care ''मी स्वत:साठीही" launched called. The programme seeks to equip atleast one dispensary/hospital in each ward with the clinical skills for first level screening for breast cancer, referral from which would be directed to the tertiary level. Mammography

2011-12

facilities will soon be established in KEM and Nair Hospitals thereby fulfilling a long felt need in cancer care.

It shall also be our effort to establish a specialised cancer care hospital at Govandi Shatabdi Hospital complex.

6.13 Recognising the gap between demand for Dialysis and supply of dialysis in this city, new dialysis centers are sought to be established under Public Private Partnership (PPP) Models, two Models for which are being worked out i.e. the charity and the business model. We hope to initiate atleast 6 new dialysis centers in the year 2011 under these models.

6.14 Life style diseases Life style diseases such as diabetes, hypertension now affect all walks of life and all strata of society. It is, therefore, proposed to initiate special diabetes OPDs by identifying atleast one dispensary per ward. Similarly, diabetes and hypertension screening camps will be organised in urban slums in association with the Central and State Govt., a provision of Rs.2 crores is

37

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

proposed for this purpose in the budget estimate for the year 2011-12.

2011-12

Considering the mental stress of the citizens
of Mumbai, emphasis has been given to the
various programmes of mental health at the
level of Mumbai Aarogya Abhiyan.

6.16 Provisions have also been made for construction of diagnostics center at Punjabi Gully, Borivali; dispensary at Jakhadevi, Prabhadevi, Dadar and maternity centers at Bail Bazar, Kurla and at Ridhi Sidhi at Dindoshi Malad(East) and Banganga.

6.17 Enhancing and strengthening maternal and Maternal & child care has always been a top priority With M.C.G.M.

> In order to further augment the maternal and child care infrastructure, M.C.G.M. recently commissioned a 70 bedded Mother & Child Care Hospital at Magothane, Borivali(E) comprising 30 beds reserved for maternal services and 40 beds reserved for pediatric ward and NICU (Neonatal Intensive Care Unit) in Phase I of its operation. This capacity can be further enhanced by another

50 beds in Phase II once the commission capacity of Phase I is fully utilized.

Similarly, Dharavi Mother and Child Care Unit under Sion Hospital comprising 60 maternal, 50 pediatric and 10 neonatal beds, adding to 120 beds will be commissioned by September 2011.

Currently 14 Health Posts are offering regular antenatal and postnatal services and checkups It is our objective to institutionalize fully functional antenatal clinics in all the 182 Health Posts by training the concerned staff, which will help in improving maternal mortality and infant mortality indices in the city.

Comprehensive repairs in Raoli Camp, Prabhadevi and Reay Road Maternity Homes are also proposed for which I have proposed the R.E. Rs.50 lakhs and B.E. Rs.1.95 crores.

# 7. Municipal Markets

7.1 There are a total of 92 existing municipal markets which are visited by a majority of Mumbaikars regularly. Till now repairs to these municipal markets were executed in a piecemeal manner and a comprehensive programme for repairs was not undertaken.

MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

With a view to make a visit to municipal markets a pleasant experience and also to provide basic infrastructure to these markets, MCGM has undertaken a 'स्वच्छ सुंदर टापटीप मंडई' programme. Comprehensive repairs to 51 markets are planned under this programme for which I have proposed a provision of Rs.22.33 crores under R.E. and Rs.85.20 crores under B.E. The aim will be to provide clean markets equipped with basic infrastructure.

7.2	Under	the	policy	guidelines	for
Redevelopment of Municipal	redevelo	pment	of markets	s letter of inter	nt has
Markets	been issued to 18 markets, redevelopment				
	works of	f 3 mar	kets is alre	ady started.	

7.3 Bachat Gat Dalan Self Help Groups (S.H.G.) have grown in strength both in Mumbai and Maharashtra in the last decade signifying women's empowerment through micro finance. However, a hurdle often faced by these Self Help Group is a platform to market their products in a city like Mumbai.

With an objective to remove this bottleneck in the movement of Self Help Group a 'बचत गट दालन' has recently been established

in municipal market at Khotachi Wadi, Girgaum, Mumbai. This दालन will be exclusively reserved for exhibition and sale of registered Self Help Groups both from Mumbai and Maharashtra, thereby providing a much needed marketing platform to these groups.

7.4It is proposed to undertake work ofRestoration of<br/>Mahatma Phule<br/>Municipal MarketIt is proposed to undertake work of<br/>comprehensive restoration of Mahatma<br/>Phule Municipal Market the renowned<br/>Crawford Market which is a Grade-I<br/>Heritage Structure under expert guidance for<br/>which a budget provision of Rs.4 crores is<br/>proposed in the Budget of 2011-12.

# 8. Solid Waste Management

8.1 MCGM is implementing various Cleanliness Programmes for keeping the city of Mumbai clean. The cleansing of roads and the work of collection and removal of refuse from large number of slums is carried out uninterruptedly. Due to implementation of Municipal Solid Waste (Management & Handling) Rules 2000, the targets such as House to House garbage collection,

MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

minimization of handling of waste, temporary storage of waste in closed containers and 100% collection and transportation of waste in closed vehicles have been achieved.

8.2 Large Waste Generation Points As rapid development of certain areas of Greater Mumbai has resulted in large amount of refuse generation at certain locations; Stationary Compactors of 15 MT capacity have been installed at such places and it is proposed to install such compactors at 10 newly proposed sites. A provision of Rs.7 crores has been made in the Budget Estimates for year 2011-12 for the purpose. There being restrictions of using only B.S.IV (Euro IV) emission norms compliant chassis in the metropolitan area the process of purchase of 38 mini-compactors could not be completed as the Euro IV compliant chassis are not available in the market. Further the vehicles purchased 8 years ago are necessary to be replaced. For both these purposes, a provision of Rs.15.40 crores is proposed in the Budget Estimates for the year 2011-12.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

# BUDGET ESTIMATES A, B & G 2011-12

8.3 Cleanliness Campaign	For maintaining the zero garbage condition in Mumbai City, various schemes such as Slum Adoption Scheme, Clean Area Scheme, Manning and Mopping Programme are being implemented under cleanliness campaign. Similarly, seashores and beaches which are famous tourist spots are being cleansed 24 X 7. Substantial budget
	provisions are proposed in the BudgetEstimates for the year 2011-12 for theseschemes as detailed below :Slum Adoption Scheme- Rs.49.00 croresClean Area Scheme- Rs.27.96 croresManning/ MoppingProgramme- Rs.26.64 croresRemoval of refuse- Rs.170.00crores
	Cleansing of seashores and beaches - Rs.5.60 crores
8.4 Development of dumping grounds	With a view to resolving the problem of disposal of 6500 M.T. of refuse generated per day, a scheme has been worked out under an "Integrated Waste Management Project" and work of closure of 65 hectares

of land at Deonar Dumping Ground in scientific manner and landfill development works are taken in hand. The work of partial closure of Deonar Dumping Ground in scientific manner which was started in the

year 2009 is expected to be completed by the end of this year. In the proposed project, the work of setting up plants for processing of solid waste of 2000 M.T. at Deonar, 4000 M.T. at Kanjur Marg and 500 M.T. at Mulund is incorporated in the contract awarded to private operator appointed under Public Private Partnership Model and all are projects expected these to be commissioned by January, 2012. Α provision of Rs.131 crores is made for this project in the Budget Estimates 2011-12 (This project is sanctioned under JNNURM).

The dumping site at Gorai has been closed scientifically and the operation and maintenance of the site for 15 years has been started. This project has been registered under the Clean Development Mechanism. An amount of Rs.24 crores has been received as an advance towards carbon credit for the effective management of Methane gas generated from the Landfill site.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

45

Under Ashray Project, M.C.G.M. will be **Ashray Project** developing conservancy staff quarters in The 'ASHRAY' City and Suburbs. project of construction of service quarters for the conservancy staff of SWM though initially proposed to be carried out through Municipal fund by making budgetary provision, it has now been proposed to execute the ASHRAY project on Public Private Partnership (PPP) model to make the project self sufficient in view of current financial condition of M.C.G.M.

8.6 Dr. Babasaheb Ambedkar Shramsafalya Awas Yojana

8.5

With a view to rehabilitating the labour staff of Conservancy department of the M.C.G.M. as per the directives of the State Government, it is proposed to implement the "Dr. Babasaheb Ambedkar Shramsafalya Awas Yojana" for which a provision of Rs.1 crore is proposed in Budget Estimates 2011-12.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

# 9. Tree Authority Budget

9.1 Green Cover in City For enhancing the green cover in the city, the following activities will be taken in hand under the Tree Authority Budget during 2011-12.

- The tree plantation will be taken along the roads and other open spaces. Besides, the trees will also be planted at open spaces available with the other municipal departments.
- The Municipal Corporation of Greater Mumbai and the Tree Authority will organize the 16<sup>th</sup> exhibition of plants, flowers, fruits and vegetables during the year 2011-12 so as to create consciousness of importance of trees and vegetation to the human welfare.
- The work shop on various horticultural subjects will also be arranged for the citizens of Mumbai so as to bring awareness about the environment. It is decided to organize exhibition in each Ward.
- A provision of Rs.24.50 crores is proposed under the Revenue Budget Estimates for the year 2011-12 for conservation of existing trees in the City and the Suburbs, for plantation and maintenance of new trees.

MUNICIPAL CORPORATION OF GREATER MUMBAI

# 9.2 Gardens, Playgrounds, Recreation Grounds

Efforts are being taken since last 2/3 years to give impetus to garden and parks development and to increase the greenery and beautification in the city. Accordingly, following works have been undertaken for beautifying the city and the same will be completed in the ensuing year.

9.2.1 Upgradation and Development of Gardens Till now M.C.G.M. has undertaken development of 16 theme gardens. Given the success of this initiative, to continue this scheme, a provision of Rs.31.67crores is proposed in Budget Estimates 2011-12 for developing Theme Gardens.

2011-12

47

Other than provision of theme gardens, following provisions are made to upgrade existing gardens, open space and to develop new gardens and open spaces.

- A provision of Rs.12 crores is proposed in the Budget Estimates for 2011-12 to upgrade the existing gardens/R.G.
- A provision of Rs.12 crores is proposed in the Budget Estimates 2011-12 for the development of Gardens/R.Gs which come in possession under the TDR policy.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

9.2.2 Modernisation and Upgradation of Veermata Jijabai Bhosle Udyan and Zoo Veermata Jijabai Bhosale Udyan - Zoo is one of the oldest zoos in the country located in the heart of Mumbai City. The M.C.G.M. administration has taken up a project of modernization and complete revamping of this zoo. A New Master Plan has been prepared and the said plan has been approved by the Central Zoo Authority (CZA), New Delhi. The entire project will be executed in 4 phases. Currently Master Plan is waiting for M.H.C.C. nod. As per M.H.C.C., direction of bio-diversity mapping has been completed for the Udyan and proposal has been resubmitted to In 2011-12, after obtaining M.H.C.C. M.H.C.C's comprehensive approval, development will be initiated. Till then work has begun on following part I of phase-I :-

- 1) Administrative Building and Interpretation Center
- 2) Zoo hospital, Kitchen & Quarantine Area

3) Parameter wall fence and Service road Above development works included in the phase I part I has been completed to the extent of 25%. The estimated cost of this

48

2011-12

entire project is approx. Rs.480 crores. A budget provision of Rs.50 crores is proposed for the year 2011-2012. This provision will be primarily utilized for the work of development of Entry Plaza, works of preservation and restoration of the heritage structures inside the premises of V.J.B. Udyan - Zoo and completing remaining works of phase I.

9.2.3 Beautification of Mumbai's beaches and shoreline M.C.G.M. is making sustained efforts to beautify Mumbai's shoreline and beaches. I have proposed a provision of Rs.2 crores for beautification of Chimbai Beach and Rs.1 crores for the beautification of Dadar beach along with conservation of Mahim Fort. A provision of Rs.3 crores is being proposed for beach nourishment at Prabhadevi. Similarly, a provision of Rs.2 crores is being proposed for beautification of Haji Ali sea face.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

9.2.4 Beautification of Chaityabhoomi at Dadar. The works under project of beautification of Chaityabhoomi at Dadar are being carried out by M.C.G.M. in phasewise manner as per the recommendations of Steering Committee appointed by the State Government and funds are made available by the State Government. The works in Phase I are already completed and the proposal for reconstruction of existing stupa in Phase II needs to be discussed with (Sukanu Steering Committee Samiti). Phase III consists of replica of Phase-I, i.e. Ashoka Stambha, Torna Gate and includes elevated footway from Chaityabhoomi to Suryawanshi Sabha Griha . The proposal for Phase III works alongwith the extension in Phase I and II which are in CRZ-I has been returned back by MOEF for IV reconsideration. In Phase the construction of building of University for Social Justice, Art and Craft, library, museum, Vipassana Centre, Hostel Block on the 4 acre of land of India United Mill No.6 are proposed for which land acquisition and development plan is under process with due modification to be done in Rule No.19. The work of providing Tetrapod c.c. blocks near

2011-12

51

wall for protection of the Chaityabhoomi premises from tides is under progress through Harbour Engineer, P.W.D. For avoiding the effects of humid atmosphere on Toran/Gate and cladding of Ashok Stambh, a specialized contractor on regular half yearly maintenance is appointed for 3 years.

9.2.5 'संयुक्त महाराष्ट्र चळवळ स्मारक' To commemorate the golden jubilee of creation of State of Maharashtra, an impressive, 'संयुक्त महाराष्ट्र चळवळ स्मारक' along with 'संयुक्त महाराष्ट्र लढा दालन' has been constructed at a cost of Rs.8 crores and opened to public on 1st May, 2010. I am proposing adequate provision for its maintenance and upkeep.

9.2.6 Textile Museum City of Mumbai has a rich tradition of textile mills. A textile museum is proposed to be built in collaboration with National Textile Corporation to capture the tradition and culture of textile movements.

### MUNICIPAL CORPORATION OF GREATER MUMBAI

# **10.** Fire Brigade

10.1 Upgradation of Fire Brigade Services Mumbai Fire Brigade discharges the obligatory duty of saving life and property of citizens of Mumbai during fire and other calamities.

A programme was undertaken to strengthen the Disaster Management capability of the Fire Brigade, under which it was decided to construct and equip 6 Regional Command Centres, work for which is in full swing. Command Centre at Wadala will be commissioned by May, 2011, Vikhroli by September, 2011 and Byculla, Borivali and Mankhurd by March, 2012 for which I am proposing R.E. of Rs.29.16 crores and B.E. of Rs.22.30 crores

It has been our attempt to equip Mumbai Fire Brigade with the latest state of art equipment. The latest addition is of 68 mtrs. Hydraulic Platform fitted with sophisticated remote control operating system which has enhanced Mumbai Fire Brigade's external fire fighting capacity from existing 60 mtrs. (20 floors) to 68 mtrs (22 floors). Similarly, several fire fighting and rescue equipments and vehicles such as Snorkel, Aerial Ladder Platform, Breathing

Apparatus, Turn Table Ladders and water tankers have also been procured.

I of have proposed provision а in R.E Rs.60.29 crores and of Rs.70.30 crores in B.E. to further strengthen Brigade's fire fighting Mumbai Fire capacity for procuring 23 Fire Engines, 5 Rescue Vans, 35 Thermal Imaging Cameras, 10 Portable Pumps and 6 sets of Beach Safety Equipments etc.

Equipping Mumbai Fire Brigade with state of art Rescue Equipment and commissioning of the Regional Command Centres will help the Fire Brigade in enhancing its service delivery levels and also in improving its response time.

# 11 Information Technology

11.1With a view to bringing in accountabilityInformationand transparency in administrative work and<br/>to make the municipal administration public<br/>oriented, it is necessary to have<br/>comprehensive computerization based on<br/>robust networking and use of appropriate<br/>software applications.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

2011-12

Alongwith ambitious computerization initiatives, M.C.G.M. has also undertaken public facilitation projects, providing various services to the citizens, through partners like Sify and ITZ cash. Through this alliance, Administration will try to increase the services provided to citizens and provide maximum services nearer to citizen's residence/office place. Attempt is to disperse CFC like centers throughout the city and expectation is that services provided through 24 ward CFCs will be available to the citizens through approximately 500 centres.

M.C.G.M. will also try to deepen and broaden computerization in the organization by implementing more and more modules of ERP. Legacy systems will also be integrated with core financial modules. Comprehensive implementation and of HRM stabilization and Material Management Modules will be another priority for administration.

M.C.G.M. has also undertaken significant steps to throw open its databases of licences etc. in public domain to bring in

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

transparency and accountability. This is also in line with spirit of RTI.

M.C.G.M. is planning to have disaster recovery site, by next year. Due to disaster recovery site, M.C.G.M. services will not be interrupted even due to any natural calamities and all the M.C.G.M. data will be secured. A provision of Rs.5 crores is proposed in Budget Estimates 2011-12 for development of disaster recovery site.

Due to these additional systems to be deployed, the number of users will also increase and this will lead to increased load on existing client and server side hardware. In this scenario. additional hardware (Server, Storage, Networking Instruments, and Computers) will be required to get enhanced performance for the deployed Accordingly, the process of systems. procuring hardware and networking instruments of the various software system deployed by various departments has been initiated.

A provision of Rs.93.57 crores for revenue expenditure and Rs.73.29 crores for capital expenditure is proposed in the Budget

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

Estimates for 2011-2012 for Information Technology Department.

# 12. Assessment and Octroi

12.1 Modernization of Octroi Nakas

In order to improve surveillance and verification and minimize transaction time at all the major nakas, it is proposed to install modern devices like-

- In-motion weigh bridges
- Scanners
- Cameras and C.C.T.V.

A provision of Rs.100 crores is proposed in the B.E. 2011-12 for installation of modern equipments and devices at major Octroi nakas. Similarly, a provision of Rs.54.78 crores is proposed for upgradation and modernization of civil works of major Octroi nakas.

12.2Octroi Silver Card Scheme has been<br/>introduced at Dahisar Check Naka for<br/>payment of octroi on sand, stone, metal,<br/>earth bricks, and broken bricks helping<br/>hasslefree speedy clearance of vehicles. The<br/>Municipal Corporation of Greater Mumbai<br/>has allowed some concession under this

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

56

2011-12

facility to promote the payment of octroi through Silver Card and E-payment.

12.2.1 Measures to increase revenue of octroi In order to increase the revenue of octroi on imports of all sorts of diamonds etc. it is proposed to withdraw the exemption from octroi granted on such import for processing and export to overseas vide Standing Committee/Corporation Resolution Nos.171 of 21.05.1993 and 519 of 13.09.1993 respectively and to levy and recover octroi on all such imports by reducing the present rate of octroi from 2% to 0.01% advalorem. This will increase the annual collection of octroi from Rs.2 crores to Rs.9 crores approximately. The reduction in the rate will be initially for a year.

#### **12.3 Property Tax**

12.3.1 The implementation of 'capital value based' **Capital Value** property tax system has been started w.e.f. **Based New Tax** System 01.04.2010. The data pertaining to almost 2,30,000 properties is ready for fixation of capital value and the final bills will be issued in due course. The data collection measurement of and the remaining properties is also under progress.

MUNICIPAL CORPORATION OF GREATER MUMBAI

There is a substantial increase in the cases involving a huge amount of disputed additional Court in Small Causes property tax pending in the Court. These cases are at present being heard by the Additional Chief Justice of the Court. But taking into account the quantum of these cases and the amount locked up therein, administration has started the work of creation of one more Small Causes Court for Suburbs at Kandivali (East), for disposing off such cases for which a provision of Rs.1.98 crores is proposed in the Budget Estimates 2011-12.

#### 13. **Social Welfare**

12.3.2 Setting up

A total provision of Rs.6.60 crores is • 13.1 Welfare of proposed in the Budget Estimates 2011-12 **Backward Class** for development of backward class people. Citizens ٠

- It is proposed to provide artificial limbs to the physically handicapped backward class for which а provision of people Rs.3 crores is proposed in the Budget Estimates for 2011-12.
- It is proposed to grant scholarship to the ٠ backward class students passing S.S.C. exam for further studies for which a

MUNICIPAL CORPORATION OF GREATER MUMBAI

58

2011-12

provision of Rs.1.20 crores is proposed in the Budget Estimates.

• Similarly, it is also proposed to grant scholarship to the backward class students passing H.S.C. exam for Professional and Technical courses for which a provision of Rs.2.40 crores is proposed in the Budget Estimates 2011-12.

#### **Gender Budget**

13.2 Women's Empowerment Separate provisions under Gender Budget were proposed for the first time in the Budget Estimates 2009-10. On the same lines, provision of Rs.15 crores is proposed in the Budget Estimates for the year 2011-12 for the various schemes for women's empowerment.

- 1. Self Employment for deserving women.
- 2. Training for self defence / skill upgradation.
- 3. Workshop / training for capacity building.
- 4. Assistance to handicapped for selfemployed and medical aid.
- 5. Various activities under Adhar Project.
- 6. Study tour for political representative and officers of UPEC.

MUNICIPAL CORPORATION OF GREATER MUMBAI

7. Revolving fund for Self Help Group (SHG)

2011-12

13.3 Various schemes to encourage universal school enrolment and improve attendance

- It is proposed to provide text books, slates, uniform, spectacles, note books, education kits, school bags etc. free of cost for the students in Municipal Primary Schools for which, a provision of Rs.78.37 crores has been proposed.
- It is proposed to provide flavoured milk to the students in Municipal Primary Schools, for which a provision of Rs.100 crores is proposed.
- It is proposed to give incentives to the girl students attending primary and secondary municipal schools for which a provision of Rs.3.50 crores and Rs.66.81 lakhs has been proposed respectively in the Budget Estimates for the year 2011-12.
- A provision of Rs.1 crores is proposed for giving special assistance to the girl students studying in the municipal schools for higher education.
- A provision of Rs.1.25 crores is proposed in order to provide artificial limbs to the physically handicapped females and children below the age of 14 years.

MUNICIPAL CORPORATION OF GREATER MUMBAI

A budget provision of Rs.362.56 crores is proposed for the aforesaid various schemes.

2011-12

# **13.4** Improvement in the standard/quality of education in the municipal schools.

13.4.1 School Excellence Project	While preparing the budget for 2011-12 of the Education Department the emphasis has been given on improving the standard and
	quality of education. This improvement is
	basically aimed to be achieved by speeding
	up and widening the scope of the
	implementation of School Excellence
	Project which was flagged off in August,
	2010.
	Under this project quality education will be
	improved by using new techniques of
	Dedagogy considering persecutive of the

improved by using new techniques of Pedagogy considering necessity of the situation. The methodology will be as per the requirement of the student's level of learning. For this project UNICEF is providing technical support as well as monetary support to some extent.

The MOU has been signed between the Brihanmumbai Mahanagarpalika and UNICEF which is an international organization. The implementation of the

# MUNICIPAL CORPORATION OF GREATER MUMBAI

programme initially in 500 divisions of Std. I to Std. III of 103 municipal schools selected this year will be extended to all primary schools in 2011-12. Since this project is based on activity based teaching an objective of improving teaching skills of all municipal teachers using pedagogy science is set.

2011-12

# Activities to be carried out under School Excellence Project

- To evaluate student's basic learning level.
- To give training to all the teachers regarding activity based standard teaching through Science of teaching (Pedagogy). With the scientific method of teaching and using creativity of teachers for preparation of teaching aids as per the requirement of their schools and then accordingly train the teachers.
- To make maximum use of human resources and material resources and to consolidate and to computerise all this information (Management Information Studies).

62

# MUNICIPAL CORPORATION OF GREATER MUMBAI

- To improve the teachers teaching, abilities well-planned training is scheduled.
- To give training to the Headmasters to develop their leadership skills.

# Expected Outcomes of school Improvement project

- 1. To increase student's attendance upto 95%.
- To increase the passing percentage of the students of Std. IV scholarship exam from 39% to 90%.
- 3. To increase the basic learning level of students by 25%.
- 4. To reduce students drop out rate to below 5%.

For this it will be the first time that a provision of Rs.48.29 crores is being made in the budget estimate for the year 2011-12.

13.4.2Another new project which is being<br/>introduced on large scale in Municipal<br/>Schools in 2011-12 is "Virtual Classroom<br/>Project".

With a view of providing the guidance of experts for S.S.C. students the concept of

virtual classroom has been initially started on 24.01.2011 in 24 municipal schools with joint support of MMRDA and valuable group studio. In this concept 24 schools are connected to the studio through the satellite. The students from these schools are able to communicate with each other and also with the experts, thereby clearing their doubts and building up their confidence. This has facilitated in orientation of teachers, Head Masters, Parents and also the supervisory officials toward new techniques of teaching using modern technology.

The proposal of making this facility available to the remaining municipal secondary schools is put forth for the year 2011-12. For this purpose the budgetary provision of Rs.3 crores is made in the year 2011-12.

13.5With a view to extending various civicExtension of<br/>Services to the<br/>Urban Poorservices to the urban poor and improving the<br/>standard of these services, a total provision<br/>of Rs.4562.68 crores is proposed in the<br/>Budget Estimates for 2011-12 under the<br/>following heads :-

2011-12

2011-12

65

(1	Rs. in crores)
Gaothans, koliwadas and	25.11
adivasi padas	
Adhar Kendras	6.20
Upgradation and maintenance	
of slums	349.81
Improvement, management	
and maintenance of chawls for	
poorer classes.	275.79
Primary Education(Budget	1800.51
'E')	
Secondary Education	182.77
Health	1856.77
Others	65.72
Total	4562.68

# 13.6 Special arrangement for Disabled Persons

It is the responsibility of the Government and the local bodies to provide smooth access for the handicapped persons in the Government buildings and public places. With a view to providing barrier free access to the disabled persons, a provision of Rs.10 crores is proposed in the Budget Estimates 2011-12 for providing facilities like ramp with handrail and low level toilet blocks etc. in all municipal offices, hospitals, recreations centres, markets and schools.

# MUNICIPAL CORPORATION OF GREATER MUMBAI

#### **14.** Administrative Initiative

As a part of the project of computerization 14.1 Jeevanrekha of administration, the verification and Project payment of monthly salary, P.F., Pension claims of the retired municipal employees are proposed to be made through SAP This project is system. named as 'Jeevanrekha Project' which includes 'PPP' module (Payroll, P.F. & Pension) and is part of Human Resource Module.

#### 14.2 Payment through RTGS / NEFT Mode

Since 2004 payment to staff and vendors is being made through ECS and for out of MMR Region through cheques. Now all type of payments upto Rs.2 lakhs are proposed to be made through NEFT and above Rs.2 lakhs through RTGS. For this S.B.I. will not be levying any transaction charge. This will ease the payment process and will have transparency in the system.

14.3M.C.Pension Adalat forpensionPensioners/Familyof pPensionerscond

M.C.G.M. has a total of 1,00,588 pensioners. In order to ensure early release of pension, a monthly Pension Adalat is conducted at the level of Head of the Department/in-charge of Ward/Dean/ Head of Hospital.

# MUNICIPAL CORPORATION OF GREATER MUMBAI

14.4 New Contributory Pension Scheme On the lines of the State Government/Central Government, New Contributory Pension Scheme i.e. "Defined Contributory Pension Scheme" is now made applicable to the employees appointed on or after 05.05.2008 in the M.C.G.M. In this respect, regular monthly recovery with arrears of the previous period is being made from the month of November, 2010.

#### Now I am presenting the Budget "G".

15.	There were two stiff challenges before MCGM while presenting the budget
Water Supply	Weow while presenting the budget
	estimates for the year 2010-11; first the
	drinking water crisis faced by Mumbaikars
	due to scanty rainfall in catchment area of
	the lakes and another was the critical
	financial position of the MCGM. To
	overcome water crisis, proper planning was
	made for utilisation of available water for a
	whole year and the Municipal
	Administration succeeded to overcome this
	natural calamity. During this period, there
	was an incidence of drilling of the tunnel
	while work of borewell was carried out by a

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

67

2011-12

private borewell contractor that resulted in the leakage of water from tunnel. Similarly, during this period, there were incidences of puncturing the water mains in the various parts of the City. But the situation was overcome by the Administration by taking immediate measures and normal water supply was restored.

During this period of water crisis, some of the existing wells and borewells were cleaned, new borewells were dug wherever necessary and water was made available to the citizens for other than drinking purposes. I am very much thankful to the Citizens of Mumbai and the Hon'ble Councilors for extending their co-operation to the Administration during the water crisis period, last year. I also thank the Government of Maharashtra for making available additional water from Bhatsa & Upper Vaitarana dams.

The summary of Revenue/Capital Income/ Expenditure for Revised Estimate of 2010-11 & Budget Estimate for 2011-12.

As against Revenue and Capital Receipt in Budget Estimate for 2010-11, amounting to

Rs.5619.70 crores, the Revised Estimate for 2010-11 has been proposed as Rs.4986.76 crores. Budget Estimate for 2010-11 for Revenue and Capital Expenditure is Rs.5618.62 crores. whereas. Revised Estimates for 2010-11 for Revenue and Capital Expenditure is proposed as Rs.4986.25 crores.

The revenue and capital receipt for the year 2011-12 is proposed to Rs.5926.36 crores, as against revenue and capital expenditure is proposed as Rs.5925.75 crores.

#### Augmentation in Water Supply

Mumbai receives 3350 mld of water. Water levels in the six dams supplying water to Mumbai are satisfactory this year. Considering the present population of about 14 million, the projected population in the year 2061 is expected to be about 26 million. To meet the consequential water demand of about 6152 mld, MCGM has initiated and planned several major capital works in enhancing the supply, transmission and distribution of water. Major works for Middle Vaitarna Project, transmission and

69

2011-12

distribution tunnels, replacement of Tansa Mains costing Rs.7967.14 crores are in progress. For future enhanced water supply, Gargai and Pinjal water projects will be put on fast track. Availability of water through Daman Ganga Pinjal Link will be followed up to meet the demand-supply gap.

2011-12

For improving water supply to various parts of the City, following major works are in progress :

- Tunnel : Maroshi to Vakola to Mahim to Ruparel.
  - Increased input in Malabar Hill Reservoir supplying water to A, C & D Wards.
  - Improvement in water supply to G/S, G/N & H/E Ward.
    - Expected to be completed by August 2012.
- Tunnel : Veravali Reservoir to City Mall to Yari Road.
  - Improvement in water supply to K/W Ward.

Expected to be completed by June 2011.

#### MUNICIPAL CORPORATION OF GREATER MUMBAI

- Laying of 3000 mm. dia. Water Main along Eastern Express Highway from Mulund to Amar Mahal, Chembur.
  - Increased input to Trombay Hill Reservoir and improvement in water supply to M/E & M/W Wards.

2011-12

- Improvement in water supply to F/S, F/N, B & E Wards.
   Expected to be completed by May 2011.
- Tunnel : Malabar Hill to S.K. Patil Udyan to Cross Maidan
  - Improvement in water supply to Kalbadevi, Colaba, Cuff Parade and Nariman Point areas.

Expected to be completed by September 2011.

In addition to source augmentation and strengthening of feeder system, the distribution improvement measures such as Leak Detection and Water Audit will be undertaken. Leak Detection Pilot Projects are in progress and results of the same will be utilised for replicating the project for entire Mumbai.

# MUNICIPAL CORPORATION OF GREATER MUMBAI

Strengthening of distribution network by rehabilitation and replacement of water mains are proposed to improve water supply in areas receiving low pressure water supply.

2011-12

15.1 Strengthening of water supply system Brihanmumbai Mahanagarpalika has taken a number of measures in the past to strengthen the water supply system in Mumbai. However, the twin factors i.e. burgeoning population and an ageing supply network in city require us to initiate a host of measures not only to improve the quantity, quality and accessibility of drinking water but also to bring down the operational costs.

#### **Mumbai-IIIA Water Supply Project**

III-A Mumbai Water Supply Project is completed and 355 mld additional water supply is made available to Mumbai City.

The provision of Rs.71.07 crores has been proposed in the Budget Estimate 2011-12 for the payment of final bills of the completed works. The status of the balance works under this project is as follows :

72

### MUNICIPAL CORPORATION OF GREATER MUMBAI

# 1. Tunnel from Veravali to Adarsh Nagar upto Yari Road (length of 6.1 Km.)

The work of tunnel boring is completed and rest of the work is expected to be completed by June 2011. A provision of Rs.40 crores has been proposed in the Budget Estimates for 2011-12.

- 2. The Water Treatment Plant of 455 mld capacity at Panjrapur is commissioned. A provision of Rs.1 crore has been proposed in the Budget Estimates for 2011-12 for final payment.
- 3. The work of providing & laying 3000 mm dia Mild Steel Water Main of 6 Kms. length from Mulund-Goregaon Link Road & Eastern Express Highway junction to Tagore Nagar, Vikhroli (E) (Phase-I) is in progress and is expected to be completed by May 2011. The work of 4.92 km of pipe line is completed uptill now. A provision of Rs.20 crores has been proposed in the Budget Estimates for 2011-12.
- The work of providing & laying 3000 mm dia water mains of 7.6 Kms. length between Tagore Nagar, Vikhroli and Amar Mahal, Chembur (Phase-II) is completed

and the work of hydro testing is in progress. A provision of Rs.1 crore has been proposed in the Budget Estimates for 2011-12.

5. The civil work of Rs.7.57 crores for the construction of the chlorination plant at Panjrapur is in progress. The tenders are invited for mechanical & electrical works. A provision of Rs.7.30 crores has been proposed in the Budget Estimates for 2011-12.

15.2	<u>The Works carried out under Jawaharlal</u>		
Water Supply	Nehru- National Urban Renewal Mission		
Projects -	(JN-NURM)		
Augmentation of	(1) <u>IV-Mumbai Middle Vaitarna Water</u>		
Water Sources	Supply Project		

In the context of augmenting the water supply to Mumbai, IV-Mumbai Middle Vaitarna Water Supply Project has been undertaken as per the recommendations made by the Expert Committee appointed by State Government under the Chairmanship of Dr. M.A. Chitale. Accordingly, on completion of this project, additional 455 mld water will be made available to the City.

# MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

The estimated cost of the said project is Rs.1583.97 crores. However, the Central Govt. has approved Rs.1329.50 crores as admissible expenditure for the purpose of Grant-in-Aid under the Jawaharlal Nehru National Urban Renewal Mission. (JNNURM) MCGM has received grant of Rs.498.55 crores out of total admissible grant of Rs.664.76 crores as 50% share from the Central Govt. and the State Govt. so far.

The construction of the Middle Vaitarana Dam will be completed by May 2012 and the full water supply will be made available after the July 2012.

The following work components of IV-Mumbai-Middle Vaitarna Water Supply Project are in progress. A provision of Rs.887.87 crores has been proposed in Budget Estimates 2011-12.

- The work of construction of the Middle Vaitarna Dam is in progress and expected to be completed by May 2012. A provision of Rs.300 crores has been proposed in the Budget Estimates for 2011-12.
- 2. The work of construction of approach roads and bridges proceeding towards Middle

# MUNICIPAL CORPORATION OF GREATER MUMBAI

Vaitarna Dam costing Rs.16.68 crores is being carried out by P.W.D. of GoM and the same is in progress. A provision of Rs.3.16 crores has been proposed in the Budget Estimates 2011-12.

2011-12

- 3. The work of providing and laying water main from Aghai to Gundavali for conveyance of water received from Middle Vaitarna – This work consists of providing 3000 mm. dia M.S.W.M. & laying having length of 35.70 kms. including internal cement mortar lining & allied works. This work is divided in three parts- i) Aghai to Jambholi, ii) Jambholi to Chinchavali & iii) Pogaon to Gundavali. The contract cost of this work is Rs.919.63 crores. This work is in progress & expected to be completed by May 2011. A provision of Rs.25 crores has been proposed in the Budget Estimates for 2011-12. This water will be carried to Bhandup Complex through new tunnel.
- 4. Construction of the Intake Tower at Modak Sagar for conveyance of water available from Middle Vaitarna Project and construction of a Tunnel of 6.7 km between Intake Tower to Weir Chamber at Bell Nalla

is in progress. The estimated cost of this work is Rs.281.72 crores. Expected date of completion is March 2012. A provision of Rs.120 crores has been proposed in the Budget Estimates for 2011-12.

2011-12

- 5. The work of construction of new Water Treatment Plant including Chlorine Contact Tank for treating 900 mld water availed from Middle Vaitarana Dam at Bhandup Complex costing Rs.417.56 crores is in progress and 450 mld capacity is expected to be comissioned by March 2012. A provision of Rs.130 crores is proposed in the Budget Estimates for 2011-12.
- 6. To store the treated water in Master Balancing Reservoir, a new pumping station of 900 mld capacity is required to be constructed including Rising Main at Bhandup Complex at an estimated cost of Rs.99.26 crores is in progress. Expected date of completion is September 2011. A provision of Rs.40 crores is proposed in the Budget Estimates for 2011-12.
- The work of construction of 140 ML capacity Master Balancing Reservoir at Bhandup Complex, at total estimated cost of

# MUNICIPAL CORPORATION OF GREATER MUMBAI

Rs.156.58 crores, is in progress for storing the treated water lifted from pumping station. Expected date of completion is June 2011. A provision of Rs.15 crores is proposed in the Budget Estimates for 2011-12.

2011-12

- A provision of Rs.10 crores has been proposed in the Budget Estimates 2011-12 for providing telecommunication facility and electric supply from M.S.E.D. Co.Ltd. at Middle Vaitarna Dam site.
- 9. The construction of the colony at Vihigaon for rehabilitation of the Project Affected Persons (PAP) due to Middle Vaitarna Dam is at final stage. A provision of Rs.2.98 crores is proposed in the Budget Estimates for 2011-12
- 10. The Central Design Organisation (CDO) of Nashik has been appointed as a consultant for providing consultancy services for construction of Middle Vaitarna Dam. The estimated cost of the work is Rs.8.21 crores. The consultancy services will be available upto the completion of the Project. A provision of Rs.1.50 crores is proposed for fees of consultancy services in the Budget Estimates for 2011-12.

11. Besides, the consultants have been appointed for "Project Management" of various works/ activities under Middle Vaitarna Dam, the consultancy services are to be availed of upto completion of the project. The estimated cost of this work is Rs.20.17 crores. A provision of Rs.3 crores is proposed in the Budget Estimates for 2011-12.

2011-12

(2) Construction of Tunnels

(1) Malabar Hill to Cross Maidan Tunnel (length of 3.6 Kms.)

> The work of tunnel boring has been completed & work of cement lining is in progress. The project is expected to be completed by September 2011. A provision of Rs.40 crores has been proposed in the Budget Estimates for 2011-12.

(2) Maroshi to Ruparel College Tunnel (length of 12.25 Kms.)

> The work of 9.8 Km has been completed till date and remaining work is expected to be completed by August 2012. A provision of Rs.140 crores has been proposed in the Budget Estimates for 2011-12. After construction of this tunnel, the problem of

> > 79

maintenance of old water mains passing through the Airport land will be resolved.

For these two Tunnels, grant of Rs.97.21 crores has been received as 50% share of Rs.194.43 crores from the Central & State Govt. under JNNURM Scheme so far.

<u>Proposed new works to meet the</u> <u>increased demand of water</u>

(1) <u>Tunnel from Gundavali to Bhandup</u> <u>Complex (5.5 m. dia.)</u>

> It is proposed to construct a tunnel of 15.1 Km (5.5 mtr dia) to overcome the difficulties due to encroachments by slum dwellers along the existing water mains. The work is divided in two parts viz. i) Gundavali to Kapurbavadi and ii) Kapurbavadi to Bhandup Complex. The work of residential quarter for Municipal Staff at Kapurbawdi is also included in this project. Contract cost of these tunnel works are i) Rs.1398.76 crores and ii) Rs.1488.50 crores respectively and provision of Rs.110 crores and Rs.120 crores respectively have been proposed in the Budget Estimates for 2011-12. These tunnels on completion, will convey water from existing sources viz.

Upper Vaitarna, Modak Sagar, Tansa as well as future sources like Middle Vaitarna, Gargai and Pinjal. The work will be geared up from September 2011 and will be completed by December 2014.

# (2) <u>Tunnels from Powai to Veravali and</u> <u>Powai to Ghatkopar</u>

It is proposed to construct two underground Tunnels from Powai to Veravali and Powai to Ghatkopar as the existing inlets to Veravali and Ghatkopar Reservoirs have gone below Link Road posing maintenance problem. M/s TCE have been appointed as consultants for preparation of Feasibility Report. A provision of Rs.35 crores has been proposed in the Budget Estimates for 2011-12 for the works recommended by the Consultants. The work would be started by October 2011 and expected to be completed by September 2015.

#### (3) Gargai Project

For augmentation of water supply to Mumbai, it is proposed to undertake the Gargai project. The Yield study, Flood study and Sedimentation study of this project has been completed by the Consultants.

It is proposed to appoint a Consultant for clearances from Forest obtaining & Environmental (Wild Life) Department. The tenders are invited for the same. A provision of Rs.4 crores has been proposed towards consultancy services. On receipt of clarances, DPR will be prepared. Work is expected to be commenced in March 2014 and to be completed by June 2017. The approximate cost of work is Rs.2700 crores at current prices. It is expected that the water supply will be increased by 440 mld on completion.

#### (4) Pinjal Project

For augmentation of water supply to MMRDA has Mumbai, proposed to construct a Dam on Pinjal River. The conveyance, treatment and storage component of Pinjal Project will be prepared by the MCGM. The follow up will be taken with MMRDA for early completion of the Pinjal project. It is expected to increase the water supply by 865 mld. DPR will be prepared by March 2014 and work is expected to commence by October 2014. The project is expected to be completed by March 2021. There is a proposal of linking

Daman Ganga and Pinjal River by National Water Development Agency (NWDA). A Memorandum of Understanding (MOU) has been signed for sharing Daman Ganga water between Government of Maharashtra and Government of Gujrat. About 2400 mld water would be available from Daman Ganga. Discussions would be held with the NWDA about this project.

# (5) **Desalination**

Feasibility studies for desalination is proposed. A provision of Rs.9.50 crores has been proposed in the Budget Estimates 2011-12.

# 15.3 Water Distribution Network

Expansion & Strengthening of Water Distribution System

#### (1) Laying of Water Mains

(a) During the year 2010-11, laying distributiory water mains of length 126 kms. is in progress.

(b) During the year 2011-12, it is proposed to lay 130 kms. of distributory water mains.

A provision of Rs.221.67 crores is proposed in the Budget Estimates for 2011-12.

83

#### (2) <u>Reconstruction of old Reservoirs</u>

# (a) Worli Hill Reservoir

As the Worli Hill Reservoir is very old and there is continuous leakage of water from the reservoir, it is proposed to demolish and reconstruct the same. The estimated cost of reconstruction of Worli Hill Reservoir is Rs.27.36 crores and a provision of Rs.14.05 crores is proposed in the Budget Estimates 2011-12. This work is expected to be completed by March 2013.

#### (b) Bhandup Hill Reservoir

The work of demolishing the Bhandup Hill Reservoir and to reconstruct the same is in progress. The estimated cost of this work is Rs.24.97 crores. A provision of Rs.12 crores has been proposed in Budget Estimates for 2011-12. Work is expected to be completed by March 2012.

# (c) New Malad Hill Reservoir-III (50 MLD capacity)

Malad, Borivali and Dahisar get water supply from Bhandup M.B.R. through recently completed Bhandup-Malad-Charkop tunnel. Due to increased demand in this region, it is proposed to construct a third

new reservoir of 50 mld at Malad Hill near existing two reservoirs. The estimated cost of this work is Rs.50 crores. A provision of Rs.8 crores is proposed in the Budget Estimates for 2011-12. This work is expected to be completed by September 2013.

# (3)<u>Construction of the Effluent Treatment</u> <u>Plant at Panjrapur</u>

As per the recommendations of the Maharashtra Pollution Control Board, it is proposed to construct the Effluent Treatment Plant at Panjrapur near existing Treatment Plant to treat backwash water from Panjrapur Treatment Plant at an estimated cost of Rs.30 crores. A provision of Rs.5 crores has been proposed in the Budget Estimates for 2011-12 for erection of Effluent Treatment Plant.

# (4) <u>Replacement of Tansa Mains</u>

The water is supplied to Mumbai City, from Tansa Dam through two 1800 mm. dia water mains. These pipelines were laid in 1930 and have become very old. Due to ageing, the water mains burst frequently at many places and significant quantity of water gets lost. Replacement of existing old water mains from "Tansa to Tarali Section" by M.S. pipeline 2750 mm dia of 41.35 km is undertaken. The contract cost of this project is Rs.1431.88 crores. The work is in progress and expected to be completed by May 2013. A provision of Rs.311 crores has been proposed in the Budget Estimates for 2011-12.

# (5) <u>Replacement & Rehabilitation of Old</u> <u>Water Mains</u>

# A) <u>Replacement of old Distributory</u> <u>Water Mains</u>

In the year 2008-09, water mains of 35 kms. Length, in the year 2009-10, water mains of 64 kms. length & in 2010-11 water mains of 62 kms were replaced. Now water mains of 66 kms. length are proposed to be replaced in 2011-12 for which a provision of Rs.82.05 crores has been proposed in the Budget Estimates for 2011-12.

# B) <u>Rehabilitation of old Distributory</u> <u>Water Mains</u>

In the year 2008-09, water mains of 96 kms. Length, in the year 2009-10, water mains of 47 kms. length & water mains of 26 kms. length were rehabilitated in 2010-11. Now

2011-12

the rehabilitation of 40 km of water mains is proposed in the year 2011-12 for which a provision of Rs.22.40 crores is proposed in the Budget Estimates for 2011-12.

15.4It is proposed to undertake a mass scaleLeak Detectionprogramme of detection of leakage and<br/>arrest the same to save the water on the<br/>backdrop of increasing gap between demand<br/>and supply of water, inequitable distribution<br/>and delay in availability of new water<br/>supply source.

A pilot project of leak detection & water measurement with modern technology in P, R,D & F/South wards has been undertaken. It is expected to complete the project by October 2011.The same project will be replicated with proper planning in various parts of the City. A provision of Rs.10.05 crores has been proposed in the Budget Estimates for 2011-12.

15.5Installation of Water Meters and Flow<br/>MetersEffective DemandMetersManagement<br/>MeasuresMCGM has implemented Telescopic Rate<br/>Structure from 01.03.2008 for domestic<br/>consumers in order to regulate per capita<br/>consumption and to promote reasonable use

MUNICIPAL CORPORATION OF GREATER MUMBAI

of water. The responsibility of installing the water meters on all connections including operating, maintaining and reading is entrusted to the reputed firms. This project is proposed to be executed in two phases. The work of 1<sup>st</sup> phase is completed and the work of Phase-II is started in October 2010. Total 30375 water meters are installed in City, Eastern Suburbs & Western Suburbs. The rest of the installation work is expected to be completed by March 2012. Due to installation of water meters, water consumed by the consumers can be measured and Water Audit can be feasible and leakage of water can be ascertained.

2011-12

Similarly, the work of installation 148 flow meters is completed where the water is supplied directly through Trunk-mains and the work of testing and commissioning of 23 flow meters is in progress. By installation of flow meters, the quantum of water supplied to each Zone will be known. A provision of Rs.190 crores has been proposed in the Budget Estimates 2011-12 for flow meters and water meters.

# MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

89

With the objective of utilisation rain water 15.6 for other than drinking purpose, the **Rain Water** Harvesting programme for Rain Water Harvesting in 184 properties owned by MCGM, 48 in City, 65 in Western Subs & 71 in Eastern Subs has been undertaken. A provision of Rs.10.60 crores has been provided in the Budget Estimates for 2011-12. Since there was a scarcity of water due to 15.7 **Cleanliness of** paucity of rain in the Lake areas, 971 wells existing Wells & 174 borewells owned by public and and providing **Tube Wells** 

privately got repaired and 525 borewells are constructed newly to overcome the scarcity of water. A provision of Rs. 6.53 crores has been proposed in Budget Estimates 2011-12.

15.8Hydraulic Engineer Department has nowImplementation<br/>of micro-<br/>tunneling<br/>technologyHydraulic Engineer Department has nowproposed to adopt the technique of micro-<br/>tunneling and the work at 2 locations i.e.<br/>Ghatkopar (E) & Bhandup (E) is in progress.<br/>Additional works at 3 places will be taken in<br/>hand in the near future. A provision of<br/>Rs.42 crores is proposed in the Budget<br/>Estimates for 2011-12.

The Consultant have been appointed for feasbility study of generation of Hydro-Electricity electricity at Middle Vaitarna Dam. A Generation provision of Rs.1 crore has been made in the Budget Estimates for 2011-12.

> The first stage of creation of Theme-based Gardens at John Baptista Garden at Bhandarwada Hill Reservoir is completed under the guidance of a panel of eminent consultants and the works under Stage-II are in progress since October 2010. A provision of Rs.2 crores is proposed in the Budget Estimates for 2011-12 and the work is expected to be completed in October 2011.

The beautification work at **Powai Lake** has been completed. A provision of Rs.50 lakh is proposed in the Budget Estimates for 2011-12 for final payments.

Considering the terrorist attack on Mumbai 15.11 on 26<sup>th</sup> November 2008, it has become Security Measures necessary to take steps for the security of the Municipal water supply installations. It is, therefore, proposed to install Remote CCTV Cameras at strategic locations at Bhanup Complex, Pise-Panjrapur Complex, 90

MUNICIPAL CORPORATION OF GREATER MUMBAI

15.10 **Contributing to Enhancement of** the Aesthetic Appeal of Mumbai

15.9 Hydro 2011-12

Municipal Dams and along water Trunk Mains.The work under first phase is completed. A provision of Rs.15 crores is proposed in the Budget Estimates for 2011-12.

15.12Due to the non-payment of water chargesAbhay Yojnabills before due date by the citizens and<br/>Government offices for various reasons,<br/>there was huge outstanding amount to the<br/>tune of Rs.978.35 crores at the end of<br/>August 2010.

To encourage the water consumers to pay their outstanding dues at once and avail the benefit of the non-payment of 2% additional charges in the bill, the scheme of Abhay Yojna was introduced from 01.10.2010 to 30.11.2010.

At the initial stage, the response was poor; however, subsequently better response was received from the consumers to the scheme. Hence, the scheme was extended upto 31.01.2011, with the approval of the Standing Committee.

An amount of Rs.246.05 crores is adjusted against this outstanding amount of MUNICIPAL CORPORATION OF GREATER MUMBAI 91

2011-12

Rs.978.35 crores. Out of this adjustment, an amount of Rs.117.10 crores as a 2% additional charges are waived and MCGM received Rs.128.94 crores upto 31st January 2011.

2011-12

16.MCGM has been implementing integrated<br/>water and sewerage projects since 1974.<br/>Twenty five years' Sewerage Master Plan<br/>Stage-I (MSDP-I) was completed in 2004.<br/>MSDP-I has resulted in enhanced sewage<br/>treatment installed capacity to 5600 mld,<br/>sewage collection to 1700 mld, better<br/>service coverage and less overflow/flooding,<br/>and also relatively improved sanitation<br/>facility in slums.

MSDP-II studies have been completed and the estimated fund requirement is Rs.5570 crores (at the base cost of 2001), to be completed in five phases by the year 2025. The works under Phases-I and II have been divided in three components i.e. I, II and III. Component-I works amounting to Rs.364.47 crores are in progress and expected to be completed by March 2012. The Central Govt. has accorded their approval of Rs.364.47 crores to the

2011-12

admissible expenditure for the purpose of grant-in-aid under JNNURM out of the estimated cost of Rs.502.41 crores of Mumbai Sewage Disposal Project, Stage-II (Priority Works) Component-I. The M.C.G.M. has received Rs.91.12 crores from the Central Govt. and the State Govt. as 50% share of Rs.182.23 crores. The cost of Components-II and III works is estimated to Rs.4014 crores to be completed by the end of 2015. This includes marine outfall, collector tunnel, transfer tunnel, improved treatment at 7 locations, 4 large pumping stations, 6 small pumping stations, rehabilitation of 25 km. man-entry sewers etc. On commissioning of these works the sewerage coverage in Mumbai will increase from existing 60% to 80%.

16.1 Sewerage Operation & Sewerage Project Main functions of the **Sewerage Operation Department** are (i) Replacement and Rehabilitation of the old, ageing sewer lines and (ii) Reduction of operational costs while maintaining the stipulated discharge standards.

Laying the sewage lines in various wards in the City for conveyance of sewage collected

MUNICIPAL CORPORATION OF GREATER MUMBAI

in Mumbai City is major work of the **Sewerage Project Department**.

Some of the sewer lines laid in 1860 are still in use. Hence, it is necessary to replace and rehabilitate such sewer lines, so as to increase the capacity and life of the sewer network and also to take appropriate measures to bring down the operational costs.

16.2 Expansion of Sewerage Network The following works are undertaken under the Component-I of the MSDP-Stage-II (Priority Works) as approved by the Central Government under the JNNURM:-

- The work of laying sewer lines of 18.41 km. by Micro Tunneling Method at 39 locations is undertaken and the works at 11 locations are completed. Uptill now 8.08 km sewer lines are laid down. A provision of Rs.110.36 crores is proposed in the Budget Estimates for 2011-12.
- 2. The work of laying and upsizing of sewer lines of City, Eastern and Western Suburbs by pipe bursting method was proposed. But due to some technical problem, these works are carried out by conventional method i.e.

MUNICIPAL CORPORATION OF GREATER MUMBAI

open cut method. Uptill now, sewers lines of 4.649 kms have been laid down. A provision of Rs.21.22 crores is proposed for this work in the Budget Estimates for 2011-12.

- 3. The work of upsizing of 17.749 kms. length old sewer lines was proposed by pipe bursting method in Mumbai city. Uptill now, sewers lines of 4.770 kms have been laid down A provision of Rs.3 crores for the balance work is proposed in the Budget Estimates for 2011-12.
- 4. 19 works of laying sewer lines in the City, Eastern and Western Suburbs are newly proposed for which a provision of Rs.9.30 crores has been proposed in the Budget Estimates 2011-12.

# <u>Consultancy Services for MSDP (Stage-II</u> <u>- Priority Works)</u>

- A provision of Rs.20 crores is proposed in Budget Estimates 2011-12 for the consultancy services under M.S.D.P. Stage-II.
- For implementation of works recommended by the Consultants, a provision of Rs.39 crores is proposed in the Budget Estimates for 2011-12.

# MUNICIPAL CORPORATION OF GREATER MUMBAI 95

2011-12

 It is proposed to recycle the waste water for use of other than drinking purposes. Though a provision of Rs.1 crore has been proposed in the Budget Estimates 2011-12, it is decided to implement this programme on DBOOT basis (Design, Built, Owned, Operate & Transfer).

2011-12

It is necessary to undertake the work of replacement/ rehabilitation of the existing sewerage network, especially where lines are very old.

#### Rehabilitation of sewer lines

16.3 Rehabilitation & Replacement of Sewer Lines

A provision of Rs.1.50 crores has been proposed to rehabilitate man entry sewer lines and Rs.15 crores for non-man entry sewer lines by using trenchless technology in the Budget Estimates for 2011-12.

The work order for Condition Assessment Survey of 160 km old sewer lines in 'A' to 'E' Wards was issued in March 2010. Out of which, the survey of length of 39 km sewer lines has been completed and the balance will be completed in March 2012. The provision of Rs.7 crores has been proposed in the Budget Estimates 2011-12.

# MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

The work order for Condition Assessment Survey of 200 km old sewer line in 'F' to 'G' Wards was issued in March 2010. Out of which, the survey of length of 30 km sewer lines has been completed & balance work will be completed in March 2012. The provision of Rs.7 crores has been proposed in Budget Estimates for 2011-12.

# The Energy Audit

Efficient use of Energy with a view to Reducing Operating Costs and Responding to the Threat of Global Warming

16.4

(A) The Report of the consultant appointed for the Energy Audit of water supply installations and sewage disposal installations with a view to reduce the electrical consumption and reduction in the operational cost has been received. The works recommended by the Consultant are in progress. A provision of Rs.3.60 crores is proposed for this purpose in the Budget Estimates for 2011-12.

(B) A lighting arrangement based on the Energy saving lights (CFL System) is proposed at Bandra Pumping Station and a provision of Rs.20 lakh is proposed in the Budget Estimates for 2011-12.

97

2011-12

16.5 Construction/ Repair and Rehabilitation of Public Toilets and Sanitary Systems in Slum

# Slum Sanitation Programme

In the Slum Sanitation Programme under MSDP, the process of construction of Toilet Blocks begins after the demand received from the Local Committee/ Councilors.

The main objective of Slum Sanitation Programme is to make available 35000 toilets in the slums upto 2011. Tenders have been invited to construct 235 toilets blocks (4700 toilet seats) in five zones consisting of 47 toilets blocks (940 toilet seats) in each zone. The said programme is based on demand. The work orders to construct the toilets at 237 places have been issued. Out of which, the works at 93 places (2332 seats) are completed and the works at 75 places are in progress and works at 56 places are expected to be commenced. The work orders at 13 places were cancelled due to local problems. A provision of Rs.22 crores is proposed in the Budget Estimates for 2011-12.

# **Retrofitting of Existing Slum Toilets**

Toilet blocks constructed by MHADA, MCGM and other agencies are in dilapidated condition and due to lack of

proper maintenance are lying unused. It is, therefore, proposed to carry out the work of retrofitting/revival of such existing toilet blocks and then are handed over to the local Community Based Organisations [CBOs] for day to day operation and maintenance. This programme is implemented at Ward level. For this work, a provision of Rs.3 crores has been proposed in the Budget Estimates for 2011-12.

The work of landscaping, beautification and development of Flower Garden at Dadar Pumping Station along with the construction of Administrative building is in progress. It is expected to be completed in October 2012. A provision of Rs.15 crores has been proposed in the Budget Estimates 2011-12.

The work to set up an Art & Craft Centre at the Love Grove Pumping Station to showcase art & culture of Maharashtra has been undertaken in the year 2008-09. The said work is divided in three phases. 90% civil works at the first phase along with two buildings is completed and balance works are in progress. Second phase includes Interior decoration, false ceiling and POP

16.6 Contributing to Enhancement of the Aesthetic Appeal for Beautification of Mumbai

# MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

work of two buildings and is expected to be completed by March 2012. Third phase includes the landscaping of the plot and is expected to be completed by March 2013. A provision of Rs.3 crores is proposed

# 17.1(a) Water Supply :

Presently MCGM is supplying 3350 Mld water to Mumbai City from 6 different lakes, out of which two are within city and 4 are beyond city limits located at 80 to 100 kms. from Mumbai. Of these 6 lakes, 4 belong to MCGM and 2 lakes are owned by the Government of Maharashtra. However, MCGM have shared the cost of construction of the two dams owned by Government of Maharashtra. The present population of Mumbai is about 14 million and due to the continuous growth consequential gap between water demand the supply is presently about 900 Mld. This gap in demand and supply can be met by two pronged action - one by reducing the leakages and wastage of water is the system and second by augmenting by developing new sources.

# 17. Water Supply and Sewage Disposal Status & Future Needs

MUNICIPAL CORPORATION OF GREATER MUMBAI

2011-12

In order to meet the ever growing water demand. MCGM is continuously augmenting the water supply by developing new sources. Currently, Middle Vaitarna is in progress and expected to be completed by However, Mumbai's water May 2012. supply will be augmented by 455 Mld only after July 2012 when Dam is filled. The cost of 6 components of Middle Vaitarna Project is Rs.2006 crores. On completion of ongoing Middle Vaitarna Project, the two major sources to be developed are Gargai and Pinjal.

Gargai Project will be developed by MCGM. The project is targeted for commencement by March 2014 and expected to be completed by June 2017. This source will give 440 Mld of water and the approximate cost of this project is Rs.2700 crores (at 2010 rates).

Simultaneously, Pinjal Project also be taken up in the year 2014. The dam will be constructed by MMRDA and the conveyance, treatment, storage components of the project will be undertaken by MCGM. This source will give additional 865 MId from 2021. The cost of the project is

expected to be about Rs.12000 crores (at 2010 rates).

Presently, the operation and maintenance cost stands at Rs.287 crores per annum. On completion of all the above projects, the same will be Rs.544 crores per annum. Development of new sources, mentioned above will result in increase in revenue at present tariff. However, due to increase in operation and maintenance cost to distribute additional water and also due to debt charges, the cost of production will also increase phase-wise. To achieve 100% cost recovery it would be necessary to increase the tariff for water supply phase-wise.

Sr.	Source	Year	Projected	Average	Increase
No.			Production	Tariff	required
			Cost	per KL	per KL
			Rs./KL		
1	Middle	2013-	13.31	6.80	6.51
	Vaitarna	14			
2	Gargai	2019-	20.47	13.31	6.80
		20			
3	Pinjal	2021-	21.01	20.47	0.54
		22			

# **17.1(b)** Sewage Disposal

Presently the collection of sewage is 60% in Mumbai. Most of the modern megapolises like Mumbai have 90-95% sewage collection. MCGM has already started the

MUNICIPAL CORPORATION OF GREATER MUMBAI

implementation of MSDP-II, through own funds and supplemented by JnNURM grants. A 25 years plan of MSDP-II made in 2002 aimed at putting Mumbai in the bracket of major megapolices by collecting 90-95% sewage and disposing it to meet prevailing clean environmental standards. This plan projected an expenditure of Rs.5570 crores at 2001 prices, which represents approximately 10000 crores at 2010 prices. MCGM is now planning to enhance sewage collection capacity to 80% and also enhance and improve treatment capacities. besides rehabilitating and upsizing the old sewers. This work estimates an expenditure of Rs.4014 crores at 2010 prices. The enhanced capacities and network will further estimates additional operational and maintenance cost on MCGM that are projected to increase from present Rs.70 crores to Rs.225 crores in 2015. To complete all works of MSDP-II, MCGM will need Rs.6000 crores additional capital cost at current prices.

17.2As these projects would put tremendous<br/>financial burden, the MCGM will be<br/>constrained to enhance the present tariff

rates in near future, implement new technologies for reducing non revenue water (NRW) and energy efficiency measures for reducing operational cost and increasing the revenue collection efficiency and build financial capacity for being able to raise resources for meeting additional investment, expenditures and repaying the borrowings.

2011-12

17.3 I propose to bring a plan of action on this during the course of the year.

18. While concluding my statement on the Budget, I would like to reiterate that neither any hike in the rates of the present taxes is proposed nor any new taxes have been imposed in the Budget Estimates for 2011-12.

**19.** Looking forward to your wholehearted participation and cooperation, I present for consideration and approval of the Standing Committee the Budget Estimates for a surplus Revenue and Capital Budget 'A' (Fund Code- 11,12,60,70), a balanced Budget 'B' (Fund Code -21,22,23) and surplus Budget 'G' (Fund Code - 40) for the year 2011-12.

Thank you,

Mumbai, Date : 4 February, 2011 Subodh Kumar Municipal Commissioner

MUNICIPAL CORPORATION OF GREATER MUMBAI

# BUDGET ESTIMATES A, B & G 2011-12



# BUDGET ESTIMATES A, B & G 2011-12

# **ANNEXURE - I**

# Revenue Income - Budget Estimates 'A', 'B', 'E',

# 'G' & Tree Authority

	1	(Rs. in crores)
Sr. No.	Sources of Revenue Income	Budget Estimates 2011-12
1.	Octroi (Net)	5700.00
2.	Property Tax	3962.88
3.	Water & Sewerage Charges	948.07
	Receipts from Development Plan	
4.	Department	1639.28
5.	Grant-in-Aid from Government	272.00
б.	Income from investments	1161.80
7.	Supervision Charges	581.32
8.	Solid Waste Management	90.52
9.	Receipts from Roads & Bridges	112.59
10	Receipts from License Department	118.04
11.	Receipts from Hospitals & Medical Colleges	93.59
12.	Receipts from Markets & Deonar Abattoir	63.84
13.	Other Receipts	683.62
	Total	15427.55

# BUDGET ESTIMATES A, B & G 2011-12

# ANNEXURE – II

# Revenue Expenditure - Budget Estimates 'A', 'B', 'E', **'G' & Tree Authority.**

		(Rs. in crores)
Sr. No.	Items of Revenue Expenditure	Budget Estimates 2011-12
1.	Establishment Expenses	8094.13
2.	Administrative Expenses	647.65
3.	Operation and Maintenance	2554.34
4.	Interest and Finance Charges	127.28
5.	Programme Expenses	190.78
6.	Revenue Grants, Contributions and	
	Subsidies	1384.35
7.	Provisions and write-off	156.76
8.	Transfer to Reserve Fund	
	Other	89.50
9.	Refund of taxes	109.70
	Total Revenue Expenditure	13354.49
	Transfer to Capital Account	2103.58
	Total	15458.07

#### BUDGET ESTIMATES A, B & G 2011-12

### ANNEXURE – III **PROPOSED PROVISIONS FOR VARIOUS BUDGETARY OBJECTIVES** (Fund Code 11, 12, 21, 22, 23, 30, 40, 50, 60 & 70)

10	Miscellaneous Activities	5058.38	484.38	5542.96
10	Assets Common Services and	5058.38	484.58	5542.96
	Maintenance of Municipal			
9.	Improvement, Management and	190.66	85.13	275.79
8.	Social Welfare	355.67	24.49	380.16
7.	Institutional Improvement and Reforms	13.22	265.00	278.22
6.	Improving Civic Services and Citizen Facilitation	93.57	79.34	172.91
	Improving Disaster Preparedness			
5.	Disaster Management and	140.62	129.82	270.44
	Creation of Places of Tourist Interest			
4.	City Beautification and	85.52	157.61	243.13
3.	Cleanliness and Improvement of City Environment	1348.59	216.58	1565.17
2.	Up-gradation of Social Infrastructure and Amenities	3232.63	879.64	4112.27
1.	Strengthening of Civic Infrastructure	2835.63	5373.51	8209.14
		Expenditure	Expenditure	
No	Sector	Revenue	Capital	Total
Sr.		(Rs. in crores) Budget Estimates 2011-12		

# ANNEXURE – IV Budget Estimates A, B, E, G, & Tree Authority **Department-wise Summary**

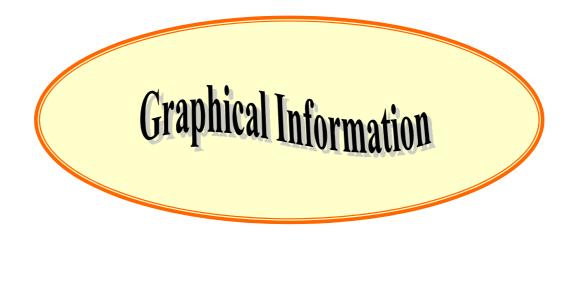
	Department-wi		(Rs. in crore	s)
Deptt.		Budget Estin	nates 2011-12	
Code	Department	Revenue	Capital	Total
	-	Expenditure	Expenditure	
18	Information Technology	93.57	73.29	166.86
	Department			
21	Disaster Management Cell	8.79	15.63	24.42
24	Assessor and Collector Department	359.61	178.52	538.13
30	Education Department	1330.87	162.52	1493.39
31	Solid Waste Management	1286.94	208.00	1494.94
	Department			
32	Transport Department	354.94	24.60	379.54
33	Storm Water Drains Department	274.70	1240.00	1514.70
34	Mechanical & Electrical	61.69	64.82	126.51
	Department			
35	City Engineer's Department	343.11	287.00	630.11
37	Development Plan Department	32.92	316.92	349.84
38	Fire Brigade Department	131.83	114.18	246.01
41	Garden Department	135.45	133.44	268.89
42	Market Department	63.99	85.20	149.19
43	Deonar Abattoir Department	28.02	1.55	29.57
44	Roads & Traffic Department	572.29	727.24	1299.53
45	Bridges Department	5.56	165.72	171.28
46	Printing Press Department	39.67	2.86	42.53
47	Health Department	514.34	95.57	609.91
	Major Hospitals	528.22	103.62	631.84
	Medical Colleges	228.16	19.40	247.56
	Specialised Hospitals	94.88	10.31	105.19
	Peripheral Hospitals	298.10	211.56	509.66
49	Water Operation Department	1186.65	1052.44	2239.09
50	Water Supply Project Department	26.78	1546.64	1573.42
51	Sewerage Operation Department	581.76	178.26	760.02
52	Sewerage Project Department	23.81	275.07	298.88
53	Mumbai Sewerage Disposal	15.67	224.10	239.77
	Project			
	Others Department	4732.17	177.24	4909.41
	Total	13354.49	7695.70	21050.19
	Contribution to Capital Account	2103.58		
	Total	15458.07	••	

111

#### ANNEXURE – V

# Capital Accounts –Budget Estimates A, B, E, G & Tree Authority

(Rs. in crores) Sr. **Particulars** Budget Estimates 2011-12 No. Opening Balance as on 1<sup>st</sup> April 223.80 **CAPITAL RECEIPTS** 1 Loan 2597.73 2. Grants 531.18 3 Contribution from Development Fund 233.50 4 Sale proceeds/ premium of land and 150.16 building 5 Accumulated Surplus 706.00 Withdrawal from Special Fund : 6 Assets Replacement Fund 339.00 Land Acquisition and Development Fund 300.00 Primary School Building Maintenance Fund 128.00 Primary School Building Construction Fund 0.20 Asset Replacement & Rehabilitation Fund 435.60 **Total of 6** 1202.80 7 247.64 Other Receipts **Total** – 1 to 7 5669.01 8 Contribution from Revenue Account 2103.58 9 7772.59 **Total** -Capital Receipts 10 Total – Fund Available 7996.39 11 Capital Expenditure 7695.70 12 Transfer to Reserve Fund 0.60 **Closing Balance as on 31<sup>st</sup> March** 300.09

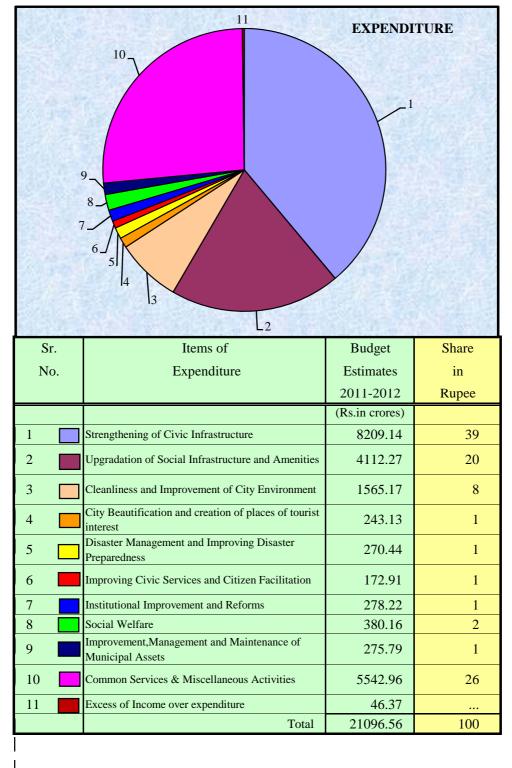


i

2 4 5 6 7 INCOME / RECEIPTS 2 4 5 6 7 INCOME / RECEIPTS			
Sr.No.	Sources of Income/Receipts	Budget Estimates 2011-2012	Share in Rupee
		(Rs.in crores)	
1	Revenue Income	15427.55	73
2	Loan	2597.73	12
3	Grants	531.18	3
4	Withdrawal from special fund	1202.80	6
5	Contribution from Development Fund	233.50	1
6	Contribution from Accumulated Surplus	706.00	3
7	Other Receipts	397.80	2
	Total	21096.56	100

SIZE OF BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY

I

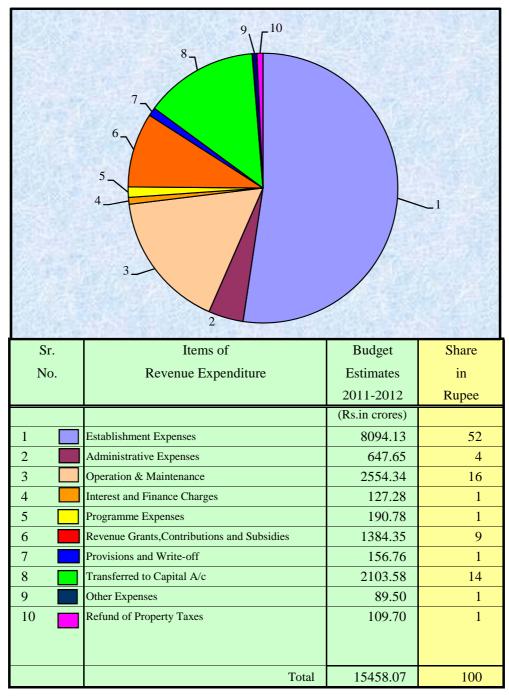


SIZE OF BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY

		Budget	Share
Sr.No.	Sources of Revenue Income	Estimates	in
		2011-2012	Rupee
		(Rs.in crores)	
1	Octroi (Net)	5700.00	37
2	Property Tax	3962.88	26
3	Water & Sewerage Charges	948.07	6
4	Receipts from Development Plan Department	1639.28	11
5	Grant-in-Aid from Government	272.00	2
6	Interest on Investment	1161.80	7
7	Supervision Charges	581.32	4
8	Solid Waste Management	90.52	
9	Receipts from Roads & Bridges	112.59	1
10	Receipts from License Department	118.04	1
11	Receipts from Hospitals & Medical Colleges	93.59	1
12	Receipts from Markets & Deonar Abattoir	63.84	
13	Other Receipts	683.62	4
14	Excess of Expenditure over Income ( To be met from opening surplus)	30.52	
	Total	15458.07	100

REVENUE INCOME-BUDGET ESTIMATES 'A','B', 'E','G' AND TREE AUTHORITY

iv



REVENUE EXPENDITURE -BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY

v

6.			
		Budget	Share
Sr.No.	Sources of Capital Receipts	Estimates	in
Sr.No.	Sources of Capital Receipts	Estimates 2011-2012	in Rupee
Sr.No.	Sources of Capital Receipts		
Sr.No.	Sources of Capital Receipts	2011-2012	
		2011-2012 (Rs.in crores)	Rupee
1	Loan	2011-2012 (Rs.in crores) 2597.73	Rupee 33
1	Loan Grants	2011-2012 (Rs.in crores) 2597.73 531.18	Rupee           33           7
	Loan Grants Contribution from development Fund	2011-2012 (Rs.in crores) 2597.73 531.18 233.50	Rupee           33           7           3
1 2 2 3 3 4	Loan Grants Contribution from development Fund Receipts from Premium of land and buildings	2011-2012 (Rs.in crores) 2597.73 531.18 233.50 150.16	Rupee 33 7 3 2
1 2 2 3 3 4 5 5	Loan Grants Contribution from development Fund Receipts from Premium of land and buildings Contribution from Revenue A/c	2011-2012 (Rs.in crores) 2597.73 531.18 233.50 150.16 2103.58	Rupee 33 7 3 2 27
1 2 2 3 3 4 5 6	Loan Grants Contribution from development Fund Receipts from Premium of land and buildings Contribution from Revenue A/c Accumulated Surplus	2011-2012 (Rs.in crores) 2597.73 531.18 233.50 150.16 2103.58 706.00	Rupee 33 7 3 2 27 9

CAPITAL RECEIPTS -BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY

vi

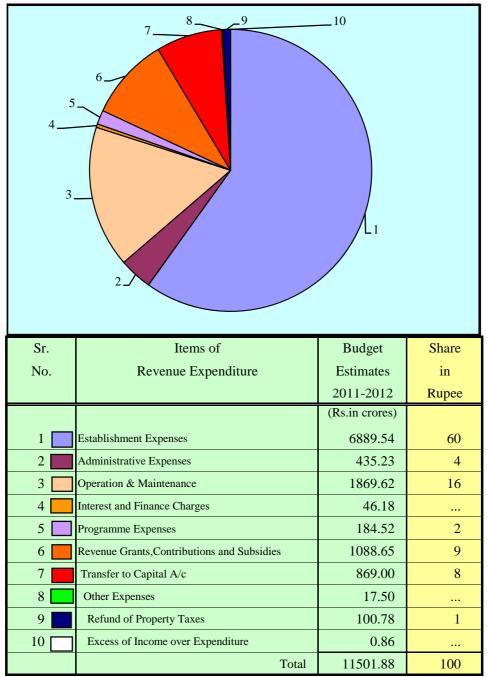
Sr.	Items of	Budget	Share
No.	Capital Expenditure	Estimates	in
		2011-2012	Rupee
		(Rs.in crores)	
1	Traffic Operations, Roads & Bridges	892.96	12
2	Storm Water Drains	1240.00	16
3	Solid Waste Management & Transport	232.60	3
4	Health Department	495.04	6
5	Water Supply	2599.08	33
6	Sewage Disposal	677.43	9
7	Fire Brigade & Disaster Management	129.81	2
8	Information Technology	73.29	1
9	Market & Deonar Abattoir	86.75	1
10	Repairs to Mun.Properties & Slum Improvement (Budget-B)	85.13	1
11	Repairs to Primary School Buildings (Budget E)	169.27	2
12	Others	1014.34	13
13	Excess of Income over Expenditure	76.89	1
	Total	7772.59	100

CAPITAL EXPENDITURE -BUDGET ESTIMATES 'A','B', 'E', 'G' AND TREE AUTHORITY

Sr.No.	Sources of Revenue Income	Budget Estimates	Share in
51.110.	sources of Revenue income	2011-2012	Rupee
		(Rs.in crores)	1
1	Octroi (Net)	5700.00	50
2	Property Tax	2000.00	17
3	Grant-in-Aid from Government	272.00	2
4	Interest on Investment	521.53	4
5	Receipts from Development Plan Department	1639.28	14
6	Receipts from Roads & Bridges	112.59	1
7	Receipts from License Department	118.04	1
8	Solid Waste Management	90.52	1
9	Supervision Charges	250.00	2
10	Receipts from Hospitals & Medical Colleges	93.59	1
11	Receipts from Markets & Deonar Abattoir	63.84	1
12	Other Receipts	640.49	б
	Total	11501.88	100

REVENUE INCOME-BUDGET ESTIMATES 'A','B' & 'E'

viii



**REVENUE EXPENDITURE-BUDGET ESTIMATES 'A', 'B' & 'E'** 

ix

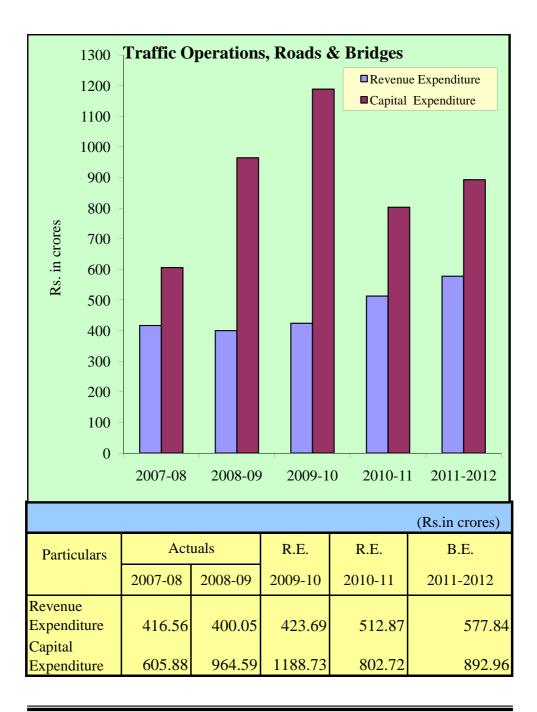
Sr.		Budget	Share
No.	Particulars	Estimates	in
		2011-2012	Rupee
		(Rs. in crores)	
1	Internal Loan	2000.00	45
2	Contribution from Revenue Account	869.00	19
3	Withdrawal from Special Funds	767.20	17
4	Premium towards additional 0.33 F.S.I.	200.00	5
5	Contribution from Development Fund	175.13	4
6	Grant for Brimstowad/JNNURM/SWM Project	270.80	6
7 🗖	Others Receipts	197.80	4
	Total	4479.93	100

CAPITAL RECEIPTS - BUDGET ESTIMATES 'A','B' & 'E'

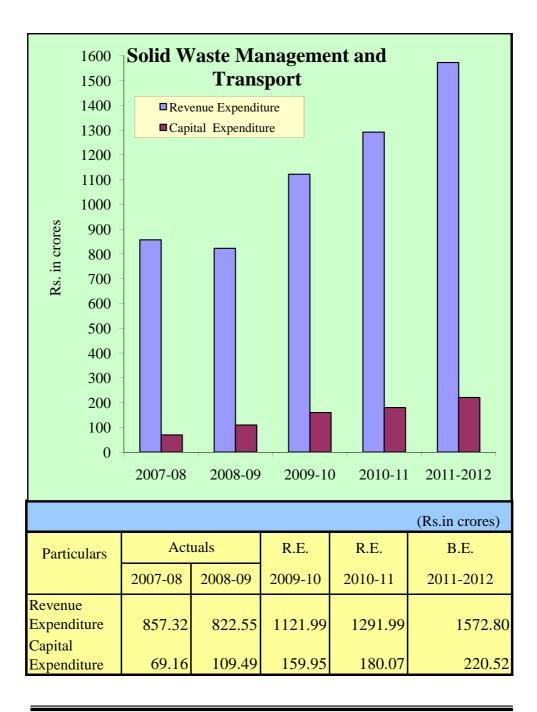
Х

Sr.		Budget	Share
No.	Particulars	Estimates	in
		2011-12	Rupee
		(Rs.in crores)	
1	Traffic Operations, Roads & Bridges	892.96	20
2	Storm Water Drains	1240.00	28
3	Information Technology Department	73.29	1
4	Markets & Deonar Abattoir	86.75	2
5	Health Budget	495.04	11
6	S.W.M.and Transport	220.52	4
7	Fire Brigade Services & Disaster Management	129.81	3
8	Gardens	130.54	3
9	Others (Budget A)	880.33	20
10	Repairs to Municipal properties & Slum Improvement (Budget B)	85.13	2
11	Repairs to Primary School Buildings (Budget E )	169.27	4
12	Excess of Income over Expenditure	76.29	2
	Total	4479.93	100

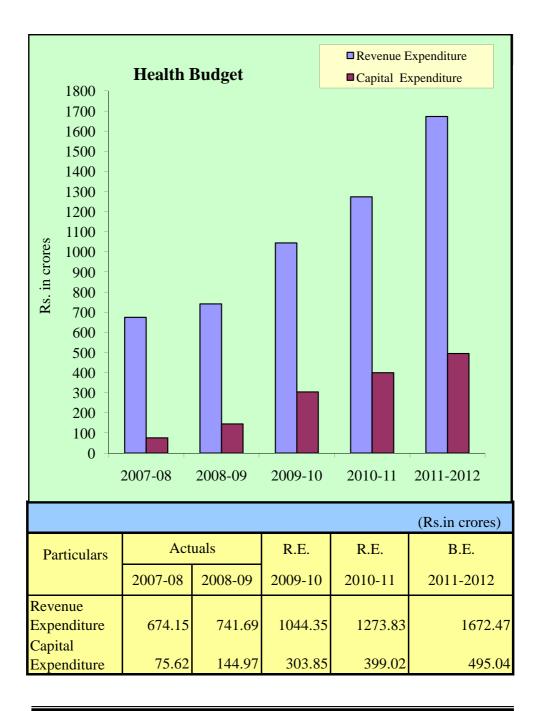
CAPITAL EXPENDITURE - BUDGET ESTIMATES 'A', 'B' & 'E'

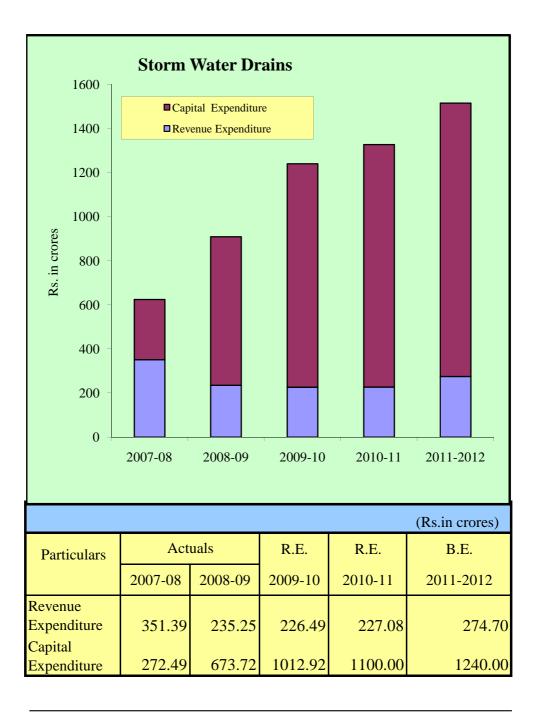




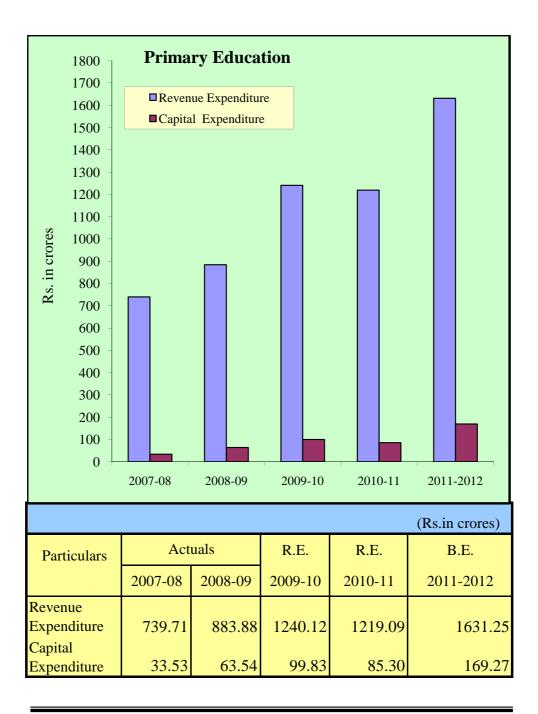


xiii

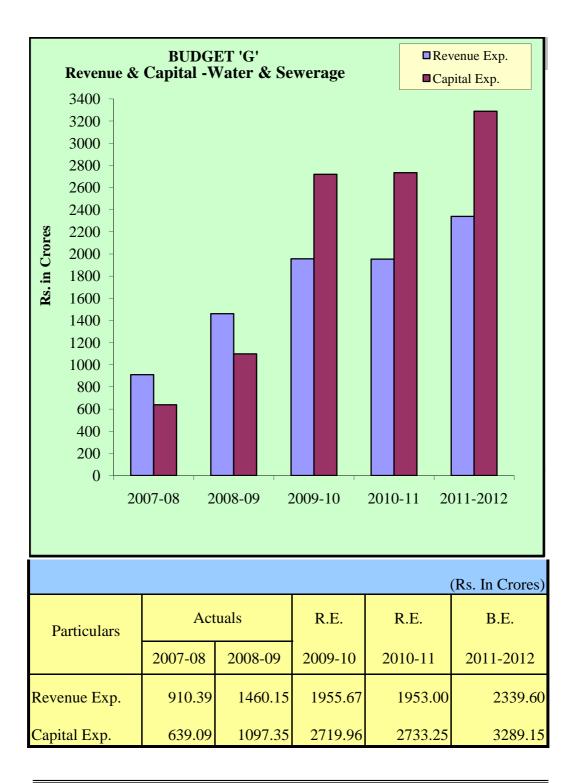




XV



xvi

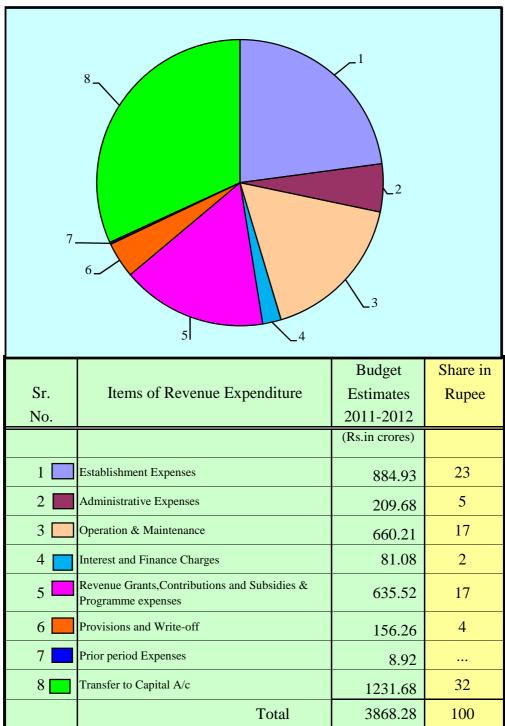


xvii

# **REVENUE INCOME - BUDGET 'G'**

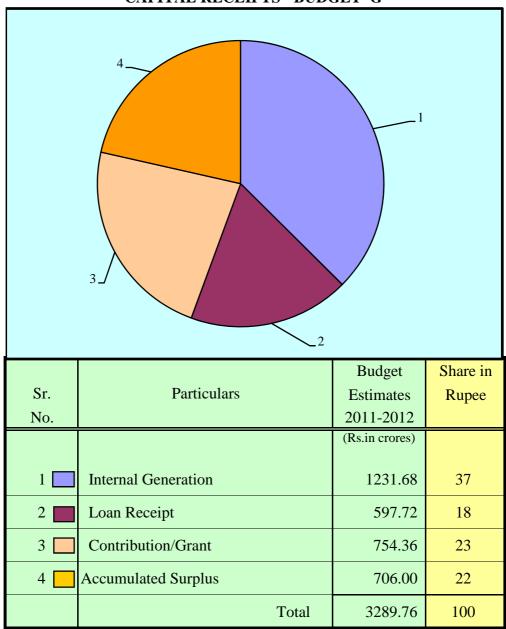
Sr. No.	Sources of Revenue Income	Budget Estimates 2011-2012	Share in Rupee
		(Rs.in crores)	
1	Water Charges	546.92	14
2	Water Tax	256.12	7
3	Water Benefit Tax	823.86	21
4	Sewerage Charges	280.15	7
5	Sewerage Tax	374.02	10
6	Sewerage Benefit Tax	494.28	13
7	Other Receipts	1092.93	28
	Total	3868.28	100

xviii



**REVENUE EXPENDITURE - BUDGET 'G'** 

xix



### CAPITAL RECEIPTS - BUDGET 'G'

XX

Sr.	Division wise	Budget	Share in
No.	Capital Expenditure	Estimates 2011-2012	Rupee
		(Rs.in crores)	
1 🗖	Common Services	12.66	
2	Water Operation	1052.44	32
3	Water Supply Project	1546.64	47
4	Sewerage Operation	178.25	6
5	Sewerage Project	275.06	8
6 🗖	M S D P	224.10	7
7 🗖	Anticipated surplus during the year	0.61	
	Total	3289.76	100

# CAPITAL EXPENDITURE - BUDGET 'G'

xxi