

Appraisal of City Development Plan Vadodara

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Appraisal of City Development Plan: Vadodara

1. General Comments

The various sections of the CDP are fairly detailed and recommendations for future improvements follow in a rational manner. First general NIUA: of the CDP are pointed out as under. This is followed by specific sector-wise NIUA.

1.1 The CDP of Vadodara comprises an analysis of the existing situation with a demographic profile, economic characteristics, financial profile, sectoral infrastructure assessment, and institutional set-up followed by a vision for the city and a city investment plan. An executive summary of the CDP is also attached with the report. A sector-wise SWOT analysis carried out is helpful in understanding the present situation in a nutshell.

1.2 According to the report, the total population for Vadodara was 13.06 lakh in 2001. From the table on page 2-4, it appears that this figure is for Vadodara Municipal Corporation (VMC. The population of VUDA (Vadodara Urban Development Authority) area is not given (Page 2-4). A future investment plan for Vadodara is presented on page 8-97 and 8-98, Tables 28 and 29, and separate plans for VMC and VUDA areas are proposed. But an analysis of existing conditions for VUDA area has not been carried out. Basic information like a map, population and area covered under VUDA is also not provided.

VMC:

The detail of VUDA is provided in a separate section – refer section 4.13 on page 4-33 and section 5.6 on page 5-37

NIUA:

The function of VUDA is comprehensively discussed.

1.3 Separate Master Plans for Water Supply, Sewerage and Storm Water Drains and Solid Waste Management have been prepared at different time periods (refer pages 428, 433, 434 and 449). However, the status of implementation of these plans is not discussed. All these plans need to be discussed and it may be clarified how far the existing problems are addressed in those plans. The source of funds for these Master Plans need to be elucidated.

VMC:

The master plan details have been added in respective section, with the level of details such as the total investment carried for implementation of works proposed under master plan. This is further details in each service with reference to page numbers and sections in the report.

1.4 The maps attached are titled 'City Development Strategies – Vadodara'. This needs to be changed to City Development Plan – Vadodara. According to the Base map attached after page 2-5, two boundaries are shown – one for Vadodara Municipal Corporation (VMC) and the other VMC boundary till 2002. Does this mean that the

VMC boundary not dated is a more recent one? If so, the year of delineation of this boundary should also be mentioned. The extent of Vadodara Urban Agglomeration (UA) may also be shown. This will help visualize and understand the area of influence of the city and future growth directions.

VMC:

The titles of all maps have been changed to City Development Plan, Vadodara

The boundary of Vadodara was changed in 2002; hence two boundaries have been shown. The year of boundary is also mentioned in all maps -- legend.

NIUA:

The above-mentioned map is clear after revision.

1.5 The funding schemes and programmes in operation with respect to improvement of infrastructure (water supply, drainage, sewerage, solid waste and roads) and the existing funds under each is not given in the report.

VMC:

The funding would be as per the guidelines of JNNURM. However for the earlier works taken up under the master plans were from VMC own revenue sources. The amount of work is also provided in each section of service under the master plan details.

NIUA:

After discussions it was clarified that the Master Plans have been considered as a base and there is no duplication as far as proposed projects are concerned.

1.6 No consolidated plan for the urban poor is presented.

- On page 2-7, the report mentions ‘A survey was carried out for urban basic services in the urban slums of Vadodara, which identified 96,000 families (2.8 lakh falling below poverty line. i.e. the family was drawing an income of Rs. 373 per capita per month. In other words, it would appear that 36% of the population in Vadodara lives below the poverty line.’ The source and baseline year of this data needs to be mentioned clearly.

VMC:

The information is sourced form VMC, year 2000. The SEWA survey was recently carried out in the year 2006.

- On page 6-67 it is mentioned that slums comprise 25% (or 2.57 lakh) of the city’s population. The source of this information is not mentioned. One is not clear which statement is more reliable and why.

VMC:

The information is sourced form VMC. The other source of information on slums is the recent survey carried out by SEWA, which is also detailed in the report under section on slums (refer section 4.10 page 4-29)

- *The report mentions improving the living standards of the poor by providing proper sanitation facilities as one of the visions for Vadodara (page 6-68, section 6.3.3). However, there is no analysis with respect to the present situation of sanitation facilities in the slum areas.*

A section on slum has been added in report -- (refer section 4.10 page 4-27)

NIUA:

The section presents the findings of the survey done by SEWA. The status of infrastructure facilities available and inadequacies are well brought out in the analysis.

2. Existing Situation

2.1 Water Supply

The main source of water supply to Vadodara is surface water – the Sayaji Sarovar in the northeast and Mahi river in the northwest. (Page 4-25; Table 13- Source and quantity of Water Supply). According to the report there are tubewells inside the VMC limit, which are developed, as and when required to tide over the inadequate water supply in the local areas. In all, about 56 tubewells have been sunk. The frequency of drawl of ground water is not mentioned. Further there is a need to correlate this with the information on the ground water table to understand how far one may rely on ground water sources in times of surface water crisis. The data and analysis on ground water table along with withdrawals and recharge of ground water should support this information. In case there is over-exploitation of groundwater, it may be minimized by adopting artificial recharge of ground water. The CDP does not mention whether efforts in this regard have already been made

VMC:

Refer section 4.1 on page 4-13 of CDP

Tube wells are an alternate source of water supply in VMC. The water from these tube wells is directly injected into the distribution system. Depending upon the area served, the tube wells work from 1 to 18 hours everyday. Based on the capacity of pumps and its working hours, the water supplied is believed to be 10 MLD from about 46 tube wells. These well operate in the areas where the water supply could not be reached due to pressure problems. Due to the low drawl from these tube wells, the water table in the city does not get impacted. The average water table in the city is around 20 metres and gets recharges regularly due to the presence of perennial rivers on the north. Besides these tube wells, a series of 56 tube wells in the riverbed and around the banks of Mahi have been under development. In all, about 56 tube wells have been sunk. Of these, about 40 wells on the bank are in working condition with submersible/turbine pumps already installed and commissioned. These tube wells are used in case of shortage of surface water. With the help of these wells, VMC has been tiding over the current water crisis in the last couple of years especially during draught.

NIUA:

The explanatory note added in the revised CDP clarifies that groundwater is an alternate source of water supply, resorted to in cases of exigency. The ground water level is not low and overexploitation of groundwater is not an issue.

The city has two water treatment plants with capacities of 45 MLD and 50 MLD. The report mentions on page 4-26, “Due to inadequacy of the treatment capacity, the treatment plants are over-utilized. The utilization capacity

of the treatment plants is 279%”. It is not clear how this is being done. Normally, overloading to the extent of 10% is allowed.

VMC:

Refer section 4.1.1 on page 4-13

The capacity utilisation of the treatment plants is 73%.

NIUA:

After discussions it was clarified that actually the treatment plant is not used to its full capacity. The mistake has been corrected in the report.

On page 4-26, issues pertaining to water supply are discussed. A table on the same page gives the future demand of water from 2008 to 2018 and gap in supply. The present figure and gap (if any) is not given.

The per capita demand and gap is given for the years 2008, 2013 and 2018. But the population estimates for the same timelines is not given. In such a case it is not clear how the figures for water supply have been arrived at. The above contradictions need to be clarified. The information on present per capita supply of water vis-à-vis expected gap in demand and supply for 2008, 2011, 2013 and 2018 need to be given.

VMC: Refer section 4.1.3 on page 4-14

Year	Population for Old Limit (108.26 Sq. Km)	Population of Newly added Area (40.74 Sq. Kms)	Geometric	Polynomial	VMC Population (Average)	Demand (MLD)
2001	1305546	61323*				
2005	1512522	119743	1671711	1592818	1632264	--
2008	1659328	140268	1865992	1733199	1799596	310-325
2010	1758814	154217	1995512	1830550	1913031	--
2013	1910466	175541	2189793	1982220	2086006	355-375

NIUA:

As per the explanation given in Section 4.3.1 (page 414) at present, there is a gap of 8 MLD, which will increase further. If no augmentation measures are taken, not only will insanitary conditions intensify, it will also lead to outbreaks of epidemics and water-borne diseases.

The Status of Infrastructure is presented in Table 23, page 4-57. The figure for installed capacity of water is 308 MLD and the daily release is mentioned to be 250 lpcd. The per capita supply is mentioned to be 180 lpcd. As per page 2-4, the estimated population for 2005 is 14.69 lakh and the present total water supply is 240 MLD – 270 MLD (page 4-25). So, the per-capita supply would be 163 lpcd – 183 lpcd. An explanatory note for the figures arrived at should be given along-with the table on ‘Status of Infrastructure’ on page 4-53

VMC:

Refer Table 24 on page 4-32. An explanatory not has also been added.

The installed capacity is 240-270 MLD and release is 250

Explanatory note: Approximate 10 % variation in the installed capacity is due to variation in the discharge due to large seasonal variation in the water levels in the river and in the tube wells. The difference in the installed capacity and supply is due to the restriction in the yield from the source and non operational of some of the tube wells in the riverbed.

NIUA:

This explanation has been added to the CDP.

As per the SWOT Analysis carried out for the water supply sector, (page 4-28), a Water Supply Master Plan has been prepared for 2018 and is ready for implementation. In Annexure VII on page 115 the Financial Requirement for the Water Supply System is given. It needs to be clarified whether the activities proposed here are the same as that of the Master Plan in question. If so, has the city sought funds from sources other than JNNURM? This may be clarified.

VMC:

Refer page 4-13.

A master plan for water supply was prepared very recently in 2004-05. The broad heads of the components of the plan are:

Strengthening of water supply network

Providing new network and

Providing new storage reservoirs

Based on the priority given by the consultants, VMC has initiated following projects, with total project cost of around Rs. 19.88 crores. This essentially included network strengthening / new networks.

All other works of network strengthening and construction of new reservoirs to cater to the development of the city till 2018 have been considered in the City Development Plan.

NIUA:

The above explanatory report added to the CDP, now clears the ambiguity.

2.2 Sewerage System

The city has three drainage zones for sewerage system based on natural topography with a STP in each zone. Though the capacities of the STPs are given, (Table 16, page 4-31 and 4-32), there is no data / analysis with respect to the total sewage generated vis-à-vis the total amount of sewage treated in the city.

VMC:

Refer section 4.2.1 on page 4-15

The total sewerage generated by the city of Vadodara is 215 MLD, as against which only 180 MLD gets treated. Though the sewerage treatment plants (STP) have a capacity of 215 MLD, the sewage does not reach these plants. In spite of having more capacity, the system is not functioning to its fullest extent. This is also quite evident from that fact that 40% of the VMC area does not have sewerage network.

NIUA:

The above information has been added to the CDP and justifies the improvements proposed and funds sought.

On page 4-33, the report mentions that the entire city is not covered by the sewerage network. The map enclosed between pages 4-31 and 4-32 shows the three sewerage zones, which are not very clear. The sewerage network is not superimposed on this map. Therefore, one does not get a clear picture of the portions of the city not covered by the network. On page 4-33, mention has been made that 40% of the Municipal area does not have sewerage facility. The data should be complimentary and presented in an integrated manner.

VMC:

Refer section 4.2.1 on page 4-15

In spite of having more capacity, the system is not functioning to its fullest extent. This is also quite evident from that fact that 40% of the VMC area does not have sewerage facility.

NIUA:

The information provided above supplements this information and appears convincing.

The report further mentions that the size of the sewerage pipelines is inadequate and old. The old trunk mains are on the verge of collapse. The problems identified by the sewerage Master Plan in 1997 proposing for improvements up to 2021 is also briefed on page 4-33. The status of implementation of this plan needs to be given in order to understand the present status better.

VMC:

Refer section 4.2 on page 4-15

The sewerage master plan prepared by VMC in 1999 has not been fully implemented. It has extended the sewerage system in some of the areas as per the priorities and availability of funds from time to time. The master plan had following main components.

- *Strengthening of sewerage network*
- *Providing new network and*
- *Providing new sewage pumping stations and pumping mains.*
- *Providing new sewage treatment plant*

Based on the priority given by the consultants, VMC has initiated and completed projects worth around Rs. 70 crores – pressure line, gravity mains, etc. Serious problems of untreated sewage getting released in the river and that of manhole overflowing could be solved after the projects envisaged under JNNURM get completed.

Some of the projects under progress are -- Drainage line along Dabhoi road and near Ameet Nagar. The cost of these projects is around Rs. 25.5 crores are being carried out from VMC funds and are not proposed under JNNURM.

NIUA:

The above section has been added to the report after discussions.

2.3 Storm Water Drains

The network of rivers Jambuva and Vishwamitri and Kaans (or watercourses) forms the storm water drainage system of Vadodara. According to the CDP “VMC has prepared a Master Plan for Storm Water Drainage in 1984. This was prepared considering a phase-wise implementation programme and only few drains were

constructed based on priority and fund availability.” The timeline of this Master Plan, and the status / level of implementation of this Storm Water Drainage Plan may also be stated.

VMC:

Refer section 4.3 on page 4-17

VMC had prepared a master plan for storm water drainage in the year 1996. This was prepared considering a phase-wise implementation program but only a few drains were constructed based on priority and funds availability. The master plan envisaged an investment of Rs. 116 crores, but VMC has carried out works of not more than Rs. 15 crores i.e. 10% of the master plan. As a result not much development of storm water drain has happened. The map depicts the existing storm water network and chronic water logging areas in Vadodara. The projects taken under JNNURM are essentially to take care of these waterlogging areas shown in the map. It is also evident from the investment priority that storm water has been given the third priority.

NIUA:

The above section has been added to the report after discussions. The additional map on waterlogged areas added to the report substantiates the rationale presented. The information on the Master Plans now gives a comprehensive picture for the sector as a whole.

2.4 Solid Waste Management

There is no information / analysis on per capita waste generated in the city. The report talks of a collection efficiency of 85%. There is no mention of the frequency of collection of waste. (i.e. how frequently waste is collected from different parts of the city).

VMC:

Refer section 4.5.1 on page 4-19

The waste from these containers is collected on a daily basis, but on an average 85% of the total waste generated is collected by VMC.

On page 4-46, section 4.5.2, the heading mentions ‘Composition of Waste’. However, there is no information on the same – i.e. degradable / biodegradable waste. As per the report, the waste is dumped in the landfill site. There is only one landfill site in the city. It appears from the details that the landfill is not engineered.

VMC:

Refer section 4.5.1 on page 4-19

The waste collection comprises of organic, inert material and other waste.

The average waste composition of Vadodara at different point such as at source, at collection container and at the landfill listed as under.

Sl.	Waste Type	Percentages		
		Source of generation	Container	Landfill
1	Paper	8.49	5.75	4.5
2	Plastic	5.33	4.93	13.4
3	Glass	0.01	1.54	0
4	Metal	0.84	2.03	0
5	Organic matter	76.80	52.17	35
6	Inert Material	8.53	33.58	47.1
Total		100	100	100

NIUA: The above section has been added to the report after discussions.

As per the report (SWOT Analysis on page 4-49) the Master Plan for Solid Waste Management is ready. The salient features of this plan may also be discussed. It may also be clarified whether the plan proposed for management of solid waste (Annexure XIV) is the same as the above-mentioned Master Plan.

VMC:

Refer section 4.5 on page 4-19

There was no master plan for prior to 2005. As part of preparedness for the JNNURM, in the second half of 2005, VMC prepared a master plan for SWM for the period 2006 to 2011. Till date there is no implementation of SWM master plan and the entire master plan has been taken under JNNURM.

NIUA:

The above section has been added to the report after discussions.

2.5 Financial Profile

VMC has surplus revenue income over expenditure. The total revenue account receipts have increased at a CAGR of 10% between 2001-02 and 2004-05. According to the report, the revenue account status of VMC has improved from a deficit of Rs. 243 lakh in 2001-02 to a surplus of Rs.4371 lakh in 2004-05 (pg.3-18). Octroi contributes about 72% share of tax income (pg.3-14). The financial profile is well summarized in Section 3.4, page 3-23.

3. Vision

3.1 General:

Vadodara has been envisioned as a vibrant and versatile, virtuous and dream city; liveable and economic city. Vadodara has witnessed a slowdown in the pace of industrial development in the past. The city wants to stop this deceleration process. According to the report, the vision would ensure “Balancing economic opportunity and quality of life”. In order to boost economic activity, the city proposes to boost development of sectors like information technology, biotechnology and pharmaceuticals, medical or health tourism, etc. These are well elucidated in the report (page 6-64)

In the context of improving quality of life, the vision for the city is to improve upon the physical infrastructure. For each sector, emphasis is given on increased coverage among citizens and improved efficiency. The sector specific vision statements are briefed as under (ref. Pages 6.68 to 6-73)

- Increase coverage of water supply to all
- Improve the living standard of the urban poor by providing proper sanitation facilities

- Safe and scientific disposal of solid waste by 2011
- Strengthening storm water drainage system in Vadodara for protecting the city from future floods
- To develop quality roads with full right of way to ensure smooth traffic flow
- Secure safe living for the city dwellers and save on repetitive flood damage programmes

The opinion of citizens regarding prioritization of services has been consolidated and presented in a graphical form on page 6-66. There are 8 bars numbered 1 to 8. What do these numbers signify? Are these different samples of population from different areas? It appears that the bar named N.R. consolidates for the entire city. If so, then the citizens seem to feel that all are almost equally important with a slightly greater emphasis on social infrastructure and development of old city.

VMC:

Refer on page 6-43

The graph presents prioritisation of services by the citizens of Vadodara. The Y-axis shows the percentage of surveyed people, while the X-axis shows the rating of the services. Some people have abstained from rating certain services, so those have been considered as a 'non-respondents (N.R) for that particular service.

The overall rating is also provided in the subsequent chart on page 6-64. A separate analysis is carried out for samples collected from slums.

NIUA:

The above explanation has been added to the report after discussions.

As part of the vision for the water supply sector, the city also intends to take up a pilot project for providing water supply 24 hours (page 6-68). The feasibility of this project needs to be explored, as it appears to be rather ambitious.

VMC:

Refer section 6.3.3 on page 6-45

Taking up a pilot project for providing 24 x7 water supply for a industrial area on a full cost recovery basis

3.2 City Investment Plan and Financing Strategies

Two Capital investment plans phased over a period of five years (2006 to 2011) have been presented – one for VMC area (Table 28, page 8-97) and the other for VUDA area (Table 29, page 8-98). But the analysis of the existing scenario with respect to all the sectors have been presented only for VMC area as mentioned earlier. Out of the sectors included (ref. Page 8-97 and 8-98) one of them is slum development. No analysis on the present status of urban poor / slums is attached in the report. This analysis is required to justify the funds sought.

VMC:

Refer section 4.10 on page 4-27 and section 8.2.8 on page 8-76

A section on slum and urban poor has been added. The other section on page 8-76 provides the justification for the fund and the way the fund would be utilized. The annexure on IV detailed investment phasing also give further details of the beneficiaries.

NIUA:

Under each sector, the investment required for the urban poor is given as a sub-component.

As per the Capital investment Plan, the investments are phased with respect to time. However prioritization of funds is not clearly spelt out. The total investment required is Rs. 1641.77 Crores. The total figures under each sector percentage-wise would be as under:

Table 1 – Funds required for various sectors (2006 to 2011)

Sectors	Funds required for VMC Area in Rs. Crore (Amount in %)	Funds required for VUDA Area in Rs. Crore (Amount in %)
Water Supply System	271.17 (16.52)	54.23 (37.68)
Sewerage System	136.67 (8.32)	27.33 (18.99)
Roads, bridges & flyovers	124.42 (7.58)	37.48 (26.04)
Storm water drains	326.09 (19.86)	24.88 (17.29)
Solid Waste Management	175.57 (10.69)	-
Interlinking of Lakes and Lake Development	72.00 (4.39)	-
Diversion of Bhukhi & Vishwamitri and Vishwamitri River Front Development	157.00 (9.56)	-
Urban Poor (Slum Development)	378.85 (23.08)	-
Total	1641.77 (100.00)	143.93 (100.00)

As per the figures presented in the report (page 8-97, Table 28) the percentage of total investment for slum development is 23.08%. But the report mentions it to be 35%. As per Table 28, for VMC area the maximum investment is on slum development followed by storm water drainage development, water supply and lake development.

VMC: The investment plan has undergone a change. Hence, the share of each of above would also change. VMC's investment is revised to RS. 1897 crores and that of VUDA is Rs. 494 crores. Details are provided in chapter 8.

NIUA: The above section has been modified in the report.

3.3 Sector-wise Investment Plans

The sector-wise investment plans are given in Chapter 8, Section 8.2, page 8-98.

Water Supply: As per the table on page 8-98, the total project cost is Rs. 27117 lakhs or Rs. 271.17 Crore. According to the detailed break up given in Annexure VII, pages 115 to 118, it is Rs. 36249 lakh or 362.49 Crore. One is not clear why the two figures are different, though the subheads are the same. Further in Annexure VII, the headings for the planning years and corresponding columns do not coincide.

Roads, bridges, flyovers: The total cost is mentioned as Rs. 32609 lakh or 326.09 Crore (page 8-100). But as per Table 28 on page 8-97, it is Rs. 124.42 Crore.

Storm Water Drainage: The total cost is mentioned as Rs. 12442 lakh or Rs. 124.42 Crore (page 8-101). But as per Table 28 on page 8-97 the amount is mentioned as Rs. 326.09 Crore. As per Annexure XIII, the investment needed upto 2011 is Rs. 11857.2 lakh or Rs. 118.57 Crore and upto 2015 it is Rs. 14641.95 lakh or 146.42 Crore.

As per the consultation meeting minutes with various groups (page 159), the CDP proposes for a total funding of Rs. 1000 Crores, out of which Rs. 500 Crores will be contributed by GOI, Rs. 300 Crores by GOG and Rs. 200 Crores by VMC. However, in the City Investment Plan (Chapter 8, page 8-97) a total investment of Rs. 1641.77 Crore for VMC and Rs. 143.93 Crore for VUDA is sought. It is not mentioned here how the funds will be shared between GOI, GOG and VMC.

VMC:

Refer page 89

Prior to the announcement of JNNURM, Vadodara Municipal Corporation had carried out rapid assessment of the city. The initial assessment, gave a requirement of Rs. 1000 crores of investment. This assessment of used to brief the citizens about the status of Vadodara, its services, economic development etc.

Stakeholder Consultations: Annexure XVI presents the Citizens Survey Analysis. As per the report, the sample covered was 5000 residents belonging to different sections of society. There is no information on the proportion of respondents selected from various sections / community groups of the city. This information will help understand whether the sample is well spread out among the various stakeholders in the city. Further, it is not understood whether the sample population was representative of different parts of the city. The spatial spread of respondents will also throw light on the proper representation of the selected sample.

VMC: Refer page 138

The sectoral spread of respondents included officers, banks and financial institutions, slums, NGO's, health sector, planners and builders, students, educationists, entrepreneurs and industrialists, I.T and also the participants of the Vadodara festival.

In Annexure XVIII, page 157, the Minutes of consultation with various stakeholders groups is enclosed. Minutes of 6 consultative group meetings are enclosed. There seems to have been no consultative group comprising the urban poor. Members of educational institutes are participants of two groups. The number of members in each group and their background is not mentioned anywhere.

VMC: Refer page 6-44

The sample of survey not only involved NGOs working in slum area, but also involved slum people participating indirectly in a daylong symposium on JNNURM in the first week of January. This symposium was organised by umbrella organisation called United Way of Baroda.

NIUA: According to the additions and modifications made in the report, 1825 samples were collected from all wards and zones of Vadodara.

Expected Improvements

The various sections of the CDP are fairly detailed and recommendations for future improvements follow in a rational manner. There are certain areas for improvement that have been pointed out in this appraisal note and are summarized below:

1. Brief note on institutional arrangements between state, parastatal agencies and Urban Local Body for providing services.

VMC:

Refer page 5-34 and Table 25 in CDP, which is also given below.

Urban Infrastructure	Planning and design	Construction	Operation and Maintenance
Water supply	VMC	VMC	VMC
Sewerage	VMC	VMC	VMC
Drainage	VMC	VMC	VMC
Storm water drainage	VMC	VMC	VMC
Solid waste disposal	VMC	VMC	VMC
Municipal road (including flyovers)	VMC	VMC	VMC
Street lighting	VMC	VMC	VMC
Public transport	GSRTC	GSRTC	GSRTC

2. Following information on Vadodara Urban Development Authority (VUDA) area:

- Total population, areal extent, map
- Analysis of existing situation and areas that need improvement for the following sectors - water supply, sewerage, storm water drains, roads and bridges.

VMC:

Refer section 4.1.3 on page 4-33 and section 5.6 on page 5-37

NIUA:

A map of the Vadodara Urban Development Authority (VUDA) area along with a description of the functions of VUDA has been added. The new maps added clearly show the boundaries of the two areas.

3. Brief outline, implementation arrangements and funding mechanism for existing Master Plans for Water Supply, Sewerage, Storm Water drains and Solid Waste Management - Separate Master Plans for Water Supply, Sewerage, Storm Water Drains and Solid Waste Management have been prepared at different time periods (refer pages 4-28, 4-33, 4-34 and 4-49 of the CDP). Following points need clarification:

- The status of implementation of these plans
- How far the existing problems are addressed in these plans
- Source of funds for the Master Plans

VMC:

The same has been discussed in the respective section and incorporated

NIUA:

The above has been incorporated in respective sections for each sector in the report

Water Supply: Section 4.1.2

Sewerage: Section 4.2

Storm Water Drains: Section 4.3

Solid Waste Management: Section 4.5

Sections have been added to the report after discussions. The additional map on waterlogged areas added to the report substantiates the rationale presented. The information on the Master Plans now gives a comprehensive picture for each the sectors.

4. Consolidated Plan for dealing with the problems of urban poor, especially with respect to infrastructure (e.g. water supply, drainage, sewerage, solid waste) taking into consideration inclusion of poor population of the city in the consultative process.

VMC:

Refer section 4.10 on page 4-27

NIUA:

The section presents the findings of the survey done by SEWA. The status of infrastructure facilities available and inadequacies are well brought out in the analysis. Under each sector, the investment required for the urban poor is given as a sub-component.

5. Prioritization of Plans for different sectors - The opinion of citizens regarding prioritization of services has been consolidated and presented in a graphical form on page 666 of the CDP. An explanatory note regarding what the diagram intends to depict will clarify this aspect.

VMC:

Refer section 6.3.1 on page 6-42

NIUA:

Additional charts showing overall prioritisation by residents and a separate one for the poor have been attached. The prioritisation is reflected in the funding priorities also. So, the two are well coordinated and elucidated.

6. Stakeholder Consultations - In Annexure XVIII, page 157 of the CDP, the Minutes of consultation with various stakeholders groups is enclosed. Minutes of 6 consultative group meetings are enclosed. Were there consultative groups consisting of the urban poor? If so, details should be provided.

VMC:

Refer page 6-44

NIUA:

According to the additions and modifications made in the report, 1825 samples were collected from all wards and zones of Vadodara. The spatial as well as socio-economic spread of respondents is well brought out in the report.

7. Financing pattern - Two Capital investment plans phased over a period of five years (2006 to 2011) have been presented – one for VMC area (Table 28, page 8-97) and the other for VUDA area (Table 29, page 8-98). But the analysis of the existing scenario with respect to all the sectors have been presented only for VMC area. The total investment required for VMC area is Rs. 1641.77 Crores and for VUDA area Rs. 143.93 Crore (refer Table 1 of this appraisal note). Analysis of Capital Investment Plan for VUDA needs to be given.

VMC:

Refer chapter 8 on Capital Investment Plan

The investment plan has undergone a change with respect to the investment submitted earlier. Since the earlier submission was a draft, a lot of details have been added. Also, further to the meeting with the state level Steering

committee, the minister suggested to improve the investment plan. With the NIUA: of the committee and detailing of the further work resulted in an increase in the overall investment plan. The detailed break-up of individual works is also annexed in the report – refer annexure IV.

NIUA:

As per the revised Financial Plan, a total of Rs. 1897 Crore for VMC area and Rs. 494.52 Crore for VUDA area are proposed. The projected investment plan is presented in Section 8.4 (pages 8-78 to 8-83). Four scenarios are analysed with various assumptions related to taxes / charges levied, collection efficiency, growth and share of PPP. The desired scenario is well justified.

8. Following lists may be added to the report:

- List of Maps
- List of Abbreviations used
- References / Sources of data to be quoted properly

VMC:

Points incorporated

In order to give a comprehensive plan, addition sections have been added in the report. These cover, old city development, health and education, etc. A detailed analysis also provides and insight into these sector. Certain suggestions received from stakeholder are also added in the annexure. The CDP of Vadodara now provided a holistic picture of including Vadodara Municipal Corporation and Vadodara Urban Development Authority area.

Social facilities – refer section 4.11

Health facilities – refer section 4.11.1 page 4-29

Educational facilities – refer section 4.11.2 page 4-29

Redevelopment of old city (heritage component)– refer section 4.12 on page 4-30

Vadodara Urban Development Authority – refer section 4.13 on page 4-33 and section 5.6 on page 5-37

Prioritisation of services in slums area – section 6.32 on page 6-44

Suggestion from stakeholders – annexure IX on page 156

NIUA: The CDP is now in accordance with the guidelines of the JNNURM Toolkit Number 2.