
AHMEDABAD CITY

Ahmedabad, the former capital of Gujarat, traditionally a major centre for industries as well as trade and commerce, was also called the 'Manchester of India' on account of its textile industry. It is the seventh largest city in India, the largest city of Gujarat and also its commercial capital. But, the decline in the textile industry in the 80's set in motion de-industrialization process. The trends got accentuated due to strict enforcement of environmental regulations in the 90's. The industrial policies pursued by the state also led to shift of industries to the hinterland.

Decline in economic base had cascading effect on overall environment of the city. Tax collections declined leading to decline in investments even for operation and maintenance of infrastructure services resulting in deterioration of services provision both in terms of quality and quantity. Seminars and debates were held to discuss if Ahmedabad was dying?

The city government took up the challenge and pursued with the policies to improve quality of urban infrastructure services and the physical environment in general, leading to the turnaround of Ahmedabad city economy. This paper summarizes the urban renewal efforts of Ahmedabad Municipal Corporation.

City Growth: An Overview

The history of Ahmedabad stretches as far back as in the 11th century and linking it self with old towns of Ashaval and Karnavati about 1000 years ago. In the year 1411 AD, Sultan Ahmed Shah built citadel and encouraged development of trade and commerce. In 1456 AD, an enclosing wall was constructed defining a periphery to the city-limits. The city within this wall got structured into wards, organized by 12 main roads each terminating at a gate in the wall.

With the coming of the railway around 1860, development began to spill over (beyond the city-limits) towards the northeast and southeast of the walled city. The first textile mill was started in 1861 here by Ranchhodlal Chhotalal. This also resulted in the industrial and residential development across the western side of Sabarmati River. Construction of 5 bridges – Ellis Bridge, Gandhi Bridge, Sardar Patel Bridge, the Nehru Bridge and the Subhash Bridge accelerated this development. But by and large the industrial development has remained concentrated on the eastern side and the walled city has continued to grow in density due to incorporation of fringe areas into the city limits.

The city municipality was given the status of Municipal Corporation in 1950 when the city started growing rapidly eastwards and southwards. In the later part of the century, the western part has developed rapidly. The city is governed by Ahmedabad Municipal Corporation (AMC), established in July 1950.

The Walled city housed 44 % of the AUA population in 1951 which decreased to 37% in 1961 and has been consistently declining since and was 12% in 1991. Decline of population in the walled city is because of outmigration of population from here to other

parts of the city due to commercialization of the area as well as due to repeated communal violence in the area in the 1980s and resulting conditions. The periphery on the other hand registered the fastest growth rates due to low population size compares to the core and availability of land in the periphery to absorb this population. Western Ahmedabad has grown faster than eastern Ahmedabad, especially the peripheral areas. In the earlier decades only eastern parts of the city registered faster growth rates, but since the 1980s the western periphery has grown rapidly. However, the eastern areas which are industrial have continued to attract higher proportion of new population added to the city and continue to house larger share of population as compared to the western areas.

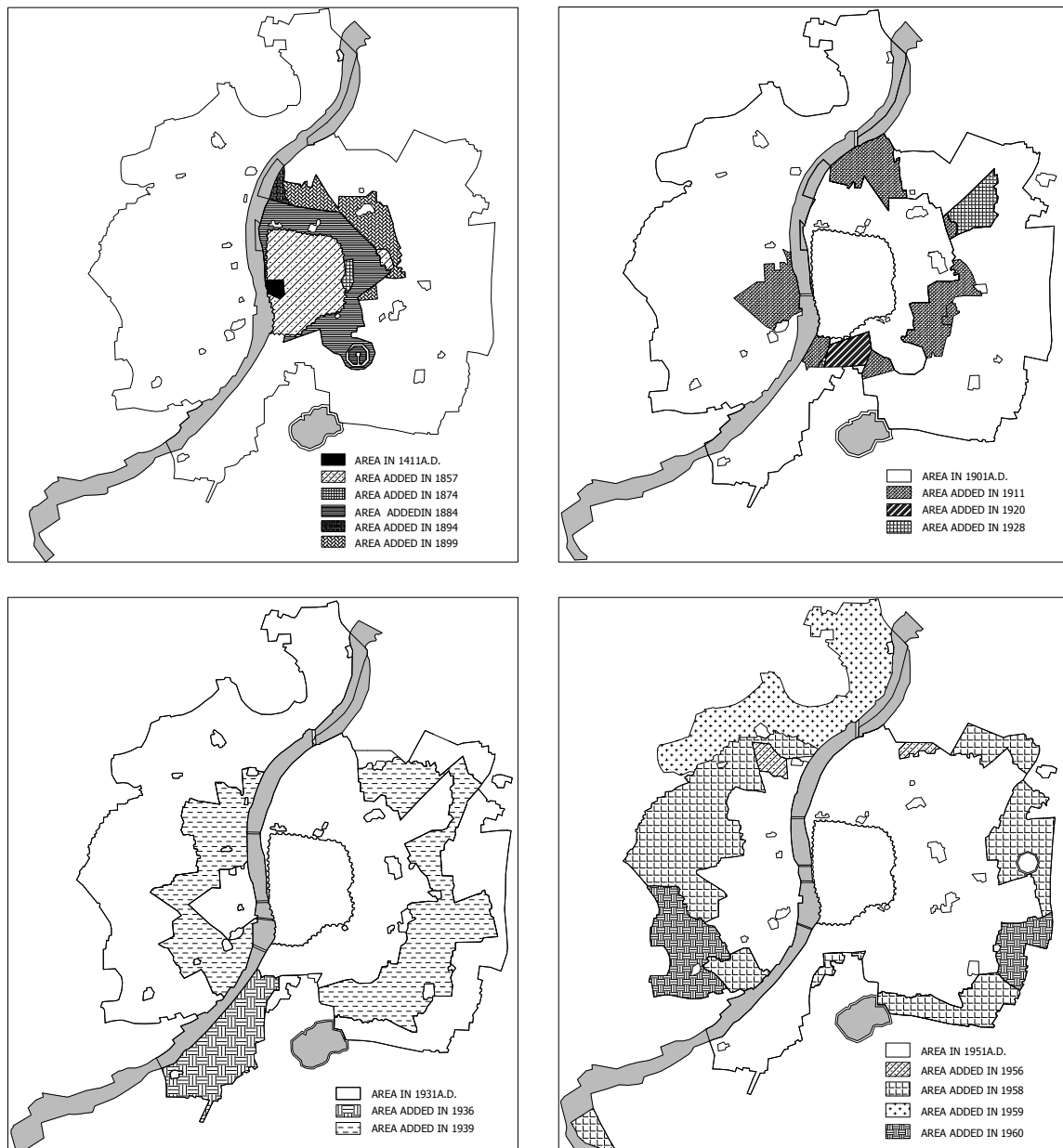


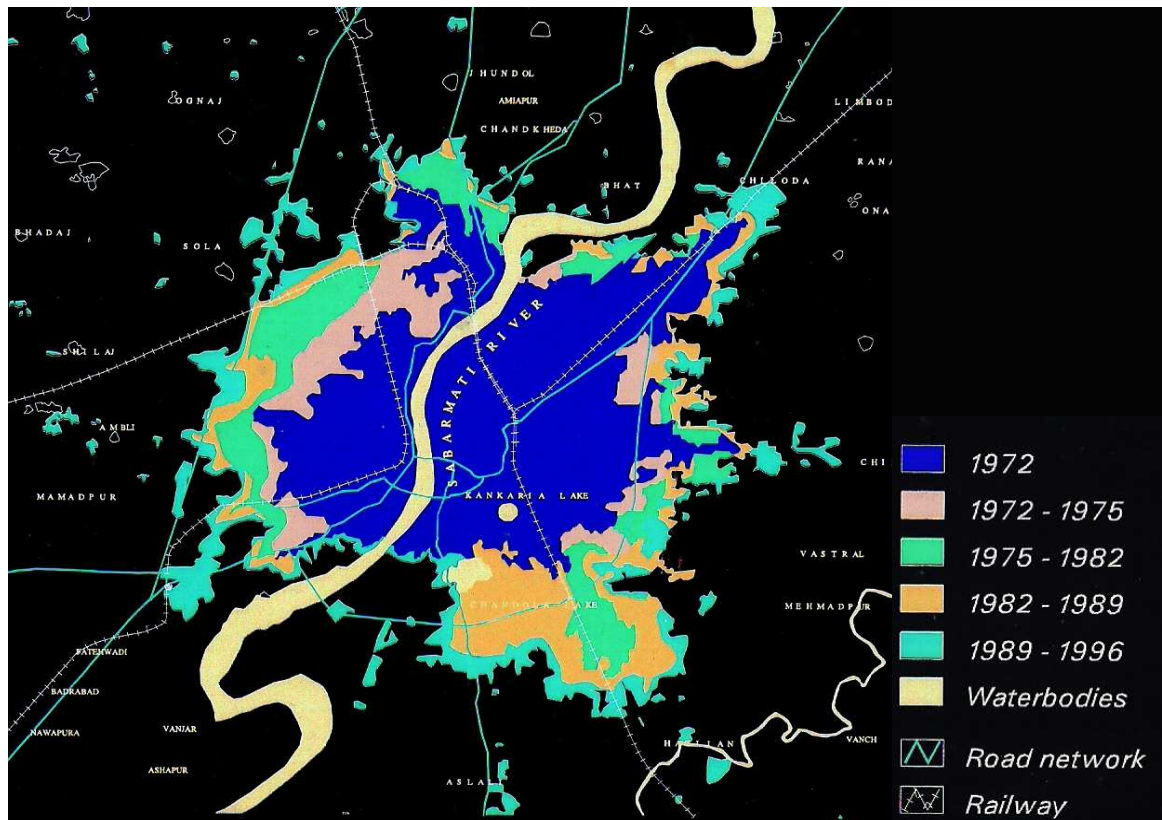
Fig. 4.1 Phases of Growth of Ahmedabad

(1) 1411 to 1900

(2) 1901 to 1930

(3) 1931 to 1950

(4) 1951 to 1960



Over the years, rapid urbanization has led to spillover of population outside the city limits. This has resulted in intensification of development high rise structures which have been putting tremendous pressure on the infrastructure facilities. In response, the jurisdictional limit of AMC has been increased to 450 Sq. Kms. With trends continuing, by 2011, the city is likely to accommodate 60 lakh people.

As may be noted, land use planning efforts have been fairly successful in Ahmedabad in containing sprawl and haphazard growth. The city continues to be relatively compact. Some industrial activity has spilled over to the periphery. Containing the tendency of sprawl growth observed in the recent past is a necessity. Transit oriented development as a mechanism needs to be explored. Central and eastern zones have lost employment opportunities.

The economy of Ahmedabad is gradually being dominated by the tertiary sector. The downtrend in the textile industry has led to the weakening of the industrial base. The industries like chemical, petrochemical, engineering existing in the GIDC estates are less labour intensive and hence have much lower employment rates. This has led to the redundancy of major section of the labour force.

Urban Economy:

The emergence of Ahmedabad as a trading and commercial hub was triggered off by a strategic decision taken by its ruler Sultan Ahmed Shah in the year 1411. Sultan Ahmed,

from whom the city derived its present name (its former name being Karnavati), built a citadel and created the walled city. The protection thus provided, encouraged trade and commerce, and the city soon emerged as one of the main trade centres of medieval western India.

The city's second phase of expansion was triggered by the formation of its municipality in 1858, and the provision of railway link with Mumbai in 1864. This phase saw Ahmedabad rising into prominence as an important centre of textile manufacturing. Ahmedabad continued to be a commercial and manufacturing hub till the 1970s.

Almost 40% of the dyestuff factories in India are located in Ahmedabad. Pharma giants like Cadila Pharma, Zydus Cadila and Torrent Pharma and many small pharma companies have flourished in Ahmedabad and the growth trend is expected to continue given the positive outlook of pharma industry in India.

The city contributes more than the proportionate share towards the State income. The city, which accounted for 8 percent of the total and 23 percent of the urban population of the State, was estimated to have generated 17 percent of the State income in 1995. This has also been increasing over time.

The slowdown in the textile sector since the 80s had its negative impact on Ahmedabad's growth. During the period 1981-85, city lost about 100 thousand jobs in the manufacturing sector. The surplus labour, which was unable to enter the formal market/sector, was mainly absorbed in the informal sector. Informal sector in the city today provides direct employment to 1 lakh people and indirect employment to 3 lakh people. Since then the sector has become significant creating business volume of approximately Rs 4 Crore everyday. During the 90's several chemical industries were closed down due to lack of compliance to environmental regulations. With this, the situation continued to remain depressed.

However, the situation is changing again! Now Ahmedabad is poised for multi-pronged growth today and certain directions of the same are clearly visible. Recent business survey placed Ahmedabad as one of the ten top destinations for investment in the country.

Large investments in ports, particularly private ports, in Gujarat are coming up. As a consequence of the state is geared to become the trade gateway for the entire north and central India, which have traditionally been served by ports of Maharashtra. Ahmedabad is centrally connected to all ports in Gujarat and is expected to be the main conduit for this trade. The extensive port network is also expected to facilitate the growth of new, high-end manufacturing industries, such as automobile accessories.

Several key high-growth industries such as textiles, pharmaceuticals and natural gas are already firmly anchored in Ahmedabad. Also the industrial centres around Ahmedabad, its traditional strength, are witnessing a turnaround, to Ahmedabad's advantage.

The traditional image of Ahmedabad with companies hesitant to launching new products had been changing over the years. Ahmedabad is now one of the most preferred destinations for opening retail outlets. A prime example being the Tata Group's retail arm, Trent, which launched its StarBazaar concept with a store in Ahmedabad on a pilot basis. A wide range of multiplexes and eating joints have also mushroomed all over the city. However, Ahmedabad is yet to fully complete the transition to a truly cosmopolitan city with a variety of entertainment options.

Ahmedabad is not reputed to be a tourist destination. However, in reality it offers visitors an adventurous destination packed with pleasant surprises. The city has the distinction of having probably the largest range of architectural monuments, from ancient examples of Hindu, Jain and Islamic architecture to some of the finest examples of the Modern Movement, designed by architects like Le Corbusier and Louis Kahn. With Mahatma Gandhi setting up the Sabarmati Ashram in the city, Ahmedabad was also an important witness to the Indian freedom struggle, and till date there are many sites of historical significance. Given these factors and the wide variety of festivals, traditional celebrations and handicrafts, Ahmedabad has a huge realized potential of emerging as a cultural hub and tourist destination.

Again, though the information technology wave bypassed Ahmedabad, the city has the potential to become a hub for business process outsourcing (BPO) services, given its strong academic and research base. With institutions such as the Indian Institute of Management, National Institute of Design, Centre for Environment Planning and Technology (CEPT University), Physical Research Laboratory and Institute for Plasma Research, Ahmedabad is well positioned to leverage the nationwide growth in service and knowledge industries.

Finally, the completion of the Narmada canal project is expected to boost agricultural production in the areas surrounding Ahmedabad and improve rural incomes, leading to increased consumption. Ahmedabad is poised to emerge as the key consumption centre and may develop into the most favoured trading zone for farm products, given its capacity to build the right kind of storage and transportation facilities.

AMC's efforts at empowering the city with suitable infrastructure to realize this multi-dimensional growth potential has been the source of this transformation. The section below describes the efforts made by AMC.

Urban Renewal Efforts:

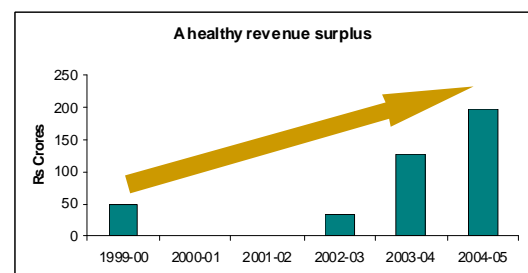
The confidence of the citizen stems from the fact, that the city governments have proven their efficiency in delivering services.

Over the years, AMC has faced growth challenges effectively and provided urban services at a level significantly higher than the national averages, making it one of the top tier service providers in the country. Coverage levels in water supply, solid waste collection and sewerage are well above national averages.

The recent focus on city transportation, encroachment removal and cleanliness has been maintained with impressive improvements over the past. More roads have been resurfaced, more encroachments removed and more solid waste collected in the first three months of calendar year 2005 than in any comparable period in the past. AMC's service delivery is matched by its high quality of governance, which has set benchmarks for other municipal corporations in the country.

AMC has undertaken several novel initiatives which have been summarized below.

Issuing municipal bonds: AMC was the first municipality in Asia to have accessed the capital markets, and enjoys a high credit rating (AA(so) by CRISIL and AA+ by CARE). This has been made possible by AMC's sound financial



management, which has resulted in a healthy revenue surplus in recent years.

Implementing property tax reforms: Ahmedabad was the first large city in India to have implemented property tax reforms, and set a “zero litigation” record. CRISIL recognised this as the best urban practice in financial management and extended the CRISIL Award for Excellence in Municipal Initiatives to AMC in 2004.

- Setting benchmarks in the areas of e-governance, slum improvement and urban environmental improvement: The civic centres of Ahmedabad are a model in e-governance, which has greatly benefitted citizens. Not surprisingly, these models are being adopted by several other cities.
- Implementing the public private partnership model in municipal transport: This novel step, involving 220 environment-friendly CNG buses, led to 33 per cent reduction in AMC’s operating costs. AMC intends to procure 180 more such CNG buses.

AMC over the years has carried out reforms in different areas viz. property tax, E-governance and computerisation, etc. The next section highlights the strength of AMC in undertaking these reforms. These steps are:

- Reform in Property tax by introducing area based property tax, thereby preventing leakage property tax systems
- Introducing E-governance
- Preparation of comprehensive City Development Strategy (CDS) with an investment plan
- Private sector participation in solid waste management, street cleaning, road maintenance, etc.
- Modernising Octroi collection system thereby preventing leakage in octroi
- Improvement of systems – financial management, valuation of goods, etc.
- Involvement of NGOs and CBOs
- Organisational restructuring and professionalisation of management – lateral recruitment of MBA, Chartered Accountants etc.,
- Utilisation of professional agencies for project execution
- The capital investments per year of the city government has gone up by four folds.

E-governance: The city is in the forefront of adopting e-governance in its administration. There are 16 city civic centres. The applications include Town Plan sanction, payment of taxes, issue of births and death certificates, issue of licenses and a complaint redressal system.

Urban Planning Efforts: As may be noted, land use planning efforts have been fairly successful in Ahmedabad in containing sprawl and haphazard growth. An integrated land use planning and regulation of building activities, taking into account the mutual interaction of land use and urban services, is essential for fostering functional efficiency and orderly growth of urban areas. In order to have a planned and guided growth, planning mechanisms under the Gujarat Town Planning and Urban Development Act (1976) have been established. The mechanism in operation in Gujarat includes:

Development Plan: Prepared for the entire area of the Urban Development Area which consists of two parts

A land use plan earmarking various areas as permissible use zones, and

A Development Control Rules for implementation of development plans

Town Planning Scheme (TPS): Prepared for an area of about 100 hectares with an objective to convert original agricultural plots into urban plots with proper shape, size and access. In the process of preparation of these areas, aspects of public amenities, housing for weaker section and for marketing by the ULB to recover facilities infrastructure building costs are integrated. The total of this area ranges between 35 to 50%

Probably Ahmedabad is the only city in the country which had the benefit of preparing five Development Plans (Land use Plans) during five decades and implementing them successfully. An innovative local area planning tool, effectively used by the city in its endeavour for growth management planning. Over 300 schemes have been implemented. It proposed that additional 113 TP Schemes covering entire development area proposed for year the first 10 years. 24 TPS covering 2410 ha have been prepared. 24 TPS have been sanctioned: during 2001- 02. Further, 24 more TP Schemes (2680 ha) are underway. Creating land bank for building infrastructure has been a major feature of this tool. AUDA created Land-Bank worth Rs. 500 crores from 24 TP Schemes, which may be used as collateral for raising funds for infrastructure development.

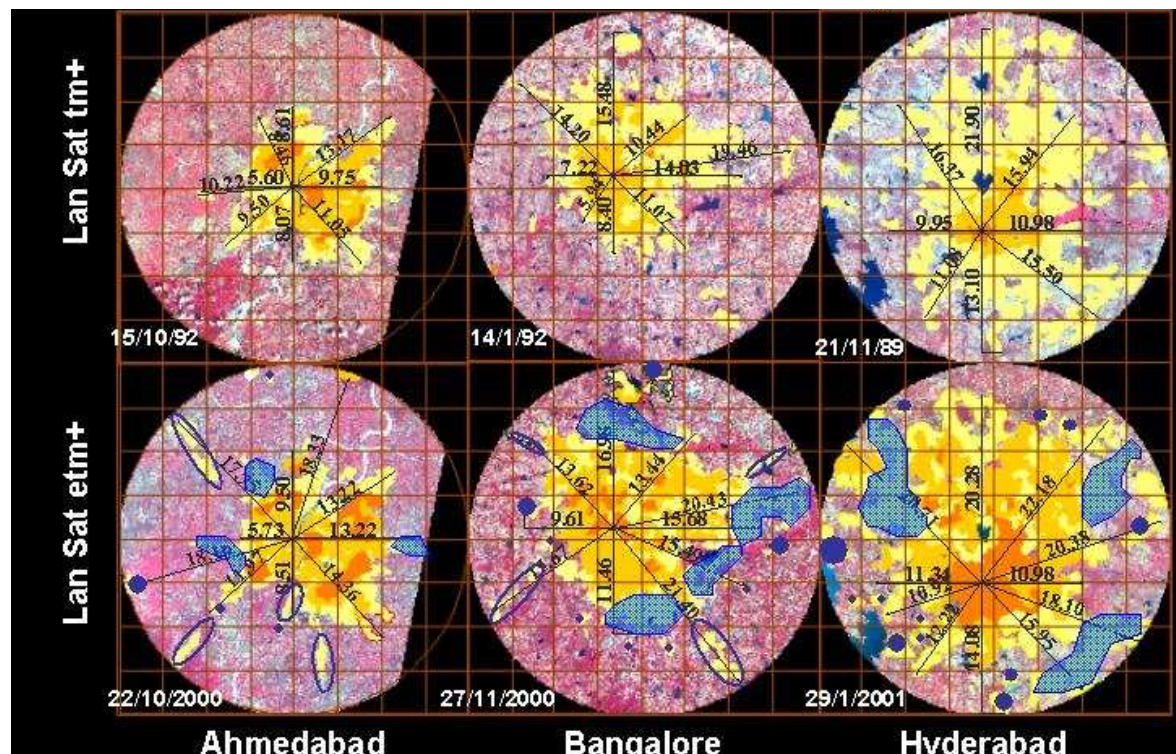
Heritage Area Development: The city government has a heritage cell. Development of Chows, Gates, Traditional houses has been a significant activity of AMC. A heritage walk starting from a temple ending at a mosque is a major attraction for visitors. Going beyond buildings, the city has been developing heritage development through a systematic effort. A plan to develop inner-city transit development is underway to make inner city accessible. Inner-city pedestrianisation is underway.

Water Supply: The history of organized water supply in Ahmedabad dates back to the year 1891, during which Dudheshwar water works was constructed on eastern riverbank and piped water supply was given to the residential localities. Due to non-availability of perennial water after late 50's in the River Sabarmati, the city started depending on the ground water sources. Apart from the municipal bores, a large number of private bores have been installed in various parts of the city. This has seriously affecting the ground

water level, which is depleting at the rate of 2 to 3m annually. Thus, the reliability and sustainability of the ground water source is questionable. The situation further worsened in the late ninties due to poor monsoon condition. At this time, the city initiated a new scheme – Raska Wier Project, at a cost of Rs. 110 Crores. The pipeline project over a length of 43 kms carrying 65 million gallons per day water conceived, executed and put to operation with a period of 130 days. In addition, a water treatment plant was also commissioned. Continuing with this, the city continued with development of surface water sources. As a result the dependency on ground water reduced from 60% to 5%. In the next two years the city will be served with 100% surface water supply. Along with this, Insufficient storage capacity other problems in the sector such as distributional Inefficiencies, contamination of water due to old service connections, inadequate coverage, high system losses and non-revenue water, limited duration of supply have also been addressed.

Box-1: Ahmedabad- A Compact City

In terms of spatial expansion, as may be seen from below, unlike Bangalore and Hyderabad, the city during the past ten-year period has expanded in a contiguous manner and remained compact



A comparative analysis of three cities in terms of spatial expansion over a decade has been carried out based on Lan Sat Image. From the above it is evident that Hyderabad is the most spread out city followed by Bangalore. The blue patches indicate low-density sprawl type of development.

The study referred below analyzed planning mechanisms and concluded that the Master Plan/Development Planning and Town Planning Scheme mechanisms have been

effective in Ahmedabad in keeping the city compact. Further, it concludes that the effect of urban sprawl is also evident in terms acute traffic and transport problems in Bangalore and to some extent in Hyderabad.

Sewerage: In 1987 over 100 sq. km densely populated but unserviced area was added to municipal limits. In the periphery systems have to be built for most part. Further, untreated waste was disposed in to River Sabarmati. Some polluting industries are also disposing off their wastes either in Kharicut canal or within the estate, while the rest of the industries of Ahmedabad are pumping their effluent into the GIDC main sewer line. Cases of industries putting their effluents into the manholes have also been reported. Mixing of storm water with sewerage during monsoons was also a major issue. Addressing these has been high on the agenda of Municipal Corporation. 100 sq.km area of eastern Ahmedabad is provided with underground sewerage network covering 95% of the area. Treatment capacity doubled in just about 7 years. Industrial effluent channel has been constructed which takes effluent to treatment plants.

Storm water Drainage: The monsoon in the region is seasonal and is active between the months of June to September. The land drainage in Ahmedabad city is relatively poor and, during the monsoon months, many areas of the city suffer temporary flooding/blockage of storm water. The city also experienced one of the worst floods in 2000. Storm water drains in the city cover only 23% of the roads in the city. The city is presently developing 367 km of storm water network covering all the primary road network of the city. Through urban watershed approach, provide for ground water recharge, lake development are the co-benefits of the project.

Sabarmati River Development: Since years together, the Sabarmati river, Ahmedabad's solitary water resource has been abused by the fast pace of urban and industrial growth. Though the Sabarmati is a major source of water for the city, the riverfront lies neglected and ignored. The storm water outlets perennially pollute the environment due to illegal release of sewage into the river bed. The Sabarmati riverfront project is a bold step to stop this abuse. It aims to undo the years of human neglect and promises to present an ideal return gift to Mother Nature. It diverts waste water from coming into the river, protects river bed, minimizes flood risk, provides alternate housing for poor at safe locations and provides space for public amenities. The project is developed on cost recovery basis through land development. The project under implementation has been awarded The Prime Minister's National Award for Excellence in Urban Planning and Design.

Lake Development Plans: The city has successfully brought back Vastrapur Lake, which was totally dysfunctional. The Kankaria Lake is being developed as a recreational area of world standard.

Solid Waste Management: Solid Waste collection and disposal has been a major challenge faced by many developing cities. The cities in India had neglected this service for a long time. The Supreme Court of India, issued guidelines for managing the waste.

The city, leading the initiative in the state, has initiated daily door-to-door collection of solid waste in 700 thousand households (80% hh). The total waste generated in the city is of the order of 2100 tonnes per day. Safe disposal systems have also been put in place.

Bio-medical waste: The bio-medical waste generated from the Municipal hospitals are segregated at source and collected in yellow polyethene bags at separate collection centers in hospitals as per the rules. These are collected and transported in closed vehicles of AMC. The incinerator plants are operated by authorized private contractors.

Urban Transport: Ahmedabad city is well connected by an expressway, several national and state highways, the broad-gauge and meter-gauge railways and an international airport. The city transportation system is predominantly dependent on roadway systems. Vehicular growth has been rapid. Every year about a lakh of vehicles are added in the city. Of these about 20000 are cars and about 60000 are two wheelers. In fact the vehicle ownership rates are the highest among the 4 million plus cities of India. However the due to integrated development strategy, the congestion levels have still not reached their critical limits. There are at least five important initiatives worth noting.

As a result of frequent plan updating, the network development has been complete with five ring and seventeen radial roads. This coupled with mixed landuse zoning makes trip length shorter and distributes over space. Trip lengths are one of the shortest at 5.5 kms average. Fatalities are also one of the lowest (230 deaths in 2006) for a city with 16 lakh vehicles and 5 million people.

The city had the problem of severe air pollution as many autorikshaws were using kerosene as fuel. With a drive, with a period of one year, 37000 autorikshaws have now started running on CNG. Unlike Delhi and other places in the country, conversion to CNG has happened without any resistance.

The city bus services had deteriorated significantly over the years. In 2005, there were only 350 buses with the Municipal Transport Undertaking and were serving about 3 lakh passengers per day. The Municipal Corporation, through private participation, increased the fleet to 800. The patronage has also gone upto to 8.2 Lakh passengers per day. The efficiency improvements are observed in terms of per vehicle kilometer cost reduction from Rs. 39 to Rs. 19.

A 76 Km long ring road has been developed with public-private partnership approach. Land has been made available by private owners on the promise of the city government to make Town Planning Schemes in these areas. A two lane highway is under operation. Four laning is being done through private investment. Toll recovered will also reimburse the initial costs on making the road.

The city of Ahmedabad is implementing a BRT system with 60 Km long Exclusive bus way and other essential elements. Integration of NMV, technology, fare etc., are important features of the system/ System is likely to come into operation by April 2008.

Social Facilities and Amenities: The Municipal Corporation of Ahmedabad, going beyond its mandate, provides several non-obligatory services such as education and health. The city government runs about 530 primary schools and 3 general and 2 special hospitals (2100 beds). In addition 43 health centres are in operation. The quality of service provided is on par with private facilities and serve large section of urban poor population.

Industrial Area Management through Participative Approach: The management of the three industrial areas in the city has been handed over to a special purpose vehicle (SPV). The company consisting of AMC, industrial estate association and private provider manages services in the area. AMC in turn returns 75% of the property tax paid by the industrialists. This fund is leveraged to raise resources from the financial market to invest in infrastructure development.

Urban Poor: Protecting the interests of urban poor has been on the main agenda of AMC. The City has implemented a major project 'Slum Networking', on site development of slums areas. The project received UN Habitat award as a best practice. The city is presently constructing 38000 dwellings for urban poor. 8000 dwellings have been completed. The target is to reach upto 60000 dwellings during the next 2 years.

A programme 'ek moka udaan', an employment oriented programme for youth from slums in Ahmedabad has been initiated with support from NGO. The programme trains youth to serve in modern service industry such as malls, star hotels, institutions etc.

With these in the background, the city government strives to transform Ahmedabad from a clean and livable city to productive, well governed and self sustaining vibrant city.