

## **Appraisal of City Development Plan: Surat**

The City Development Plan (2006-2012) for Surat has been prepared and presented very well. Since the economic base of the city is very strong, with textile manufacturing, trade and diamond cutting and polishing industries, the City Development Plan (CDP) focuses on promoting economic growth through good governance and improved service delivery. Surat's vision is to become a global city with global standards.

The CDP appraisal has been divided into the three stages – an analysis of the existing situation, vision and strategies, and city investment plan.

### **Stakeholder Consultations**

1. The Surat Municipal Corporation (SMC), in the year 2000, had taken up the project of devising “City Development Strategies” (CDS) that involved stakeholder consultations. The CDP states that the stakeholders involved included NGOs, government organisations (Police Deptt., Collectorate, GST, GPCB etc.), commercial organisations, M.Ps, MLAs, municipal councillors, eminent citizens, technocrats and social workers. From this it would seem that broad based stakeholder consultations have been held in the city and their opinion sought. However, it is not possible to ascertain if there were representatives of the poor in the consultations.

SMC:

The consultations were open for all and NGOs, Social organizations took part, which includes the representatives of poor. Moreover being a third tier local self-govt. body, the Municipal councillors are the representatives of the urban poor, slum areas whose opinion was taken. 12000 forms were distributed & feedbacks were received. The report of centre for social studies on urban poor which deals with the slum issues like provision of infrastructure, improving the quality of living was also taken into consideration.

This CDP has built on the CDS exercise.

### **1. Analysis of the Existing Situation**

The CDP presents the analysis of the existing situation very well. However, migration and informal sector have not been discussed in any detail in the CDP. Since Surat is an industrial city and attracts a large number of migrants, the impact of migration would have an impact on housing and the informal sector. This aspect could be included in the CDP.

The land issues, basic services and infrastructure, and transport sections have been dealt with in detail and give a good idea of where the city is today with respect to these services. However, the institutional responsibility matrix and the role of the private sector have not been presented. The cost and recovery aspects as also the investment aspects of basic services and infrastructure have not been discussed. Details of the financial aspects (O&M and investment) of each service should also be presented to provide a comprehensive picture of the services and infrastructure.

The section on housing and slums discusses the housing situation in the city but does not project the housing requirements for the poor. However, the housing conditions of the slum dwellers and the availability of basic services to them have been detailed out well.

The CDP also discusses the social infrastructure i.e., education, health and recreational aspects to give a comprehensive picture of the services and facilities in the city.

The finances of SMC are given in detail and presented well. The financial information given for SMC for the last five years (2001 – 05) can be summarized as follows:

1. The revenue income of SMC has increased from Rs. 400 to Rs. 620 cr.
2. The revenue expenditure has increased from Rs. 300 to 440 cr.
3. The revenue surplus has increased from Rs. 90 cr. to Rs. 180 cr
4. The capital income of SMC has ranged between 1700 cr and 13, 925 cr.
5. The capital expenditure of SMC has ranged between Rs. 160 cr and Rs. 200 cr.

In 2004-05, the octroi & toll income contributed 57% to the revenue income while property tax contributed 24%. In 2004-05 the capital income of SMC was Rs. 46.56 cr against an expenditure of Rs. 174.87 cr. The SMC's capital operating ratio deficit is met out of the revenue account. In 2004-05, roads and bridges took up 37% of the capital expenditure while 23% was spent on water supply projects.

The revenue income of SMC has been projected to grow between 7% (min.) and 15% (max.) per annum while the revenue expenditure has been projected to grow between 5% (min.) and 8% (max.) per annum.

## **2. Vision and Strategies**

The Surat CDP combines the vision and strategies in the same chapter but it is presented well. Each section in the chapter presents the main theme, the strategies, the action plan/ tasks, institutions involved and the projects. The strategies give an operating plan for the vision. However, the strategies only give phasing but not prioritization.

While emerging issues have been given for each sector in the existing situation analysis section, many of the projects proposed are not in line with the issues. It is presumed that the projects not proposed under JNNURM will be financed by SMC from its own resources.

The following section analyses the projects proposed for funding under JNNURM:

### **A. Inner city revitalisation**

The proposal for inner city revitalization has projects for Rs. 50 crores. Apart from the other admissible components, it includes a component - 'erection of new light poles' for Rs. 1 crore. While this component (street lighting) is not admissible under Mission I, the CDP states that the inner city has maximum slum population. Therefore, this component becomes admissible under Mission II. (ref. p. 115 in CDP).

### **B. Water supply**

Projects amounting to Rs. 222.10 crores have been proposed for Water Supply for the SMC area. The projects proposed are mainly for WTPs, intake wells, service reservoirs, water supply networks, 24x7 water supply, pumping and related electrical-mechanical machineries for water works and water distribution station.

#### SMC area

1. The total amount proposed for Water Treatment Plants (p. 120) is Rs. 54.22 cr. However, as per information given in p. 31, the WTP at Sarthana Water Works (costing Rs. 24.22 cr) is already underway. Therefore, this project cannot be proposed for funding under JNNURM. Hence funding requirement under this head would amount to only Rs. 30 crores.
2. The total amount proposed for projects under Service Reservoirs is Rs. 50.34 crores. However, as per information given in p. 31 the following emerges:
  - a. Construction of 225 lac litres capacity UGSR at Katargam Water Works for Rs. 5.00 cr has already been completed, hence not eligible for funding.

b. Construction of two 225 lac litres capacity UGSRs, with provision of booster house, at Sarthana Water Works and Render Water Works (proposed for Rs. 4.02 cr and Rs. 4.85 cr respectively), is already underway, hence not eligible for funding.

The projects completed and projects already underway amount to Rs. 13.87 cr.

c. Rs. 15.30 cr have been proposed for 24x7 water supply (p. 121). However, it is not clear what this involves. No details are available under this head. These details need to be provided.

Therefore, the water supply projects for SMC would amount to Rs. 184.01 crores

#### SUDA area

Projects for Rs. 396.00 crores have been proposed for the SUDA area for water supply. The projects proposed are for the year 2019 and 2034. It is not clear as to why the year 2019 has been taken for SUDA projects instead of 2011 as is the case for SMC. Even if 2019 is accepted, projects for 2034 cannot be considered. Therefore, the total amount proposed for projects in the SUDA area given in the CDP are for Rs. 30.277 cr and not Rs. 396 cr as given on page 163.

*The SUDA was consulted on this matter and the revised figures have been provided – attached as Annex 3a.*

### **C. Sewerage**

#### SMC Area

The projects proposed for the SMC area for sewerage are for Rs. 291 cr. These include some projects that are not eligible:

- a) Sewage gas based power plants at four places for Rs. 32 cr ; and
- b) Pandesa GIDC – CETP for Rs. 72 cr.

The CETP should be taken up by the concerned industries or MOEF and not proposed under JNNURM.

A project has also been proposed for a Tertiary Treatment Plant at Singapore for Rs. 25 cr. It is not clear from the CDP if the city had explored the secondary treatment option before proposing tertiary treatment.

#### SUDA Area

Since the SUDA area lacks adequate sewerage system (including treatment and disposal system), projects have been proposed for Rs 61.47 cr. for this area for the year 2019. However, the total cost of projects for SUDA given on p. 163 amount to Rs. 420 cr. This needs to be checked and corrected.

### **D. Storm water drainage**

SMC has not proposed any project under this head, though some of the projects proposed under ‘Environment Improvement’ related to drainage could have been brought under this head.

For SUDA area, projects have been proposed for Rs. 77.81 cr for three projects (p. 132). However, details of these projects have not been given. These need to be given in detail in the CDP.

## **E. Solid waste management**

For the SMC area, projects for Rs. 8 cr have been proposed (p. 163). However, details of projects are available for only Rs. 6 cr. The investment proposed is mainly for the purchase of equipment, machinery and transportation vehicles.

For SUDA area, no projects have been given in the strategies section. However, projects worth Rs. 80 cr have been proposed in the summary table on p. 163. The details of the proposed projects need to be given in the CDP.

## **F. Roads and Traffic Management**

### Traffic management

Projects for Rs. 415.73 cr are being proposed under traffic management in SMC area. Under this, the largest amount (Rs. 160 cr) is being proposed for 'Puzzle Parking', which would be developed on BOT basis (PPP). Rs. 112.25 cr is being proposed for MRTS while Rs. 102.00 cr is being proposed for 'Escalator type pedestrian over bridge/ subway' (this project cannot be given priority). The remaining amounts are to be used for road dividers, traffic island and junction improvements, signals with timers and cameras, area traffic control, safety devices and signages, thermoplastic road marking paint and privatisation of city bus transportation (Rs. 9 cr. – not clear as to what this amount is required for).

The Ministry may take a view whether traffic management components would be funded under JNNURM. It needs to be ascertained how many of these components are a part of SMC function and which are with the State Govt.

### Roads

#### SMC area

The emphasis under the 'roads' head has been given to expanding major roads and converting them to cement concrete roads, improving connectivity, completion of ring road, and construction of bridges. While projects for Rs. 981.89 cr have been given on p. 142 & 143, projects for only Rs. 748.40 are being proposed under JNNURM (p. 163). It is not clear from pages 142 & 143 as to which projects are being proposed under the Mission and which projects are going to be financed by the State and the ULB.

Of the proposed projects, about Rs. 748.40 is for flyovers and bridges, while Rs. 233.49 is for expanding roads and converting them to CC roads.

#### SUDA area

For the SUDA area, projects for Rs. 89.30 cr are being proposed. These are for a 4-lane ring road and for roads in 20 TP schemes.

## **G. *Housing and slums***

For the SMC area, EWS housing will be taken up in a number of Town Planning schemes as per the table on p. 146. However, the cost estimates for these schemes have not been provided.

The table on p. 163 indicates an investment requirement of Rs. 738.85 cr but the details have not been provided in the CDP. These need to be given.

For the SUDA area, projects for Rs. 100 cr have been proposed on p. 147 but the figure for proposed projects given on p. 163 is Rs. 351.75 cr. This mismatch needs to be corrected.

#### **H. Environment**

The projects being proposed under 'Environment' amount to Rs. 163 cr (p. 150).

Of this, the STP for tertiary treatment at Singanpore for Rs. 25 cr has already been proposed under Sewerage section and, therefore, needs to be deleted from this section.

Projects related to drainage are proposed for Rs. 27 cr while a Rs. 2 cr project has been proposed for urban forestry, mainly to tackle air pollution problem. These projects could be considered as eligible.

An amount of Rs. 50 cr is being proposed for construction of a multipurpose Barrage on Tapi River. This is not an admissible component under JNNURM. Projects proposed for flood protection are for Rs. 59 cr. The Ministry may take a view whether these projects need to be funded under JNNURM.

#### **I. Urban Governance**

A GIS project for Rs. 5 cr is being proposed under this head (p. 156). The Ministry may take a view whether this project could be proposed under the e-governance project of the Ministry.

#### **Summary**

A sectoral summary of projects identified is given on p. 163 of the CDP. The total amount proposed for projects is Rs. 7156.45 for both SMC and SUDA area.

The amount proposed for SMC is Rs. 4639.20 cr. However, this contains ineligible projects amounting to Rs. 321.6 cr as detailed below:

1. Science Centre, Museum, art gallery	Rs. 50.0 cr
2. Trade centre	Rs. 22.0 cr
3. Slaughter house	Rs. 9 .0cr
4. Social Infrastructure	Rs. 38.6 cr
5. Alia Bet Development	Rs. 202.0 cr

In addition to the above, it is not clear how the Rs. 110 cr 'Integrated Road Development' project (details in p. 160) is different to the projects proposed under Roads and Bridges (p. 142). This would need to be clarified.

A Tapi Riverfront Development project is proposed for Rs. 1000 cr. The details of the project, which are given on p. 161, are for Rs. 1710 cr. It is not clear from the table which components are being proposed under JNNURM.

#### **Total Investment Requirement**

If the ineligible components of the proposed projects were taken out, the total amount of funding required for SMC would come down from Rs. 4639.20 to about Rs. 3200 cr or less. Together with Rs. 2517.25 cr investment required for the SUDA area, the total investment requirement for Surat could come down to about Rs. 5700 cr instead of the Rs. 7156 cr being proposed.

The projects being proposed in the CDP have not been prioritized.

## Capital Investment Plan

This section gives the basis of working out the CIP, the CIP process and the multi-year investment programme. The CDP has given an investment requirement of Rs. 7156.45 crores of which Rs. 4639.20 crores is the requirement for the SMC area and Rs. 2517.25 crores for the SUDA area. Of the capital investment required by SMC, about 39% is for roads and bridges, 21% for river embankment/conservation and 16% for slums/EWS/LIG. The CIP, however, does not give any norms and standards that were used to arrive at the investment requirements.

Overall, the CDP has been developed well and presented well. It covers all the aspects that SMC deals with. Since projects have also been proposed for the SUDA area, it is clear that the city is also looking at the future expansion of its boundary. The SMC has indicated its financial strength and its ability to sustain investments.

While the CDP is largely acceptable, some additional information would be required to make it complete.

### Further information required from Surat

In order to complete the CDP, the city needs to provide the following:

1. Data and analysis on composition of population growth – how much of growth is due to natural increase, migration and increase in area.
2. Data and analysis on migration (at least estimates) and indicate if these have been factored into the population forecast.

SMC:

The details of composition of population growth are given below.

The projections given in the CDP are of Surat urban agglomeration. However as per the data availability for the SMC area, the figures are below:

#### Population Growth Composition

1	Population (1991)	14,98,817
2	Population (2001)	24,33,835
3	Increase in Population	9,35,810
4	Decadal Growth Rate	62.30%
5	Total No. of Birth	4,45,290
6	Total No. of Death	86,753
7	Net Natural Increase in Population	3,58,537
8	Natural Rate of Increase	23.92%
9	Decadal Rate of Population increase due to Migration	38.38%
10	Annual Rate of population increase due to Migration	3.8%

*Considering the above fact the annual migration rate of increase of population in the city is estimated to be 3.5% to 4.0%.*

*All the development projects which has been identified for next six to seven years including housing are based on the over all population projection. This projection includes the migration aspect. The decadal growth rate for last three decades of Surat is one of the highest in the country and this rate is due to the migration factor. The trend of the growth rate is taken for the population projection hence the action plans take care of the same.*

*Informal sector is an integrated part of the city economy. SMC has taken various concrete steps for the informal sector during planning as well plan implementation like hawking zone in several parts of the city, stalls for the*

physically handicapped, kiosks for the small stalls, exclusively earmarked municipal vegetable markets, local commercial in each Town Planning scheme etc. The E.W.S. and the VAMBEY scheme take care of the housing requirement for such sector. In addition SMC had already acquired the land in Bhestan and Kosad area for urban poor and has initiated industrial workers housing in different industrial areas. In addition Surat being planned on mixed land use pattern residential use has been earmarked in the industrial areas to provide housing for industrial workers within proximity.

3. Institutional responsibility matrix giving the role of each institution.

SMC:

The institutional responsibility matrix, including the role of private sector is given below:

Institutional Responsibility Matrix (Included in Revised CDP)

Sl. No	Sector	Delivery Responsible Agency	
		Provision	O & M
1	Water Supply	SMC/SUDA	Outsourcing + SMC
2	SWD including lakes, river etc.,	SMC/SUDA	Outsourcing + SMC
3	Sewerage	SMC/SUDA	Outsourcing + SMC
4	Roads	SMC	SMC
5	Transport	GSRTC/SMC/PPP	Proposal of CNG bus services by SMC
6	Street Lights	SMC	Outsourcing
7	Solid waste management	SMC	Outsourcing
8	Health	SMC/PP	SMC
9	Education	SMC/PP	SMC(80% GOG & 20% SMC)
10	Fire	SMC/GOG	SMC
11	Parks & Play Grounds	SMC/PP	SMC
12	Disaster management	SMC + GOG	
13	Traffic Management/Engineering	SMC/PPP	SMC + PPP

4. Information on the role of the private sector in providing services.

5. Cost and recovery aspects of services.

SMC:

O & M recovery mechanism of each service have been shown in the table below:

**Services and Cost-Recovery Mechanisms (Included in Revised CDP)**

Sl. No.	Sector	Cost Recovery Tool (Present)
1	Water Supply	Water tax, connection & disconnection charges, road reinstatement charges, metered charges for non-residential users
2	SWD including lakes, river etc.,	Conservancy tax and user fees for recreation
3	Sewerage	Drainage connection fees + conservancy charges
4	Roads	Vehicle tax/Road reinstatement charges/Rent/Advt tax
5	Transport	
6	Street Lights	

Sl. No.	Sector	Cost Recovery Tool (Present)
7	Solid waste management and Health	Charges for bio-medical waste from pvt. Hospitals and nursing homes, Admn. charges
		Preventive health – conservancy tax and Admn. Charges, Hospitals-user charges
8	Education	Education cess 80% recovery
9	Parks & Play Grounds	User fees/Outlets for commercial activities
10	Disaster management/Fire	-

*Further for the future O & M expenditures of each service, necessary projections have been done with due consideration of past growth rate as well apprehended future growth. For the recovery of the O & M costs of these services, SMC is recovering 40%- 50% directly through various taxes and charges. Further in the reform agenda of the ULB the user charges projections have been stated categorically. Energy auditing, e-governance and administrative reforms have been undertaken to bring down the O & M expenditure in major infrastructure projects.*

6. Information on the housing requirements of the poor.

*SMC:*

*For the housing and slums, the chapter has been revised and dealt in length of the future housing requirement in E.W.S. and Urban Poor. A master plan is also prepared and included in the revised CDP. This also takes care of the migrated labour force.*

7. Explain if secondary treatment option was explored for Singanpore STP before proposing tertiary treatment.

*SMC: Sewage gas based power plants are part of UASB based tertiary treatment of sewage and are coming under sewerage system only. Introducing and implementing such technology in the country will become a role model for energy conservation for other cities in India. Therefore it is requested that these projects shall be considered for funding.*

*Singanpore Treatment plant is presently treating sewage up to secondary treatment and covering northern area of city as well as nearby rural area of Surat. The SMC had already taken care of secondary treatment in all treatment plants. Since Singanpore STP is situated on the up stream of the river Tapi, it would be an imperative for SMC to treat the waste to the permissible standard and dispose into the river. Therefore it is requested to consider the Singanpore Tertiary Treatment Plant for JNNURM.*

8. Correct investment requirements for sewerage, with details, for the SUDA area.

9. Details of storm water drainage projects for SUDA area.

*SMC:*

*Storm Water Drainage: SMC has proposed new projects in revised CDP as well as corrected the sector "Environmental Improvement".*

10. Details of projects for SWM for SUDA area.

*SMC: Solid Waste Management - SMC has corrected the details of proposed outlay in revised CDP.*

11. How many of the traffic management components are a part of SMC function and which are with the State Govt.?

**SMC:**

*Roads and Traffic Management: Traffic engineering is an integral component of city management and service provision. Traffic engineering is a function of ULB whereas monitoring is a police domain function. Therefore SMC would need to exercise the functions under traffic engineering like: Multi Storied Parking in various congested areas, MRTS (Presently considered Integrated Public Transit System (IPTTS) like Bus Rapid Transit System (BRTS), Privatisation of City Bus Transportation, Pedestrian Movement using Foot over Bridge/ Subways and escalators, Area Traffic Control, Junction Improvement, Signalling including Timers and Cameras, Road Signage including Overhead Gantry Signage, Road Markings and Safety measures like Road Dividers, Traffic awareness among citizens through Development of Traffic Academy etc. Therefore all the component mentioned in the Traffic Management/Engineering are inevitable functions of SMC and the ministry may appropriate decision for funding. All the roads and flyover/ bridges projects have been proposed under the JNNURM.*

Of the projects given on p. 142 & 143 for roads, which components are being proposed under JNNURM?

**SMC:**

*Urban Governance: GIS project has been taken up and proposed under JNNURM as a part of mandatory reforms - GIS for utilities. This aspect has been stressed time and again in the various meetings as a part of reforms. Therefore it is requested that these projects shall be considered for funding. e-governance is taken up as separate sector whereby SMC has prepared IT policy and constituted IS department and is developing necessary programs in house.*

*Summary: Integrated Road Development project aims at the all round development of the circulation network of the city. These include arterial and sub-arterial, access roads from the major National & State Highways to the city. Integrated road development includes construction & development of "Modern Model Paths" considering the urbanscape and identity of the city. There are instruments to support industrial and trade developing for promoting and marketing economic growth. Therefore the projects under the integrated road development shall be considered as an admissible component under JNNURM funding. For clarification purpose, the roads projects taken in the "Roads" category are C.C. Roads, which are maintenance free amounting to less O & M expenditures:*

Cost estimates for EWS housing in the T.P. Schemes on p. 146

**SMC:**

*Housing & Slums: Estimates for T.P. Schemes EWS housing have been incorporated in Revised CDP. A complete master plan has been prepared for housing for urban poor and included in the revised CDP.*

12. Which components of Tapi Riverfront Development project are being proposed under JNNURM?

**SMC:**

*Environment - Multipurpose barrage on Tapi river has been taken up for water resource management, flood protection river conservation and to control salinity ingress from the tidal water of the sea. Therefore it is requested that this project shall be considered for funding.*

*Tapi River Front Development: This project is estimated to cost Rs. 1570 Crores as per the revised estimates which has been incorporated in revised CDP. The total project time span is 10 years hence for the next 7 years intermediate cost of the project has been taken as Rs. 1000 Crores. The priority is given to barrage and river conservation in the initial stage. This project aims at water conservation, improving the ground water table, water recharging and rehabilitation of riverbank slum dwellers and informal sector. This is an upcoming important and environment improvement project for Surat Municipal Corporation therefore it is requested to consider this project for full funding.*

13. Prioritization of projects for funding.

*SMC:*

*Vision & Strategies - The prioritisation of the projects has been done separately and communicated to the state govt. for the current and next year. Already the DPRs have been sent as per the priority via State Govt. to Central Govt. The prioritisation for the entire seven-year plan is attempted at this stage taking in to consideration technical capability, existing manpower, financial availability, time factor etc. Infrastructure projects and basic minimum services have been given priorities in the initial years. Next priorities have been given to projects of qualitative improvement of service provision like 24x7 water supply, SCADA and GIS. However phasing plan of projects in each sector also indicates tentative priority of that project within the respective sector.*

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