

Alternative Sources of Financing Capital Expenditure in Navi Mumbai Municipal Corporation

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ABSTRACT

In India, the urban local bodies do not have decentralisation in various functions. The Navi Mumbai Municipal Corporation is planned as modern Municipal Corporation. Municipal Corporation invested financial resources in development for civic infrastructure. Therefore population, industries, educational institutions, markets, transport and other facilities are expanding very fast. But Municipal Corporation is facing number of issues in financing civic infrastructure facilities. The Municipal Corporation of Navi Mumbai must raise funds from capital market through municipal bonds. More investment must be made in civic infrastructure. Similarly corporation must spend more funds on poor, welfare of women and children. Municipal Corporation must monitor and protect environment. It must give more priorities for processing of solid and e-waste, protect local culture, primary and secondary education, health care for all and technology in provision of civic services. It must develop human resource and create best place to live in metropolitan region.

Keywords: Culture, Health, Population

Introduction:

The urban local bodies play a crucial role in delivery of social and economic services. Fiscal status of these bodies is, therefore, important for overall economic development, particularly for the up-liftment of the masses (Purohit M.C. 2016). Local finance at the bottom of the public finance pyramid can serve as the engine of economic development. Due to modern infrastructure and housing, people from all over India are migrating to Navi- Mumbai. They migrate mainly for employment and business purposes. After establishment of Navi Mumbai Municipal Corporation, it has become government agency which solves daily issues with the people. The sewage treatment plants do not treat entire sewage water. Every day thousands million litres of untreated sewage is getting mixed with fresh stock of river and sea water. Overall pollutions of water bodies and wetlands are increasing fast. There are numbers of species exists in ponds, rivers, Arabian Sea near corporation area. The mammals, fish and migratory birds are very sensitive to environmental degradation in corporation. The people in corporation are involved in destruction of wetlands. They are cutting forest, man grows and destroying water bodies.

Review of literature:

Accounting is an important tool of financial management. It involves not only keeping all the records of financial transactions but also analysing these transactions and supplying the necessary information to the authorities for forecasting, planning and exercising control (Jariwala, V.S. 2016). A lot of funds are spend by the public authority for the common people and for the creation a various socio-economic infrastructures. The government needs a lot of money to run it successfully (Sharma, D. 2013). Municipal Corporations are local self-government body that administers the cities (Katyal H.and Raj K.2014). The municipal corporations are providing the constant and regular delivery of services to people (Madumo, O. S.2015). The groundwater is

affecting wetland salinity, particularly in closed-basin wetlands receiving groundwater discharge (Baugha J.W. et.al. 2018). The extent of urbanization and land-use activities strongly influence the species composition of wetland plant communities. The wetlands are degrading, with extensive human activity. The wetlands currently provide more provisioning and cultural services, while regulatory and supporting services are predominantly provided by urban wetlands, followed by reference wetlands, though they are highly impacted (Wondie A. 2018).

Objectives of study:

The major objective of this paper is to evaluate the revenue receipts and expenditure as well as capital receipts and expenditure of corporation since its establishment. The aim is also to find the statistical significance of the subheads of revenue and expenditure. The objective of this study is to provide the policy implication to increase the financial options to finance capital expenditure to Municipal Corporation.

Data and Methodology:

We downloaded the recent budgets from municipal corporation website. The secondary data of revenue and capital receipts and expenditure is available from 2001-2018. We have analysed this data in SPSS@24 and STATA @11 software's. We have applied the annual compound growth method.

Economic model:

We have developed economic model related to total revenue and expenditure of Municipal Corporation. It is given in short as follows

$$\sum_{i=1}^n TR = \left[\sum_{i=3}^n RR + \sum_{i=1}^n CR \right] + G + T \quad (5)$$

Total revenue at particular year comprises as revenue receipts, capital receipts, grants and tax to corporation. The revenue receipts and capital receipts for particular year are further divided as follows.

$$\sum_{i=3}^n RR = GS + PR + PW + H + SWM + CA + F + PASW + OS \quad (6)$$

The revenue receipt of corporation at particular year comprises as General services, planning and regulation, public works, health, solid waste management, civic amenities, forestry, poverty alleviation and social welfare, other services.

$$\sum_{i=3}^n CR = GA + TP + FB + A + ACP + SD + WS \quad (7)$$

The capital receipts are at particular year mainly divided into general administrative services, town planning, fire brigade, Vishnu das Bhave Auditorium, sports and cultural programs, security deposits and water supply,

$$\sum_{i=1}^n TE = \left[\sum_{i=3}^n RE + \sum_{i=1}^n CE \right] + T \quad (8)$$

Total expenditure of corporation in particular year comprises as revenue expenditure, capital expenditure and taxes. We have also given the revenue expenditure of Municipal Corporation as follows.

$$\sum_{i=3}^n RE = GS + PR + PW + H + SWM + CA + F + PASW + OS \tag{9}$$

Revenue expenditure in particular year comprises as general services, planning and regulation, public works, health, solid waste management, civic amenities, forestry, poverty alleviation and social welfare and other services.

$$\sum_{i=3}^n CE = GA + PR + PW + H + SWM + CA + F + PASW + OS + L \tag{10}$$

In various budgets, the capital expenditure at any year is mainly divided as general services, planning and regulation, public works, health, solid waste management, civic amenities, forestry, poverty alleviation and social welfare, other services and loans.

The growth of revenue and capital receipts and expenditure:

We have estimated the growth of revenue and capital receipts and expenditure from 2000-01 to 2017-18. We have calculated the annual compound growth rate for the above period. It is explained as follows.

Table 1: The revenue and capital receipts and expenditure (2000-01 to 2017-18) (CAGR)

Particulars	CAGR
Revenue Expenditure	12.54
Capital Expenditure	14.06
Tax Refund	6.88
Revenue Receipts	13.19
Capital Receipts	9.73
Grants	9.49
Government Tax	6.83

Source: Calculated from 2000-2018 budgets

Above table shows that revenue expenditure has grown at 12.54 per cent from 2000-01 to 2017-18. Municipal Corporation is spending regularly on various civic services. The capital expenditure was observed as 14.06 per cent from 2000-01 to 2017-18. It is highest expenditure done by corporation to create and upgrade civic infrastructure. We found capital expenditure more than revenue expenditure over the period of time. The tax refund growth was observed as 6.88 per cent. The revenue receipts from 2000-01 to 2017-18 was 13.19 per cent. Such revenue receipts are less than revenue expenditure. We have also observed the capital receipts grown as 9.73 per cent from 2000-01 to 2017-18. We can conclude that the revenue receipts are more than

capital receipts. The growth of grants was 9.49 per cent over the period of time. The growth of government tax is observed as 6.83 per cent from 2000-01 to 2017-18.

The revenue receipts:

We have calculated the Compound annual growth rate from 2000-01 to 2017-18 period for revenue receipts of corporation. The per cent of growth rate over the period of time of various subheads is presented in the following table.

Table 2 : The Revenue receipts of Navi Mumbai Municipal Corporation (CAGR) (2000-01 to 2017-18)

Categories	Revenue Receipts	Per cent
General administration	General Administrative Service	13.54
	Municipal Estate	38.04
Revenue	Cess/LBT	15.88
	Property Tax	14.38
	Pay and Park	36.63
	Licence Fees	24.85
Planning and regulation	Town Planning	21.46
	Encroachment	22.25
Public work	Road	18.45
	Street lighting	36.51
Urban forestry	Gardens	15.15
Poverty alleviation and social welfare	Art and Social Welfare	7.10
Health	Crematorium	30.96
	Malaria Eradication	44.04
Solid Waste Management	Cattle Pound	4.42
	Solid Waste Management	10.99
	Dumping Ground	135.72
Civic amenities	Markets	49.05
	Fire Brigade	-23.46
	Vishnudas Bhawe Auditorium	5.81
	Water Supply	4.10
	Sewerage System	-18.03
	Morbe Dam	28.69
Urban forestry	Tree Authority	7.68
Poverty alleviation and social welfare	Welfare Schemes for Schedule Tribes & BPL	26.59
	Public Toilets in Residential/Slum Area	27.66
	Women and Child Welfare Schemes	-28.39
Health	Public Health and Hospital Service	12.66
Other services	Primary Education	-100.00
	Secondary & Higher Secondary Education	19.78

Source: As per table 1

The growth of revenue receipts through general administration services was 13.54 per cent from 2001-2018. The general administrative receipts are higher because of recovery of government taxes, penalty and interest income. The revenue receipts from municipal estate were 38.04 per cent over the period of time. The receipts from municipal estate are higher because office building rents, office canteen and other rent. The revenue receipts from LBT from 2001-2018 was 15.88 per cent. LBT is higher because LBT – industrial taxes, LBT

wholesalers, LBT tax on retailers, new building construction, LBT and grant in aid from government. The revenue receipts from property tax were 11.92 per cent. The property tax for Navi Mumbai Municipal Corporation includes commercial, residential and industrial property tax, property transfer fees. The revenue receipts from town planning were 21.46 per cent. The town planning in corporation mainly comprises as development changes. The revenue receipts from encroachment were 22.25 per cent. A receipt from encroachment means encroachment income. The revenue receipts from licence fees were 24.85 per cent. The Municipal Corporation charges licence fees. The revenue receipts from roads was 18.45 per cent from 2000-2018. Various fees are charged by the Navi Mumbai Municipal Corporation related to roads. Road cutting fees cannot be viewed as a major net revenue source (Samad Rokshana Binta 2009). But few per cent is covered as road repairing charges.

The revenue receipts from street lightening was 36.51 per cent from 2000-2018. The street light included as penalty/leader, van rent. The pay and park receipts was 36.63 per cent. The revenue receipts from through gardens in city were 15.15 per cent. The receipts from gardens comprises as sale of grass, fruits, nursery, dead and fallen trees etc. In Navi Mumbai Municipal Corporation, sale of grass and dead trees are more. Therefore corporation sales such trees and grass. The growth of revenue receipts from market was 49.05 per cent. It includes receipts from milk centres and rent in corporation area. We found the negative receipts from the arts and social welfare from (-6.96 per cent) 2000-2018 periods. The receipts from arts and social welfare include gymnasium, samaj mandir. The revenue receipts from crematorium was 30.96 per cent from 2000-2018. The crematorium includes crematorium fees, rent from space, sale of wood. The revenue receipts from cattle compound was only 4.42 per cent. Cattle ponds comprises as fees, penalties, electric animal crematorium. The revenue receipts from solid waste have grown as 10.99 per cent. The solid waste related receipts are from fines and sewage tax. The receipts from dumping ground have increased as 135.72 per cent. The dumping ground receipts considered as debris, dumping ground fees, carbon credit. The revenue receipts from malaria eradication were 44.04 per cent during 2000-2018. The revenue receipts from fire brigade was negative (-23.46 per cent) from 2000-2018. Receipts increased due to fire non objection certificate, crackers sale etc.

The revenue receipts from the Vishnu Das Bhave Auditorium was 5.81 per cent from 2000-2018. The revenue receipts from tree plantation was 11.80 per cent from 2000-2018. The tree authority receipts are as tree cess. The revenue receipts from water supply were 4.10 per cent. The revenue receipts from sewerage system was negative (-18.03 per cent) from 2000-2018. The sewage system receipts include drainage connection charges, suction unit, fees, jetting machine. The revenue receipts from Morbe Dam were 28.69 per cent. Morbe dam receipts includes sale of water and royalty. The revenue receipts from welfare schemes from scheduled tribe and BPL was 26.59 per cent. Such receipts have observed from photo pass fees. The revenue receipts from public toilet and toilets in slum pockets were 27.66 per cent. The expenditure on women and child welfare was negative (-28.39 per cent). The receipts from public health and hospital services were 12.66 per cent. The primary education receipts was -100 per cent from 2000-2018. The primary education receipts are as municipal education cess. Government does not get any revenue from primary education. The revenue from secondary and higher secondary was 19.78 per cent. The receipts are considered as testing charges/school rent.

Revenue expenditure:

We have calculated the growth of subheads of revenue expenditure from 2000-2001 to 2017-18 period. The growth of subheads is presented in the following table.

Table 3 The Revenue expenditure of Navi Mumbai Municipal Corporation (CAGR) (2000-01 to 2017-18)

Categories	Revenue Expenditure	Per cent
General administration	Corporate's	18.18
	Municipal Estate	45.06
Planning and regulation	Town Planning	-7.45
	Service –Encroachment	5.15
Public works	Service - Road	11.74
	Street Lighting	12.57
Urban forestry	Lakes and Ponds	69.13
	Gardens	21.82
Civic amenities	Market	40.37
Sanitation and SWM	Cattle Pound	-100.00
	Veterinary	30.67
	Solid Waste Management	18.86
	Dumping Ground	33.19
Health	Environment Monitoring	16.05
	Malaria Eradication	11.79
	Crematorium	25.13
Civic amenities	Primary Health	31.74
	Fire Brigade	-13.80
	Vishnudas Bhawe Auditorium	11.30
	Disaster Management & Control Room	13.51
	Sports & Cultural Programme	32.67
	Water Supply	10.88
	Sewerage System	12.16
	Morbe General Administrative Expenses	8.51
Poverty alleviation and social welfare	Art & Social Welfare Centre	37.09
	Welfare Schemes for Schedule Tribes & BPL	236.09
	Welfare Schemes for Backward Class	62.80
	Education, Training & Service Centre for Persons with Disabilities (PWDs)	7.15
	Public Toilets in Residential/Slum Area	15.37
	Engineering works in Urban Poor Areas	20.79
Public works	Women and Child Welfare Schemes (Gender Budget)	42.81
Other services	Public Health and Hospital Service	23.59
	Primary Education	5.21
	Secondary School Department	7.11

Source: As per table 1

The revenue expenditure growth on corporate's was 18.18 per cent. The revenue expenditure on municipal estate was 45.06 per cent from 2000-2018. The expenditure on town planning was -7.45 per cent from 2000-2018. The revenue expenditure on encroachment was 5.15 per cent. The revenue expenditure on roads was

11.74 per cent. The revenue expenditure on street light was 12.57 per cent. The revenue receipts on lakes and ponds were 69.13 per cent. The revenue expenditure on gardens was 21.82 per cent. The revenue receipts on market were 40.37 per cent. The revenue expenditure on arts and social welfare centre was 37.09 per cent from 2000-2018. Such expenditure consists of repairs and maintenance of senior citizen facilities. The revenue expenditure on crematories was 25.13 per cent. The revenue expenditure was on cattle pond was -100 per cent from 2000-2016. The revenue expenditure from veterinary services was 30.67 per cent. The revenue expenditure growth on solid waste management was 19.26 per cent. The revenue expenditure on dumping ground was 33.19 per cent. The expenditure on environment monitoring was 16.05 per cent. The revenue expenditure on primary health care was 31.74 per cent. The expenditure on fire brigade was -13.80 per cent. The revenue expenditure on Vishnudas Bhave Auditorium was 11.30 per cent. The revenue expenditure on disaster management was 13.51 per cent. The expenditure on sports and cultural programme was 32.67 per cent. The revenue expenditure on water supply was 10.88 per cent.

The growth of revenue expenditure on sewage system was 12.16 per cent. The revenue expenditure on Morbe general administrative expenses was 8.51 per cent. The revenue expenditure on education, training and services centre from persons with disabilities was 7.15 per cent. The revenue expenditure on public toilets was 15.37 per cent from 2000 to 2018 period. It includes repair maintenance, mobile toilet and open defecation free city. The revenue expenditure on women and child welfare scheme was 42.81 per cent. The revenue expenditure on public health and hospital services was 23.59 per cent. The revenue expenditure on primary education was 5.21 per cent. Primary Education means repair and maintenance of school, furniture, electricity, internet telephone. The revenue expenditure on engineering work in urban poor was 20.79 per cent. The revenue expenditure growth on secondary school department was 7.11 per cent from 2000 to 2018.

Growth of capital receipts:

We have calculated the annual compound growth rate of various subheads of capital receipts from 2000-01 to 2017-18 period. Such growth rate is presented in the following table.

Table 4 : The Capital receipts of Navi Mumbai Municipal Corporation (CAGR) (2000-01 to 2017-18)

Capital receipts	Per cent
General Administrative Service	8.05
Town Planning	-9.00
Fire Brigade	-11.34
Vishnudas Bhave Auditorium	8.64
Sports & Cultural Programme	8.08
Security Deposit	2.72
Water Supply	-0.98

Source: As per table 1

The capital receipts growth from general administrative services was 10.29 per cent from 2000-2018. The town planning capital receipts was -3.76 per cent from 2000-2018. Town planning receipts included as building permission deposit, tree planting. The capital receipts growth from fire brigade was 10.29 per cent. The capital receipts from Vishnudas Bhave Auditorium (VBA) were 8.64 per cent. It is considered as deposits by VBA. The capital receipts growth from sports and cultural programs were 8.08 per cent. The capital receipts from security deposit were 10.94 per cent. The capital receipts growth from water supply was 18.31 per cent.

Capital expenditure:

We have also calculated the growth rate of the subheads of capital expenditure from 2000-01 to 2017-18. It is presented in the following table.

Table 5 The Capital Expenditure of Navi Mumbai Municipal Corporation (CAGR) (2000-01 to 2017-18)

Categories	Capital Expenditure	Per cent
General administration	Corporates	48.60
	General Administrative Service	21.96
	Municipal Estate	3.01
Public works	Road	18.40
	Street Lighting	7.55
	Pay and Park	26.95
Planning and regulation	City Beautification	45.43
Urban forestry	City Beautification	9.23
	Gardens	14.24
Poverty alleviation and social welfare	Gardens	42.12
Health	Art & Social Welfare Centre	50.18
Sanitation and SWM	Crematorium	32.07
	Dumping Ground	100.58
Civic amenities	Environment Monitoring	-12.39
	Fire Brigade	44.49
	Vishnudas Bhave Auditorium	86.10
	Disaster Management & Control Room	51.09
	Sports & Cultural Programme	83.25
	Providing Civic Amenities in Condominium	-11.05
	Water Supply	10.96
	Sewerage System	42.08
Loans and grants	Tree Authority	17.31
	NMMT Grant	35.61
	Security Deposit	7.63
	Loan/Finance from Institutions	30.76
Poverty alleviation and social welfare	Morbe Dam	33.66
	Welfare Schemes for Schedule Tribes & BPL	120.09
	Welfare Schemes for Backward Class	42.25
	Education, Training & Service Centre for Persons with Disabilities (PWDs)	-0.06
Health	Public Toilets in Residential/Slum Area	49.52
	Public Health and Hospital Service	8.66
Poverty alleviation and social welfare	engineering works in Urban Poor Areas	33.55
Other services	Primary Education	24.41
	Secondary & Higher Secondary Education	11.81
Grants and loans	Jawaharlal Nehru National Urban Renewal Mission (JnNURM-I)	-100.00
	Jawaharlal Nehru National Urban Renewal Mission (JnNURM-II)	-100.00

Source: As per table 1

The capital expenditure growth from corporation was 48.60 per cent from 2000-2018. The capital expenditure growth on general administrative was 12.52 per cent. Total administrative expenses consist of expenses on administration. The capital expenditure on municipal estate was 8.57 per cent from 2000-2018. The capital expenditure on roads was 18.40 per cent. The capital expenditure on street lightening was 7.55 per cent. The capital expenditure on pay and park was 26.95 per cent from 2000-2018. Pay and park means expenditure on truck terminals. The capital expenditure on city beautification was 45.43 per cent. The capital expenditure on gardens was 14.24 per cent. The capital expenditure on crematorium was 32.07 per cent from 2000-2018. The capital expenditure on dumping ground was 100.58 per cent from 2000-2018. Dumping ground expenditure means development of dumping ground, waste processing unit. The capital expenditure on environment monitoring was -12.39 per cent. The capital expenditure on fire brigade was 44.49 per cent from 2000-2018. The capital expenditure on Vishnudas Bhave Auditorium was 86.10 per cent. The capital expenditure growth on disaster management and control room was 51.09 per cent. The capital expenditure growth on sport and cultural program was 83.25 per cent.

The growth of capital expenditure on tree authority was 17.31 per cent. The capital expenditure on NMMT grant was 35.61 per cent. They are transferred to corporation. The capital expenditure on finance to institutions was 37.89 per cent. The security deposit CAGR was 24.23 per cent from 2000-2018. Security deposit comprises as SD refund and refunds to contractors. The capital expenditure on water supply was 30.76 per cent. The capital expenditure on Morbe dam was 33.66 per cent. The capital expenditure on welfare schemes for scheduled tribe and BPL families was 120.09 per cent. The capital expenditure on welfare schemes for backward class was 42.25 per cent. The capital expenditure on education, training and service centre for persons with disabilities was -0.06 per cent. The capital expenditure on public toilet in residential /slum area was 49.52 per cent. The capital expenditure during 2000-2018 on public health and hospital services was 8.66 per cent. Capital expenditure growth on primary education was 24.41 per cent. An engineering work in urban poor area was 33.55 per cent from 2000-2018. The capital expenditure for providing civic amenities in condominium was -11.05 per cent. The capital expenditure growth of municipal corporation for the secondary and higher secondary education was 11.81 per cent. The capital expenditure as Jawaharlal Nehru Urban Renewal Mission (JNNURM) 1 and 2 is nil.

Regression results:

In order to study the relationship of different variables with the revenue receipts and expenditure, capital receipts and expenditure, we have used ordinary least square regression model (Greene W. 2003). The regression model is defined as follows.

$$Y_{it} = \alpha + \beta_{X1} + \beta_{X2} + \beta_{X3} + \beta_{X4} + \dots + \epsilon \tag{11}$$

Where Y_{it} is the dependent variable and it is considered as municipal corporations revenue receipts, revenue expenditure, capital receipts and capital expenditure over the period of time. The independent variables are considered as the sub head of each revenue and expenditure.

Table 6 : Regression result of Revenue receipts and expenditure

Revenue receipts			Revenue expenditure		
Variables	Co-efficient	T test	Variables	Co-efficient	T test
LBT	0.84** (0.20)	4.15	Municipal estates	2.38** (0.23)	10.26
Property tax	2.20*** (0.57)	3.86	Public health and hospitals	6.10** (0.27)	22.63
Town planning	1.17** (0.25)	4.57	Primary education	1.25 (0.43)	2.89
Women and child welfare schemes	3.83* (4.06)	0.94	Engineering works in urban poor	-18.29 (5.91)	-3.09
Constant	-5385.81 (5970.94)	0.90	Secondary school department	82.69** (11.59)	7.13
R= 0.99 R ² =0.99 Adjusted R ² =0.99	Std. Error of the Estimate= 3649.65	F=283.73	Constant	13345.17* (910.25)	14.66
			R= 1 R ² =1 Adjusted R ² =0.99	Std. Error Of the Estimate=35.51	F=681.31

Figures in brackets are standard error

* significant at 1 per cent, ** significant at 5 per cent, *** significant at 10 per cent

Local body tax is positively co-related with revenue receipts. Local body tax is a good source of revenue. LBT in corporation area is higher because LBT on industrial taxes, LBT wholesalers, LBT tax on retailers, new building construction, LBT and grant in aid from government. Property tax is paid on real estate which is owned by the businessman and common residents. Property tax is levied on the basis of rentable value of the property. The property tax includes commercial, residential and industrial property tax, property transfer fees. The built up area is increasing in corporation area therefore the property tax collection is also increasing. The town planning is positively co-related to revenue receipts. The municipal corporation has invested too much in town planning. The town planning mainly comprises as development changes and it includes building, permission, penalty, additional development charges and lastly security fees. Therefore it is positively co-related with revenue receipts. The expenditure on women and child welfare schemes is positively co-related with revenue receipts. The municipal corporation has spent money on women and child welfare schemes. Therefore it is positively co-related and statistically significant. The revenue expenditure is positively co-related to municipal estates. The municipal estate expenditure as receipts and maintenance office, residential building, repair and electrification of municipal corporation, building, water charges, property taxes, depreciation, salary and allowances, overtime, medical reimbursement, LTA and other administrative expenses. The Municipal Corporation has spent maximum resources on development of municipal estates in corporation area. The municipal corporation is spending more resources on public health and hospitals. It comprises as surgical medicine, bio medical pathology, repair, maintain hospitals, sonography, disposal of dead bodies, housekeeping, electricity water bill, hospital rent and ambulance counselling. Most of the poor people are getting treatment in various hospitals in corporation area. The municipal corporation is spending more on the primary education. Primary Education means repair and maintenance of school, furniture, electricity, internet telephone. It is a huge expenditure for corporation every

year. An engineering works in urban poor is negatively co-related with revenue expenditure. It is statistically significant with revenue expenditure. The Engineering work in urban poor areas included as repair, maintenance to road, foot paths and gutters. The municipal corporation is spending more on the secondary school department. Such relationship is positively co-related and statistically significant. The secondary school in department included as vehicles, salary, overtime, medical LTA, travel, electricity, office, expenses. Money is spent regularly on secondary education in corporation area.

Table 7 : Regression results for capital receipts and expenditure

Capital Receipts			Capital Expenditure		
Variables	Co-efficient	T test	Variables	Co-efficient	T test
Fire brigade	1.32* (0.08)	15.65	Women and child welfare schemes	63.34** (6.11)	10.35
V.B. Auditorium	13.08 (5.00)	2.61	Primary education	51.31* (0.83)	61.43
Sport and cultural program	5.15** (1.11)	4.61	Dumping ground	-35.16** (2.00)	-17.53
Security deposit	1.06* (0.02)	44.04	Environment monitoring	7.23 (23.01)	0.315
Water supply	1.23* (0.28)	4.35	Constant	9946.13** (1461.74)	6.80
R=1 R ² =1 Adjusted R ² =0.99	Std. Error of the Estimate=35.5 1	F=681.31	R=1 R ² =1 Adjusted R ² =0.99	Std. Error of the Estimate=1542.03 0	F=206 3.27

Figures in brackets are standard error

significant at 1 per cent, **significant at 5 per cent, *significant at 10 per cent*

The capital receipts from the fire brigade are positively co-related and statistically significant. Fire Brigade related expenditure comprises as capital fees, buildings and special building and capitalisation fees. The capital receipts from Vishnudas Bhave Auditorium (VBA) are positively co-related and statistically significant. It is mainly because many people regularly come to watch various dramas. The maximum revenue is generated for Municipal Corporation from auditorium. It is also considered as deposits by VBA. The capital receipts from the sports and cultural programs are positively co-related and statistically significant. In municipal corporation area, many shows are regularly conducted and sports activities are conducted. Therefore it is statistically significant and positively co-related with capital receipts. The security deposit is positively co-related to capital receipts and it is statistically significant. The capital receipt from water supply is positively correlated and statistically significant. The water supply provides revenue to Municipal Corporation. It included as water connections, capital contribution, water connection, security deposit. Such receipts will increase over the period of time.

The capital expenditure on women and child welfare schemes are positively co-related and statistically significant in corporation area. The municipal corporation has done more expenditure on women and child welfare schemes. The capital expenditure on the primary education is positively co-related and statistically significant. Primary education expenditure by corporation is related to construction of new schools, fire extinguisher and purchase school benches in different schools. The capital expenditure on dumping ground is

negatively co-related and statistically significant. Dumping ground expenditure is related to development of dumping ground, waste processing unit in corporation area. The capital expenditure on environment monitoring is positively co-related and statistically significant in Navi Mumbai Municipal Corporation. Environment monitoring requires expenditure and it is related to innovative ideas such as green housing, solar heaters, water re-cycling, self-generated eco city. Municipal Corporation is spending on environment monitoring but numbers of projects are few.

Finding of study:

Municipal Corporation of Navi Mumbai does not get revenue receipts from arts, social welfare, fire brigade, sewerage system, women and child welfare schemes, primary education. The revenue expenditure is co-related to town planning, roads, cattle pounds, fire brigade. The capital receipts are more from general administrative services, Vishnudas Bhave Auditorium, sports and cultural programs, security deposits. The capital receipts are low from fire brigade and water supply. The capital expenditure is low on environment monitoring and education training and service centres for persons with disabilities. The capital expenditure is more on administrative services, roads, pay and parks, city beautification, gardens, dumping grounds. Similarly fire brigade, environmental monitoring, Vishnudas Bhave Auditorium, sports and cultural programs, sewage system has spent more money in corporation. The welfare schemes for SC and ST, primary and secondary education, health care also given importance in capital expenditure. The Municipal Corporation is spending money on providing infrastructural services in developed areas only.

Conclusion and policy implication:

The local bodies in Maharashtra are highly controlled and regulated by state and central government (Saruparia Chitra 2013). But we found number of problems in corporation area. Therefore, Municipal Corporation must implement following policies to overcome with various issues. It is observed that municipality has led to a quite low utilization of debt instruments (Spacek, David and Petra Dvorakova 2011). Municipal bonds are a feasible tool for financing civic infrastructure projects in corporation. The municipal bonds may play a crucial role for finances of corporation and enable them to move towards raising resources (Nallathiga, Ramakrishna 2015). Municipal Corporation must increase its financial capacity through debt instruments. All over world, the municipal corporations are already using municipal bonds to raise financial strength from capital market. Development now viewed as dynamic process rather than only commercial development of any area. Municipal Corporation must develop best destination to live and work for its own people.

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