

EXECUTIVE SUMMARY

Vadodara is the third largest city in the state of Gujarat, with an area of 149 sq km and a population of 13 lakh, located between Ahmedabad and Surat. Post independence, the city has experienced rapid population growth and significant metamorphoses. Though the existence of Vadodara can be traced back to the 2nd century B.C. its existence as a city dates back to 1816 when it came under British Rule. The modernisation of the city began in 1882 with Sayajirao Gaikwad the III ascending the throne of the Baroda State. At the time of the country's independence, Vadodara boasted of high quality urban infrastructure viz. good water supply, drainage and transport facilities; also, Vadodara was firmly entrenched as an educational and cultural centre of Western India. Post-independence, the city witnessed quantum industrial and demographic growth with the city's infrastructure supporting this growth. However, macro economic developments and the growth of neighbouring urban centres like Surat and Ahmedabad have resulted in the economic slowdown of the Vadodara city in the last two decades.

Vadodara still measures well on various liveability indices in comparison with other cities. However, today it stands a strong risk of falling into a low economy trap and of thus not being able to attract adequate investments to sustain itself.

Funding for infrastructure development, available under the aegis of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), provides Vadodara an opportunity to reinvent itself in line with the Vibrant Gujarat vision of the Government of Gujarat. The Vadodara Municipal Corporation (VMC), which is in charge of the administration of Vadodara city, has conceived a six-year investment plan to improve the basic infrastructure services of the entire area under its jurisdiction, and set the stage for the next generation of services. These investments in infrastructure would create a tangible impact on the lives of citizens, but they may not drive the city on the economic growth trajectory unless the economic revival of the city is envisioned.

This City Development Plan identifies the economic growth strategies for Vadodara, which would enable it to reinvent itself economically while carrying out comprehensive infrastructure improvement to enhance the quality of life of its people.

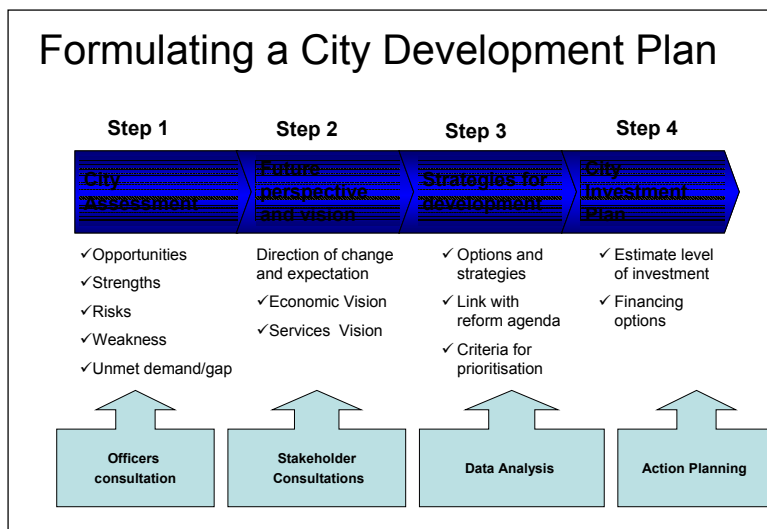
I. Process of preparation of CDP

As per the requirements of JNNURM, a City Development Plan (CDP) has been formulated. This offers both a perspective and a vision for the future development of the city and involves an extensive consultative process. This City Development Plan is thus also called the “Voice of Vadodara”; it addresses the following issues:

- ◆ Where are we now?
- ◆ Where do we want to go?
- ◆ What do we need to address on a priority basis?
- ◆ What interventions do we make in order to attain the vision?

The process of preparation of the City Development Plan has been divided into four steps as shown below:

The approach followed to prepare the CDP has been of the nature of social engineering, addressing not only the issues raised by the key stakeholders, but also those voiced by general citizens and the younger generation in particular. The feedback from the consultation process and citizen surveys have been used to formulate a common Vision for Vadodara city, which would be owned by its citizens.

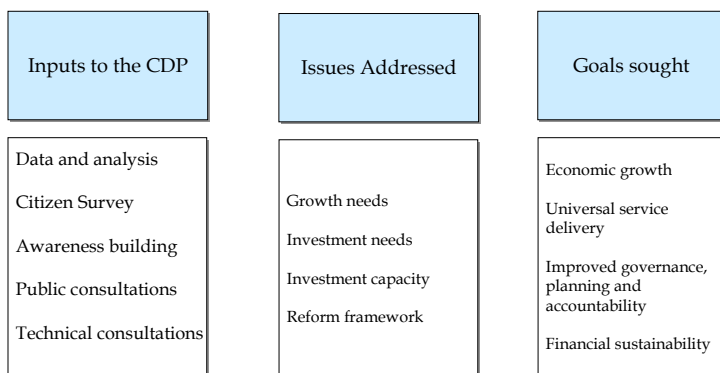


II. Vadodara in the years to come

The City Development Plan has identified investments in the areas of water supply and sewerage, roads, bridges and flyovers, slum up gradation, solid waste management, environmental management of water

bodies, street lighting, etc. These would alter the face of Vadodara in several significant ways. Vadodara would enjoy near 100% coverage in all core urban services by the year 2009 and 100% coverage of all urban services by 2011. In the years to come, the city can look forward to better social and environmental infrastructure with improved coverage and service levels. In order to make the investments in infrastructure sustainable and direct them towards economic development, Vadodara city would also need to reposition itself.

The CDP Process for Vadodara



The next decade would see structural changes in the Gujarat state economy with contribution of agriculture to gross domestic product (GDP) reducing from 16.1% in 2001 to 7.7% by 2015 and 5.7% by 2020¹. This change would be mainly brought about by an increase in contribution by industries and services that are expected to grow at a

¹ CRISIL Estimates

compounded annual growth rate (CAGR) of about ten plus percentage. It is imperative that Vadodara builds on this structural change by leveraging on its historical and cultural legacy.

The city could emerge as a centre for services and knowledge-based industries. Industrial development in the region would however be spearheaded by neighbouring cities like Ahmedabad and Surat. But Vadodara should retain its edge in petrochemicals and its diverse industrial mix as well as focus on developing ancillary and support industries to serve industries based in the neighbouring cities and regions.

The investments in infrastructure should be directed towards positioning the city as an educational and medical hub and attracting investment linked to its strengths. In that context, VMC would need to earmark zones for education campuses and set up technology parks with support from high-end utilities. Additionally, VMC would need to influence the state policy and seek support in developing Vadodara as a part of the Knowledge Corridor of Ahmedabad and Gandhinagar, as well as a part of the tourism circuit of Gujarat.

III. Historical legacy of Vadodara

Since ancient times, Vadodara has been a service and administrative centre and an intermediate point on the logistic map. It was connected with Mumbai and Ahmedabad first by road and then by rail in the 1860s. The genesis of its development can be traced to 1875 when Maharaja Malhar Rao was dethroned by the British and a new Maharaja (Sayajirao Gaikwad the III) of Vadodara was placed on the throne and Shri T. Madhavrao was appointed as the Diwan of the State. The next five years saw the foundation of a new order in the history of Vadodara. Various administrative reforms and social changes were ushered. The stress was on creating a conducive environment for trade and commerce.

In 1882, Maharaja Sayajirao Gaikwad III, on attaining adulthood, took over the mantle of the Baroda State from the Diwan Shri T Madhavrao; the period from 1882 to 1900 saw the consolidation of reforms and the development of physical and social infrastructure. Setting up of the first cotton mill; the first industrial survey and systematic geological survey; enactment of the Municipal Act; construction of Ajwa Water Works and the underground sewerage system; and the extension of railway lines were some of the initiatives taken by the new Maharaja. Also, the Maharaja focussed on setting up health centres and starting various educational institutions.

The period 1900-1947 witnessed the efflorescence of developmental activities in the city. Efforts were made to develop the city in a planned manner as an educational and cultural capital. This phase saw the democratisation of the local self-government, the introduction of property tax legislation, the codification of state laws, the separation of judicial and executive powers, etc. In support of trade and commerce, cooperative credit societies were legalised, the Bank of Baroda was established and the Board of Economic Development was formed. Planned development of the city was introduced with the establishment of the City Improvement Trust for Vadodara under a Town Planner. Vadodara was systematically planned and developed with adequate road widths, administrative centres, water supply, sewerage etc. On the social development front, primary education was made compulsory for all children and an adult literacy campaign was launched. This phase resulted in the city achieving the status of an educational and cultural centre in Western India; the State of Baroda was the most pragmatic and developed state of British India.

The period 1947-1980 witnessed about 48% decadal population growth and increase in municipal area from 24.63 sq kms to 108.22 sq kms. This phase involved intense industrial development with the setting up of huge petrochemical industries and the development of industrial estates for diverse industrial sectors as well as small-scale industries. Investments were made in the area of water supply, sewerage, urban

transport, etc. Establishment of the Maharaja Sayajirao University was a major high point in the social development of the city. The university soon emerged as one of the major educational centres of the country.

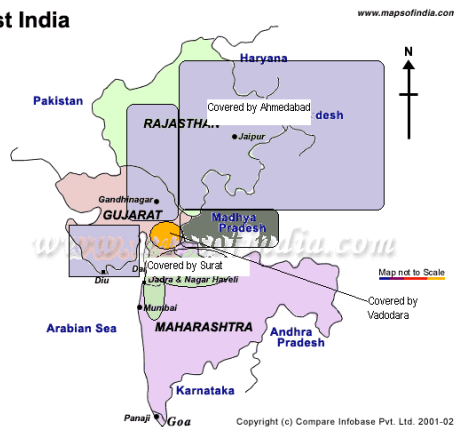
The last two decades i.e. 1981 – 2000, have been a period of general decline for the city. The period 1991 – 2000 has seen a decrease in the city's decadal population growth rate from 40.42% in 1981 – 91 to 26.63%. This implies the city is hardly attracting migration. This decrease in population is primarily due to reduced employment opportunities in Vadodara. It would also be pertinent to note that Vadodara and Surat had a population of about 4.67 lakhs and 4.93 lakhs in 1971 respectively; in 2001, the population of Surat was 24.33 lakhs while that of Vadodara had grown only to 13.06 lakhs.

There are various reasons for the slowdown of the economy of Vadodara. The key ones include the inability of the city to extend its municipal limits to abutting urban areas and the exclusion of mega industrial set-ups like IPCL and Gujarat Fertilisers from the city limits; these could have evolved as crucial sources of revenue for the city. Also, Vadodara has not seen any investments in the setting up of administrative or educational centres within the city. About 40% of the industrial undertakings in the industrial areas are closed, partially due to economic reasons, like ageing workforce, lack of skilled manpower and lack of entrepreneurship in reinventing roles and businesses in the wake of the globalisation of the Indian economy. These pressures on revenue sources and the burden of population resulted in the decline of service and coverage of municipal services viz. water supply, sewerage, conservancy, urban transport etc. In essence, there has been neglect in directing the city into the millennium; also limited investments and the tendency to live on past glories have brought about a slowdown of its economy.

IV. Regional dynamics limiting Vadodara

Vadodara cannot wish away the regional dynamics of the State of Gujarat. A perusal of the map of Gujarat will show that Vadodara is sandwiched between two major growth magnets i.e. Ahmedabad and Surat. Though a part of the golden corridor, Vadodara is at a disadvantage in attracting investments. It may be observed that Ahmedabad, due to its vantage location in central Gujarat, captures the entire hinterland of Kandla, Mundra, Pipava, Rajkot, Jamnagar, Porbander, and Surenderanagar and serves as a conduit point for all trade movements between these economic centres and

West India



the rest of the country. The central region's key strengths include strong textiles, pharmaceuticals and chemical base, agro produce and the recently developed higher educational institutes. Ahmedabad is poised to emerge as a major destination for trade and commerce. Also, being the state capital, it would be assured of continued investments in various areas. Ahmedabad and central Gujarat would emerge as major players in the knowledge industry and a value-added processing zone in the future.

Surat is located towards the south of Vadodara, in South Gujarat. This area has abundant raw materials and is a strong

base for industrial chemicals. With investments in the setting up of ports, special economic zones and LNG terminals, the region is on the threshold of an exponential growth curve. There are significant opportunities for the south Gujarat region; Surat is expected to appropriate the bulk of these opportunities.

The city of Surat also stands to gain from Mumbai and the neighbouring areas of Maharashtra i.e. the districts of Dhule, Malegaon and Jalgaon. In addition, due to train connectivity of Surat with the east, Surat is able to cater to a large portion of Madhya Pradesh and some parts of Bihar.

Unfortunately, this leaves limited hinterland with Vadodara comprising Anand, Panchmahal and Dahod. Vadodara's hinterland is constrained in the east by tribal areas and by hilly terrain in the border districts of Madhya Pradesh.

These limitations or constraints define the role and scope the economy of Vadodara can assume in the future. Vadodara has inherited the profile of an educational and cultural city. The city now needs to identify its ideal direction of growth and design interventions viz. policy, support and infrastructure, to precipitate a desirable future.

V. Vadodara's strengths and opportunities

Despite a shortage of hinterland for expansion, various opportunities are still available to Vadodara. The opportunities emerge from the overall growth projections for the Gujarat state, based on the centrality that Gujarat holds in the country's economy. India's GDP is projected to grow at a higher than 8% rate in 2006. Hence, considering past trends, the Gujarat state would grow at an annual rate of over 10%.

Considering the trend, the growth rate would translate into a higher contribution by industries and services to the overall GDP of the state. The industrial growth in the state would be primarily driven by the existing industrial belts of the state and the emerging ones viz. port-based industries, value-added processing of goods, special economic zones, etc.

Industries of Vadodara could participate in this growth and help to retain the city's position in petrochemicals and also build diverse and ancillary industries.

The services sector encompasses transport, storage, communication, trade, hotels, banking, insurance, real estate, business services etc. Gujarat has a lot of potential to exploit the booming services sector. The tourism and knowledge sectors have shown great potential in India, but they have not made any significant impact on the economy of Gujarat. These sectors could lead the growth in the services sector for the state.

Ahmedabad and Gandhinagar have already taken a lead in the knowledge sector by attracting higher educational institutions and developing software technology parks. In terms of positioning, both Ahmedabad and Gandhinagar have the necessary IT infrastructure in place, but they still need to focus on human resource development to enhance their IT enabled services attractiveness. Vadodara, with its legacy of being an educational centre, could position itself as a preferred location for educational institutes. To that end, it needs to earmark areas to attract the private sector to participate in setting up high-class education facilities. Vadodara would also need to influence the state government to expand the scope of the MS University to accredit these institutions. Given the availability of human resources, the IT enabled services sector would find it lucrative to set up facilities. Vadodara could also facilitate these by delineating such zones (Special Education Zones) and seeking support from the state government in attracting investments.

In the context of medical tourism, the city has the potential to cater to the medical and relaxation needs of the surrounding areas. The city's large NRI base to whom medical services can be rendered, gives it a competitive advantage. It can showcase its already existing medical infrastructure and health institutions.

Also, Vadodara could dwell on the circuit map of Gujarat's tourism destinations. With support from the State, Vadodara could provide good connectivity and infrastructure related services, to enable its consolidation as a part of tourist circuits.

VI. Directions for growth

The analysis of Vadodara has indicated that the economic vision would entail active support of the VMC in the following areas:

- ◆ Consolidating and retaining the city's position in high end industries (chemical, petrochemical, and fertilizers)
- ◆ Promoting ancillary industries and other industrial development (Information technology, biotechnology and pharma)
- ◆ Promoting the cultural heritage of the city for tourism
- ◆ Assuming a leading position in education and medical fields
- ◆ Harnessing the Service Sector potential to the maximum extent for economic growth and sustainability.

To that end, VMC would need to position Vadodara as a *Liveable and Economic City* that scores high on several indices. These indices would undergo substantial change after VMC undertakes its infrastructure development agenda. This would need to be supplemented by VMC's provision for infrastructure support to existing industries in the interests of their development.

Vadodara's immediate need is to '*Stop the deceleration process.*' In its immediate past, Vadodara has witnessed a slowdown in the pace of industrial growth and development, which is quite evident from its low population growth in the past decades. Therefore, it becomes imperative to provide growth triggers for the revival of the city, to put it on the path of a healthy and economic growth trajectory. The middle phase is most crucial, wherein Vadodara needs to gather economic momentum, which would then lead it towards development vistas. Hence, a focus agenda in the form of a vision needs to be followed.

Vision: 'Making Vadodara a vibrant city through economic sustainability and highest standards of service delivery in the country'

The vision would ensure 'Balancing economic opportunity and quality of life'.

JNNURM funding provides an ideal opportunity for Vadodara to achieve improvements in various infrastructure services and develop the economy of the city. The city's economic activity would be boosted by a focus on the following five areas of growth:

- a) With support from the state, Vadodara should look at **Information Technology** as one of its key growth drivers, and encourage the setting up of I.T. parks and Software Technology Parks.
- b) **Biotechnology and Pharma** have tremendous potential; under the Gujarat State Biotechnology Mission (GSBTM) entailing projects to set up bio tech parks in Gujarat, Vadodara has been qualified to the maximum number of projects. Vadodara is proposed to be a part of 19 of the 25

biotech projects announced by the state government. This is an indicator of the high potential of biotech industries in Vadodara.

- c) Vadodara has a comparative advantage of possessing a large NRI base and can be targeted for the medical or health tourism packages. What the city needs is a good marketing strategy and a tie-up with the tourism industry.
- d) The geographical location of Vadodara presents it with a number of opportunities in the agro / food processing industry.
- e) Large chemical, petrochemical and fertiliser industries have been present in Vadodara for many years and these should be nurtured.
- f) The liveability of the city, its low crime rate and the historical legacy of being an educational centre of India can help Vadodara regain its lost glory.
- g) The geographical location of Vadodara also presents it with a number of opportunities in the service sector.

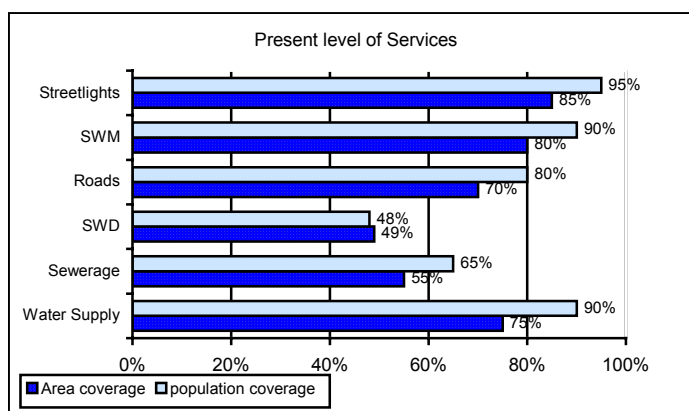
To facilitate the growth of these industries, there is a need to develop and provide appropriate infrastructure facilities. VMC under JNNURM has planned to invest in a large number of projects, which would provide the impetus for achieving the development agenda for Vadodara. Targets have been set for each service sector along with a time frame.

To achieve this vision, VMC would need to plan strategic interventions in order to rebuild its identity. This has to be in the area of education, implying activities like identifying/ zoning areas to set up education campuses, knowledge parks etc. and providing incentives through development control regulations to render the setting up of these centres less cumbersome. VMC would also need to influence the State Government to enhance the scope of the MS University to provide new courses relevant to ITeS and bring in a system of accreditation of private education centres by MS University. In addition, VMC would need to support State Government initiatives by showcasing the benefits of locating knowledge economy-based sectors in Vadodara.

In the context of tourism, VMC could support State Government initiatives by providing connectivity and infrastructure related services to major cultural centres in the city and assist in including Vadodara as an integral part of tourist circuits.

VII. Infrastructure status of Vadodara

VMC has undertaken an exhaustive exercise to identify the areas of Vadodara city that need to be taken up for infrastructure refurbishment and augmentation. These are based on a detailed assessment of the current status of infrastructure in Water Supply, Sewerage, Storm Water Drainage, Roads, Street Lighting, Solid Waste Management, Environmental Management of Water Bodies and Slum Upgradation, etc. The current level of services needs to be bridged in terms of area and population coverage. The status of service-wise details is elucidated below.



Water Supply: The city gets water from Ajwa Lake, radial and tube wells in the river Mahi, and also from tube wells scattered across the city. At present, the city receives water supply of 240 MLD (183 lpcd); of this, only 70% reaches the consumers (30-35% losses). The surface water sources account for almost 89 % of the water supply. The city has two treatment plants, which treat water only from the Sayaji Reservoir (Ajwa). Water from underground sources is not treated, but the supplies are chlorinated. The city has a water distribution network of 700 kms, which covers 75% of its total area and 90% of the population.

Sewerage: The sewerage system consists of an underground piped network, five sewage-pumping stations, 35 auxiliary pumping stations, five treatment plants and disposal facilities for the treated sewage. The city is divided into three zones with a total length of 535 km of sewerage network; the total sewerage generated is about 215 MLD. The present area of Vadodara is 149 sq. kms. of which only 82 sq. kms. (55 %) is covered by the sewerage system. This serves around 65% of the total population.

Solid Waste Management: Of the 510 tonnes of waste generated every day, around 440 tonnes per day are handled. Door-to-door collection has been started in 90% of the area spread over all the wards. Of the total waste generated in the area, around 60% is generated from residential areas while 22.5% is generated by offices, markets, hotels and commercial places. The remaining waste is construction and industrial waste.

Storm Water Drainage: Most of the storm water is drained into the river either through natural drains or storm water drains provided by VMC. The city has five major natural kaans (rivulets) and five major tanks within the city limits. The storm water drains in the city cover about 48 % of the total area (49 sq kms) and about 48 % of the total population. The city has 199 km of storm water drains of which 97 km is underground piped drainage.

Roads, Public Transport System and Parking: The city has three flyovers and railways under bridges each. The river Vishwamitri has 11 bridges interconnecting the city areas. The road network within the city is well developed in almost 70% of the area and caters to around 80% of the city's total population. More than 80% of the roads are surfaced, of which most of them are black topped while 19% of the roads are earthen.

But the increased vehicular population has resulted in increased vehicular traffic on the roads. The major roads and intersections experience traffic congestion during peak hours.

The present vehicle population of one million is expected to grow to 1.5 million by the year 2011 since the public/mass transportation system is inadequate and inefficient. Increase in vehicular population will further enhance the problems of pollution and parking. Currently, basements of buildings are used for parking, resulting in traffic. Also, the absence of pedestrian facilities results in traffic congestion and inconvenience to public.

Lakes and water bodies: The city of Vadodara was once recognised as a city of lakes. The city has around 300 lakes spread across the city. With the development of the city, the area of these lakes has depleted over the years. Many of these have also been encroached upon by slums. Also, these lakes see heavy silt formation, which affects the recharge of the ground water table. Due to low percolation of water during monsoons, the city witnesses heavy floods every year, which not only affects property, but also human life.

Slum development: The city of Vadodara has 336 slum pockets with a population of around 2.57 lakhs, which approximately amounts to 20% of the total population. The slums lack facilities of proper drainage, roads and sanitation. Though most of the slums may have water supply, they do not have proper drainage

facilities. The sewage generated is discharged in the open lowland or in the nearby natural drain that ultimately pollutes the river.

VIII. Infrastructure development strategy

To facilitate economic growth, the gap between demand and supply needs to be bridged with appropriate investment strategies. The strategy would be to achieve the following outcomes:

| Sector | Vision |
|---|--|
| Water supply | Provide water supply to all i.e. 100% with adequate pressure and equity |
| Sewerage system | Ensure sewerage coverage to all and improve quality of life of the urban poor |
| Solid waste management | Provide for safe and scientific disposal of solid waste |
| Storm water drains (SWD) | Strengthen the SWD to take care of run-off water and local flooding and rejuvenate water bodies |
| Road and traffic | Develop quality roads with full right-of-way to ensure smooth traffic flow |
| Rejuvenation of water Bodies | Preserve and revive water bodies, recharge ground water table and take care of local storm water run off |
| Flood management, diversion and resectioning of river | Ensure safe living conditions by preventing floods |
| Basis services to urban poor | Provide universal access to all services and safe living conditions |

To achieve the above vision and to develop Vadodara and its surroundings, a holistic approach has been taken. Vadodara Urban Development Authority (VUDA), which is the planning agency, covers an area of 614 sq.kms with a population of 3.5 lakhs. The main responsibility of VUDA is to carry out macro planning for the Vadodara urban agglomeration area including VMC. The planning of infrastructure facilities under JNNURM for the urban agglomeration is carried out in a comprehensive manner. The service vision set for VMC also holds true for VUDA. In order to achieve these visions, the investments envisaged under VMC and VUDA are to the tune of Rs.1897 crores and Rs. 494 crores respectively. The yearly break-up of investment for VMC and VUDA are provided in the table below:

Phasing of investment for VMC

| Sl | Sector wise Phasing | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | Total | % share |
|----|--|------------|------------|------------|------------|------------|------------|--------------|----------------|
| 1 | Water supply | 131 | 64 | 54 | 158 | - | - | 407 | 21.45% |
| 2 | Sewerage & sanitation | 45 | 38 | 22 | 23 | 12 | 6 | 146 | 7.70% |
| 3 | Storm water drains | 83 | 45 | 25 | 18 | 14 | 13 | 198 | 10.44% |
| 4 | Roads | 30 | 37 | 68 | 66 | 33 | 17 | 252 | 13.28% |
| 5 | Bridges & flyovers | 40 | 19 | 5 | 20 | 30 | 30 | 144 | 7.59% |
| 6 | Solid waste management | 38 | 25 | 28 | 31 | 34 | 36 | 193 | 10.17% |
| 7 | Rejuvenation and development of water bodies | 17 | 17 | 21 | 25 | 12 | 7 | 99 | 5.22% |
| 8 | Flood management | | | | | | | | |
| | (a) By Resectioning and diversion of Vishwamitri | 30 | 30 | 30 | 9 | - | - | 99 | 5.22% |
| | (b) By diversion of Bhukhi | 10 | 10 | 10 | 10 | 7 | - | 47 | 2.48% |
| 9 | Basic services to the urban poor | 55 | 33 | 50 | 44 | 60 | 39 | 281 | 14.81% |
| 10 | Redevelopment of inner city | 10 | 10 | 10 | - | - | - | 30 | 1.58% |
| | Total | 489 | 330 | 323 | 405 | 202 | 148 | 1,897 | 100.00% |

Note: All figures in Rs. Crores

Phasing of investment for VUDA

| Sector wise Phasing | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | Total | % share |
|-----------------------------|-----------|-----------|------------|------------|-----------|-----------|------------|----------------|
| Water supply system | 10 | 20 | 20 | 30 | 10 | 10 | 100 | 20.20% |
| Sewerage system | 5 | 10 | 23 | 10 | 10 | 7 | 65 | 13.13% |
| Storm water drains | 10 | 10 | 10 | 10 | 10 | 7 | 57 | 11.52% |
| Roads, bridges and flyovers | 25 | 25 | 50 | 100 | 50 | 23 | 273 | 55.15% |
| Total | 50 | 65 | 103 | 150 | 80 | 47 | 495 | 100.00% |

Note: All figures in Rs. Crores

IX. Reform strategy

As a precondition to access the fund, VMC needs to undertake mandatory reforms; it has already initiated some of these. VUDA also needs to undertake some reforms and is inclined to do so. The timetable for achieving the same is elucidated below:

| Reforms | Status |
|--|---|
| MANDATORY REFORMS | |
| Adoption of the modern accrual-based double entry system of accounting in Vadodara Municipal Corporation | <ul style="list-style-type: none"> ◆ Partially completed (VMC has double entry cash based accounting system) <p>Target time frame – June 2007</p> |
| Introduction of a system of e-governance using IT applications, such as GIS and MIS for various services provided to ULBs | <ul style="list-style-type: none"> ◆ Already initiated and some modules are under trial run <p>Target time frame – March 2007</p> |
| Reform of Property Tax with GIS for effective implementation to ensure 85% collection efficiency within the next seven years | <ul style="list-style-type: none"> ◆ Current collection efficiency is 80%. VMC has shifted to an area-based property tax system <p>Target time frame – 2007</p> |
| Levy of reasonable User Charges by ULBs towards recovery of O&M or recurring cost over the next seven years | <ul style="list-style-type: none"> ◆ VMC has proposed in the budget to revise this water tariff from Rs.360 p.a. to Rs.600 p.a. i.e.increase it by 60% from its present rate. ◆ Sewerage charge is proposed to be recovered upto 80% ◆ VMC is planning to introduce a new tax i.e. street light tax to gradually recover 100% of the O&M cost. It has already proposed the same in the budget proposal of 2006-07. <p>Target time frame – 2011-12</p> |
| Internal earmarking within local body's budget for basic services to urban poor | <ul style="list-style-type: none"> ◆ In the capital Budget 2006-07 (item 9), VMC has earmarked a special provision of Rs.10 crores for basic services to Urban Poor. <p>Target time frame – Completed</p> |
| Provision of Basic services to Urban Poor: Slums and Housing Activities | <ul style="list-style-type: none"> ◆ VMC intends to construct more than 5000 houses in the coming years for which 12,500 sq.m of land is required; the houses will have access to all the basic services. ◆ Under TP scheme, 16 plots with an area of 53584 sq.m of land are available for EWS. <p>Target time frame – Already initiated</p> |
| OPTIONAL REFORMS | |
| Revision of bye laws to streamline the approval process for construction of buildings, development of site, etc. | <ul style="list-style-type: none"> ◆ Proposal submitted to VUDA. Provision for parking and changes as per the new development <p>Target time frame – Already initiated</p> |
| Earmarking of Developed Land in Housing Projects For EWS/LIG category with a System of Cross-subsidy | <ul style="list-style-type: none"> ◆ Provisions are already made in the Town Planning schemes. The share needs to be increased to 20-25%. <p>Target time frame – Already initiated</p> |
| Revision of byelaws to make rainwater harvesting mandatory in all buildings and adoption of water conservation measures | <ul style="list-style-type: none"> ◆ Need to be initiated by VUDA in the Gujarat Development Control Regulation <p>Target time frame – 2008</p> |

| Reforms | Status |
|---------------------------------------|---|
| Reuse of Sewerage and Waste Water | <ul style="list-style-type: none"> ◆ Need to be initiated by VUDA in the Gujarat Development Control Regulation. VMC has already proposed to reuse the wastewater of STP for gardening purpose. <p>Target time frame – 2009</p> |
| Administrative and Structural Reforms | <p>VMC has practices of employing</p> <ul style="list-style-type: none"> ◆ Heirs of deceased employees ◆ Heirs of employees taking VRS on Medical grounds ◆ No major structural reform <p>Target time frame – Already initiated</p> |
| OTHER REFORMS COMPLETED BY VMC | |
| Water Supply Reform | <ul style="list-style-type: none"> ◆ Installation of flow meter will help in assessing the quantity of water pumped and hence the efficiency of pumps will increase. |
| Reforms in Octroi | <ul style="list-style-type: none"> ◆ Online computerisation will help monitor over transit pass (technical and administrative reform) <p>Target time frame – Already initiated</p> |

X. VMC's financial strategy

VMC follows a semi accrual-based accounting system. The Bombay Municipal Accounts Code, 1961, governs accounts in VMC. The corporation has been, by and large, generating revenue surpluses over the past decade. For the year 2004-05, VMC's revenue surplus stood at Rs. 4,371 lakhs. Tax income is the largest source of revenue income and octroi contributes the largest share of tax income. Octroi constituted around 60% of total revenue and collections amounted to Rs.15,994 lakhs in the year 2004-05. Over the last five years, property tax collections have increased at a CAGR of 10%. VMC has recently adopted an area-based property tax assessment system. The collection efficiency of property tax has improved after the change in the system.

The expenditure structure of VMC is dominated by revenue expenditure, which constitutes around 90% of total expenditure. Establishment cost is the largest revenue expenditure head; however VMC has been able to contain the growth of establishment expenditure in the last few years. Operations & Maintenance expenses have steadily grown at a CAGR of around 8.4% over the last four years and constitute around 26% of VMC's total revenue expenditure. The Debt Service Coverage Ratio of VMC as on 2004-05 stood at 2.48 indicating its strong financial position. It is expected that VMC shall repay its past debts by 2006-07 and shall thus be in a position to raise funds from the market and service such debt comfortably.

VMC has consistently exhibited a strong financial position and is capable of commissioning capital expenditure as well as sustaining operations and maintenance expenditure for the same under the proposed scheme.

The Financial Operating Plan of VMC is analysed under four scenarios. Certain assumptions with respect to growth, user charges, public private partnership shares in total funding etc. change with each scenario. Other assumptions, as detailed in the respective section, remain the same under each scenario. Of all the scenarios (as detailed in later sections), scenario three is considered to be the most appropriate.

In scenario three, a reasonable amount of increase is considered in property tax and water supply charges. Growth is also assumed in the number of connections of water supply; higher collection efficiency is

assumed. PPP is assumed at 30% of over all funding requirements of VMC. Under this scenario, in the year 2010-11, property tax will amount to Rs. 153.36 per month per household; water charges would amount to Rs. 165.25 per month per household; and solid waste management charge amount to Rs. 30.52 per month per household. In this scenario, VMC shall enjoy a revenue surplus in each year of the forecast. These taxes or charges are considered to be reasonable; therefore, scenario three shall be considered appropriate to follow.

| Financial Statement of VMC (Rs lakhs) in Scenario 3 | | | | | | | |
|--|----------------|----------------|----------------|----------------|----------------|----------------|-------------|
| | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | CAGR |
| Income from Own Sources | | | | | | | |
| Sub total of taxes | 27,718 | 31,254 | 34,946 | 38,903 | 43,408 | 48,561 | 12% |
| Non- Tax Income | 1,204 | 1,228 | 1,252 | 1,277 | 1,303 | 1,329 | 2% |
| Total Own Sources | 28,921 | 32,481 | 36,199 | 40,180 | 44,710 | 49,890 | 12% |
| B. Grants, Contributions | 2,735 | 2,872 | 3,015 | 3,166 | 3,324 | 3,490 | 5% |
| Grand Total Revenue | | | | | | | 11% |
| Income | 31,656 | 35,353 | 39,214 | 43,346 | 48,035 | 53,381 | |
| Grand Total Revenue | | | | | | | 12% |
| Expenditure | 26,502 | 28,007 | 34,713 | 39,781 | 43,306 | 46,912 | |
| Revenue account status | 5,154 | 7,346 | 4,501 | 3,565 | 4,729 | 6,468 | 5% |

VMC has sufficient funds to meet its financial obligations under JNNURM and thus does not need to borrow money from the market.

In the absence of a regular revenue source, VUDA would not be able to contribute its share of 30% as per the JNNURM guidelines. However, on the assurance of the state government to fund VUDA's share, the improvement in infrastructure seems to be feasible. On the other hand, VUDA will have to recover the new operating and maintenance expenses. VUDA will have to levy a user charge of more than Rs 400 per household per month.

Summing up, the financial needs of VMC to implement the proposed investments will be met by Central Government grants under JNNURM, VMC's internal revenue surpluses and grants from the State Government as per the JNNURM norms. Reforms in the revenue systems of VMC will provide the necessary internal resources. With these reforms, VMC would be able to meet its own share of capital expenditure as well as those relating to incremental operations and maintenance expenditure.

XI. Summary of expected outcomes

VMC’s current levels of service delivery are comparatively satisfactory. However, the economic activity in the city has been waning. Through the City Development Plan, VMC expects to achieve two objectives: provide the necessary civic services to its citizens and stimulate economic revitalisation. The resource requirements can be realistically met with JNNURM funds (from both the State and the Central

Government), VMC’s internal revenue surpluses and expected additional revenues from the implementation of reform measures. At the end of the JNNURM mission period, VMC would have achieved full service coverage and would also maintain a sustainable financial position. VMC would also have built on its strong governance framework to establish a citywide planning and governance framework and ensure modern financial management, effective e-governance and transparency in its functions.

Summary of Vadodara CDP

