

Conference Proceedings

edited by Lei Qu, Chingwen Yang, Xiaoxi Hui and Diego Sepúlveda

# **The New Urban Question: Urbanism Beyond Neo-Liberalism** - 4<sup>th</sup> Conference of International Forum on Urbanism

Conference Proceedings

Edited by Lei Qu, Chingwen Yang, Xiaoxi Hui and Diego Sepúlveda

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## INTRODUCTION

More than 35 years after the publication of *La Question Urbaine* by Manuel Castells, the urban question has to be asked anew. In the meantime the world is experiencing the fastest urbanisation in the history of man. In 1972 2.4 billion people lived in cities, in 2008 the urban population had already passed the 3.3 billion border (this is half of the world's population) and in 2030 with 4.9 billion people almost 60 % of the world's population will live in cities. Never before has human society gone through a comparable process of urban growth, nor have cities expanded as they are today. Within a few decennia new mega-cities or even meta-cities have arisen that are confronting the world with new urban cultures, with increasing social contradictions, and with new and unknown environmental threats. However, although these *super-agglomerations* are dominating the front pages of the urbanism debate, their actual impact is less dominant with only 9 % of the global urban population residing in cities of more than 10 million inhabitants.

Of greater importance, from this point of view, are the small and middle-sized cities (of up to 500,000 inhabitants) responsible for the accommodation of more than half of the world's urban population. According to the *United Nations Population Fund*, these cities will become catchment areas for the majority of the future population growth. Actually, the quality of life of people on average is much more dependent on the quality of these secondary cities than on the quality of the dominating mega-cities.

Contrary to the assumptions of many, urban growth in developing countries is not only caused by migration from rural to urban areas. An important factor is decreasing mortality that can be recognised in cities as well as rural areas. Caused by improved health systems, a more productive agriculture, and thus more and better food, the population in developing countries is growing in both cities and in rural areas. However, the capacity of rural areas is limited. They cannot accommodate the growing number of people. Thus, additional migration and the concentration of people in cities is inevitable, even if population numbers in rural areas remain stable on a global scale.

With almost 80% of the population living in cities, urbanisation in the so-called developed countries in Europe and North America seems to have reached saturation point. At first view, an opposite development can be recognised: Due to an ongoing process of suburbanisation, many cities are losing population, are losing (tax) income, and thus are losing the load-bearing capacity for facilities and infrastructure. On the other hand, the growing populations in expanding suburban areas are far from returning to a rural style livelihood. These areas are still embedded in the urban economy, and are still characterised by an urban lifestyle. In reality, spatially the cities are expanding into new metropolitan regions, while the administrative borders continue to be limited to the old municipalities.

In view of the evident recent effects of climate change it seems almost superfluous to stress the ecological threats of urbanisation. Limited energy resources, the Greenhouse Effect, rising sea levels, floods caused by melting glaciers, and the bareness caused by shifting climate zones are subjects of many international conferences and numerous debates between politicians, scientists and professionals. It makes it all the more startling then that these threats are barely recognised within architectural and urban design projects of recent years. Until now, only a minority of projects have applied advanced ecological technologies during the process of design and construction. As an example, traditional architecture and historical urban forms have always taken into account the climatic conditions of the region. However, globalisation and the belief in technical omnipotence have tended to support generic design approaches, regardless of the regional climatic conditions. This disregard of the basic rules of bioclimatic design has resulted in increased energy consumption caused, in warm climates, by the generation of urban heat islands and its growing needs for cooling, whereas in cold climates, the disregard has resulted in heat losses and energy waste. Comparable arguments can be developed for almost all forms of environmental pollution and

for the exploitation of all natural resources. Considering the strong impact of urbanisation on the environment a radical re-orientation of urban planning and design approaches seems to be unavoidable.

The destructive effects of recent urbanisation processes are banked by the social effects related to them, in particular the concentration of poverty. The UNFPA Report 2007 estimates that on a global scale one billion people reside in slums, of which 90% are to be found in developing countries. Throughout the world, slum dwellers are confronted with a variety of problems of which poverty remains only one of their burdens. Other important aspects are: poor and overcrowded shelters in sometimes large urban or suburban areas, violence and crime, the lack of public services and infrastructure, limited accessibility to education and health care, unhealthy environments, and insecure land tenure. Moreover, the increasing risks from environmental hazards disproportionately affect poor people in vulnerable areas. Manuel Castells introduced in this framework the idea of the dual city, divided between the *haves and the have-not's* and based on a similarly divided labor market that allows barely any upward mobility.

We have become accustomed to the idea that urban poverty is mainly regarded as a problem of fast growing cities in developing countries. However, dual cities can also be found in developed countries. In many industrialised countries the distinction between rich and poor has increased during the last decennia. The reasons for this distinction are based on economic transformations – in particular, the loss of employment in the industrial sector, and the dismantling of the welfare state, caused by an attempt to reduce public expenditure. As a result the economical segregation within the city, and between city and suburbs, is on the increase, in many cases additionally amplified by growing ethnical contradictions. The slogan of the Third World, *coming back to the First*, indicates the problems many cities in 'developed' countries, are confronted with.

Additionally, the concentration of poverty becomes supported by a growing tendency which François Ascher once described as *Metapolisation:* The concentration of human and material richness in the most important agglomerations. The background of these developments is represented by fundamental changes in economic demands. Modern economies, in particular the new ICT based service economies, have become almost independent from natural resources and from the natural conditions of a respective site. The new economies have become 'footloose': Enterprises, factories and offices can be easily located from one city to another, from one country to the next or even, between continents. New criteria for locating enterprises, in a general sense, have become 'man-made'. Besides socio-economic criteria such as the cost of labour, a large and diversified labour market, and a high level of services and political stability, there remain a number of criteria directly related to urban planning and design: good international connectivity and local accessibility, well established infrastructure and facilities, and attractive housing areas in particular for qualified employees and attractive business sites. Last but not least, the image and the charisma of the city itself play an important role when companies choose a site for their enterprise. A common characteristic of these new criteria is that they can be influenced and improved through planning and design interventions.

Consequently, a major effect of globalisation is the increasing competition between cities and regions on a national and international level. To facilitate economic development, cities are more or less forced to make themselves attractive for investors and enterprises by investing in infrastructure, facilities and the development of attractive sites for new business development. An important role in this framework is taken by the so-called Large Urban Projects (LUP) – *Grandes Projets* – that are often realised through the reconstruction of urban wasteland, former industrial plants, old harbor areas etc., and are usually located on central sites in the city and in particular those suitable for the development of new business activities. A general attribute of these projects is that they are not developed as mono-functional business districts. In most cases Large Urban Projects combine offices with housing, shopping, restaurants, cultural facilities and attractive public spaces, in this way generating a new type of (multifunctional) urbanity. They, too, combine public and private functions, and thus are often developed in Public Private Partnership (PPP). The Centre Pompidou area in Paris, the London Docklands, and Battery Park City in New York City, have become pioneers for these new types of projects. In the meantime, almost every self-respecting city in the world developed comparable projects to promote city branding and to participate in the growing global competition.

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Although projects such as these play an important role for the economic development of cities they also have reverse side-effects in regard to urban sustainability. These projects demand substantial portions of public resources, concentrated on only a few areas – islands within the city – and in this way support fragmentation and segregation, and in many cases result in an unbalanced over-all development of the city at large. Moreover, the dominance of commercial interests means that there is little space or funds available for social and/or environmental aims. The majority of the projects remain socially exclusive, while focusing on the solvent demand, and reinforcing the idea that environmental issues can only play a role if they contribute to the image forming and branding of the site.

For decennia urban development has been dominated by a globalising economy and almost unlimited market demands. While economic power has become more concentrated in global command centers (Saskia Sassen), the influence of public planning has decreased in the framework of governmental decentralisation. Ulrich Beck talks about a deprivation of governmental power, while international political institutions still remain weak. However, the recent economic crisis has shown the limits of growth under the conditions of neo-liberalism. In this way the crisis also yields a chance for the urbanistic debate - what Beck is calling *Reflexive Modernization*: To generate new models for urban development, new concepts for urban design, and new approaches for planning and management that are able to guide the processes of expansion and transformation of cities and regions, to bridge social contradictions, to combat segregation and fragmentation, and to face the ecological challenges.

With this challenge in mind, in 2005 the International Forum on Urbanism (IFoU) was founded as a network of universities, research institutes and knowledge centers with the aim to strengthen the international collaboration in the field of urbanism, to initiate and realise international comparative research in the fields of urban design, planning and management of metropolitan areas and regions, to support the development and dissemination of knowledge on the international level, to organise international exchange program's of training and education and, last but not least, to facilitate the dialogue between the academic world, professional organisations, corporate entities and politicians. An important activity in this framework is the organisation of international conferences, taking place once a year in one of the member institutions.

In 2009, the 4<sup>th</sup> Conference of the International Forum on Urbanism (IFoU) takes place in Amsterdam and Delft under the title 'The New Urban Question – Urbanism beyond Neo-Liberalism'. The conference aims to rediscover the discipline of urban planning and design under the recent conditions of rapid urbanisation and urban transformation, ecological threats and economical crisis, and tries to generate an idea of urbanism beyond neo-liberalism. In this framework causes, reasons, and dependencies, of worldwide transformation processes have been analysed, and planning strategies and design concepts for a more equitable, more social, and more sustainable development of cities and regions have been explored.

This book presents the most important papers contributed to the conference and selected by the scientific committee<sup>1</sup>. The book is divided into 9 parts, following the layout of the conference.

- Part 1: The New Urban Question combines a number of fundamental articles with regard to the urbanistic debate, written by the keynote speakers of the conference. Laura Burkhalter and Manuel Castells open the debate with a contribution 'towards a new urban paradigm', emphasising the opportunities for change beyond the crisis. Saskia Sassen follows with a contribution to the ecology of city and nature. Wu Liangyong demands in his article a new thinking in architecture and urbanism in China. Remarkable is the date of publication: The text is based on a keynote speech given already in 1999 at the XX UIA Congress in Beijing. Hidetoshi Ohno proposes a paradigm shift of urban planning and architectural design away from modernist thinking, and away from the concept of growth. Henk Ovink and Hsia Chu-Joe both focus on the development of two important metropolitan regions, the Randstad Holland and the West Coast Metropolitan Region of Taiwan.
- Part 2: The New Urban Economy discusses the effects of globalisation, economical crises, competition, and competitiveness on the urban structure and city form.

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Additionally, the enclosed compact disk contains all papers being presented on the conference.

- Part 3: The Urbanised Society focuses on new forms of living together and new urban cultures as well as the effects of social contradictions within the city and between city and suburb.
- Part 4: Urban Technologies and Sustainability in particular discusses integrated approaches for the development of sustainable urban technologies and infrastructures.
- Part 5: Transformation of the Urban Form targets the question to what extent globalisation, economic changes, and the need for more sustainable solutions are transforming the urban form.
- Part 6: The Design of the New Urban Space is focusing on design concepts and design principles.
- Part 7: The New Metropolitan Region discusses a new kind of spatial form that Castells is calling the new metropolitan region: 'urban constellations scattered throughout huge territorial expanses, functionally integrated and socially differentiated, around a multicentered structure' (Castells 2005).
- Part 8: New Approaches of Urban Governance concentrates on policies, tools and instruments for a more efficient, more integrated, and more sustainable urban development.
- Part 9: Changing Planning Cultures explores the recent transform in planning approaches and methods, as cultural changes related to changing societal systems.

The conference and this book, present a wide scope of ideas, concepts, and opportunities for a new urbanism beyond the crisis, and beyond the period of neo-liberalism. Of course, many ideas discussed in this framework will remain utopian, in particular in view of the recent tendencies of neo-liberal reconstruction even after the crisis. But Ernst Bloch has already taught us that we need utopias, that utopias are essential to maintain – what he is calling a necessary condition of human society – the principle of hope.

Jürgen Rosemann Chairman IFoU

## URBAN SHAPE OF AHMEDABAD CITY TRIGGERED BY INDUSTRIAL ACTIVITY, CASE STUDY OF INDUSTRIAL ESTATES OF GIDC

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**ABSTRACT:**Industrial activity of industrial estates generates occupation of land on its surrounding area. The areas become more and more developed by residential and commercial uses. Development of the city for its increased population encouraged changes of agriculture area located in between central city and the three industrial estates. Since industrial activities of industrial estates become urban generators to change the use of land, from agriculture to developed land, hence it also affected to the physical morphology of the urban areas. The paper tries to analyze the growth of the city affected by the three urban generators located in eastern part of the city that are the industrial estates under GIDC management.

**KEYWORDS:** urbanization, rapid growth, regional planning

## 1 INTRODUCTION

Ahmedabad is the largest city in Gujarat state and seventh largest city in India (Fig 1). It is a growing fast city since its inception in 1411. In the year of 1960's, there were industrial estates developed on the eastern outskirt of the city: Vatva, Odhav and Naroda; that located outside the municipal authority. The three estates are under management of GIDC (Gujarat Industrial Development Corporation) on Gujarat state level. Industrialization in Ahmedabad was highly generated by the cotton mills industry in the year of 1950s. Since then, the city becomes larger and larger in terms of population and also size.

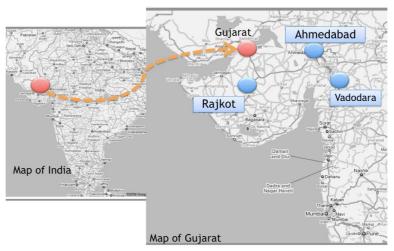


Figure 1 Location of Ahmedabad city and industrial cluster of Gujarat

The early industrialization of the state in 1960s, industrial activity was clustered on the major cities like Ahmedabad, Vadodara, and Rajkot (Fig 1). In the recent times, Industries and Mines Department of Government of Gujarat has encouraged to facilitate fast establishment of Special Economic Zones and

Industrial Parks. It is not only strengthening its industrial base but also consolidate the achievements in the interest of overall economic development of the state. The state is now determined to lead the rest of the country by emerging as a Model Industrialized State in Asia. One of the acts is: proactive approach of the government, government to act as a facilitator, and all the physical infrastructure should compete with the best in the world. Most important for industries development is incentives given by the government to open an industrial area/ land on the outskirt of center city.

In Gujarat alone, there are 76 industrial clusters at 90 different locations. These clusters would be defined as a group of industries manufacturing identical and complimentary products. The government has decided to recognize a cluster with a minimum of 50 units located within the radius of 10 kms at a particular location.

According to Balchin, Isaac and Chen (2000)<sup>i</sup>, in terms of urban economics, industrial activity in urban areas is a prime determinant in shaping city size and growth opportunities especially in developing countries. In some cases, the presence of industrial activity can also change the socio-economic status of an area by generating population growth and related employment opportunities (Haan 1989)<sup>ii</sup>. Therefore, the research will take place in industrial activity inside industrial estate as a prime generator of urban morphology.

## 2 URBANIZATION IN AHMEDABAD

The development of Ahmedabad is strongly related to the rise of the indigenous industrial sector of cotton industry. Its growth from medieval times from a major trading centre for gold, silk and cotton<sup>iii</sup>. The establishment of the first cotton mill in 1861 was the way in which this industry expanded over the years. In 1940s, the city was known as 'the Manchester of East' due to the famous textile industry<sup>iv</sup> which reflects the continuity of its distinct enterprise and business leadership<sup>3</sup>. In Ahmedabad, where native entrepreneurs created a textile industry that underlay the city' growth to the sixth largest in South Asia, there were 49 mills working in 1914 compared to 85 in Bombay<sup>v</sup>.

Cited from file by Shyam S. Dutta, refer to historian examine the Ahmedabad city (Gillion Kenneth 1968, Ahmedabad: a study in Indian Urban History)<sup>3</sup>:

"Unlike Bombay, Culcutta, Madras and Kanpur, Ahmedabad was not a creation of the British but a city which while remaining true to itself successfully adapted to the new industrial age carrying over commercial and industrial skills and patterns of traditional social organization. In no great city of India can the continuity of past and present be seen as clearly as in Ahmedabad"



Figure 2 Growth of urban space under capitalist forces vi

Population of Ahmedabad according to 2001 census was declared to be 3.5 million people<sup>vii</sup>. This number is only limited inside Ahmedabad municipal region. Total population of Ahmedabad agglomeration

is around 4.5 million:  $4,518,240^{viii}$ . There are 886 female to every 1000 males. Literacy rate in Ahmedabad is 79.89% which is highest in Gujarat. There are more than 30000 rural families lives in Ahmedabad , 5,41% of those are below poverty line.

Driven by the growth of textile industry reached its peak in the 1940s, the city attracted migration from around Gujarat and India. In the post-Independence period, the city witnessed not only diversification of its industrial base but also significant development of professional and technical institutions, such as the Physical Research Laboratory, the Indian Institute of Management, and the Centre for Environmental Planning and Technology <sup>3</sup>. In the late 1970s and 1980s, the textile industry has declined, resulting in the closure of more than half units and laying off about 60,000 workers. After 1990-1991, local economy has shown a revival. This is indicated by reduction number of lowest income group and also an increase in regular workers.

Many factories were built on large estates in or around the centre city before 1980s, and become centre of noise and pollution of its less infrastructure. The city suffered from traffic congestion and large number of slums. The old textile industries were no longer competitive, and new industries were located outside the centre city. In the year 1980s, the government did not allow polluting industries to locate in a radius of 20 kms around the city center<sup>4</sup>. The idea was not covered by any regulation, but only policy at state level<sup>ix</sup>.

The city' population has increased in a major way following economic expansion and modernization. Ahmedabad being a centre of commerce and also government institutions and military base. The density population at 258 per one sqkms area calculated on the basis of the estimated population of the earthquake affected areas.

## **3 CASE STUDIES**

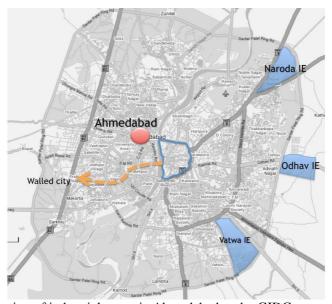


Figure 3 Location of industrial estate in Ahmedabad under GIDC management

In order to accelerate the pace of industrialization in Gujarat, under the Gujarat Industrial Development Act of 1962, GIDC came into existence in 1962. GIDC operates all over the state of Gujarat. It operates and maintains industrial estates in various districts of Gujarat State. These estates are self-contained sanctuaries capable of sustaining a large number of industries within themselves. GIDC provides ready to occupy sheds for immediately starting an industry and also provides godown for storage of its material. All across the state, GIDC has planned for 252 Industrial Estates of which 171 are developed and functional.

In Ahmedabad, GIDC operates three estates: Naroda, Odhav and Vatva (Fig 3). The three estates have been developed around year of 1968. The estates occupy areas of 120-500 hectares of land on eastern part of Ahmedabad city. Currently, the estates connected each other by Narol Naroda Road and Sardar Patel Ring Road and also connected to other cities in Gujarat. The three estates also connected with Kharikat Canal that lay from north to south.

Table 1 Characteristics of GIDC case studies

		NARODA GIDC	ODHAV GIDC	VATVA GIDC
1	Year of establishment	1968	1968	1968
2	Total area	357 ha	127 ha	512 ha
3	Number of plots	689	491	
4	Numbers of sheds	426	525	
5	Distance from central city (approximately)	8 km	4,5 km	4,5 km
6	Number of company/ factory	660	1502	1187

## 4 URBAN GROWTH OF AHMEDABAD CITY

Many factories in the early of industrialization have been developed inside the city and around the old city. The early industrialization of the Gujarat state in 1960s, industrial activity was clustered on the major cities such Ahmedabad. The city became overcrowding, increasingly higher land prices, and lack of effluent disposal sights. These industries and mostly the new industries began looking for location sites outside the city limits, into the industrial estates which being established by the state in the rural parts of Gujarat.

The state government under GIDC management developed some industrial estate on the outskirts city, they are located at maximum of 10 kms outside the city. The state government also gave incentives to industries to pursue land on those areas. In 1968, government under GIDC management appointed packed areas of land on the eastern outskirt of the city. The industrial estate are: Naroda, Odhav and Vatva (Fig 3).

After more than 40 years of development, the three industrial estates generated the growth of its surrounding areas. Agriculture land has been changed into developed land, and use of land had also been changed, such from agriculture to housing, housing to commercial, and public land for private or commercial use. The industrialization process in those particular areas has triggered these changes. According to Balchin, Isaac and Chen (2000)<sup>1</sup>, industrialization always affected to people and urban shape. Population of that city became increased since the city offer many job related to industries.

According to GIDC advisor<sup>9</sup>, in the 1980s, there are existed law that appointed land 20 kms outside the city could not be used for industries in order to protect agricultural land. Consequently, new laws restructuring the process of acquiring land making it easier to purchase land in what the government deemed outskirts, areas of low economic production and value. Incentives by the government were established to encourage industries to move away from central city, predominantly agricultural areas. As domino effects, land that left and not purchased by the state was slowly being polluted by the industries, the land became increasingly infertile and was slowly sold to the larger industrial estates.

Referred to historical data and process of urbanization driven by industrialization, which is explained on previous section, process of industrialization in Ahmedabad could be summarized as follow:

- 1861: first cotton mill were developed on the western side of the city
- 1940: since the city became famous as Manchester of East, it has attracted migration from outside Gujarat, hence the western side grew rapidly. Outside the walled city on eastern part,
- 1947: (post independence) eastern side of the city grew rapidly due to the development of some institutions and housing areas for middle income people
- 1968: development of three GIDC industrial estates (Naroda, Odhav, Vatva) on the eastern outskirt of the city (maximum of 8 km only)
- 1970-1980: textile industry has declined, many workers became unemployed
- 1980s: industrial activity developed on the outskirt of the city in radius of 20 km (government policy)
- 1986: the boundary of AMC expanded to the three industrial estates

The boundary of Ahmedabad city has been expanded due to its increased population and services. The development of the industrial estates (Naroda, Odhav, Vatva) on eastern side significantly gave impact to the Ahmedabad Municipal Corporation (AMC) area. The growth of Ahmedabad city in this case is AMC area, could be seen in three different stages of growth. The growth could be defined in three stages of urban shape of Ahmedabad city driven by industrialization. AMC has changed its boundary three times since the city' development due to respond the growth of the serviced city. The three stages are (Fig 4):

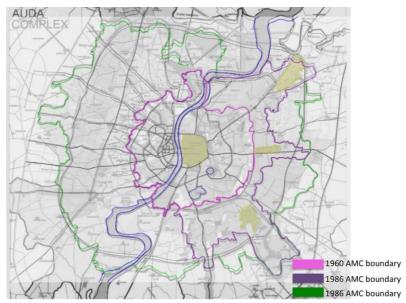


Figure 4 Stages of Ahmedabad urban growth driven by industrialization

- 1. In the year of 1960s, when economic of the city became stronger and cotton manufacturing activity became more and more developed around the walled city, and also western side of the river developed due to service development, city boundary was expanded to western side and outside walled city in the eastern part. This shape could be define as first changing of city' boundary generated by industrialization. Physical development of eastern and western side of the city were relatively balance in shape, it also driven by the development of bridges which connecting both sides. Odhav, Naroda, and Vatva industrial estate located outside the AMC boundary, since it connected to dirty activity and inappropriate land use inside the city.
- 2. In 1986, the boundary of AMC was expanded only to the eastern side. The urban shape has protruding figurine of the three GIDC industrial estates, Naroda, Odhav, and Vatva, which are located on the eastern part of the city. The western boundary still remained same as previous. Naroda, Odhav and Vatva became part of AMC area due to the development of area in between the city and the industrial estates. The new urban shape at that time could be understood as a result of the change of land occupation development in between city centre and the industrial estates, from agriculture to developed land. It also triggered by the development of ring roads and state/ national highway around the city. Surrounding areas of the three estates became developed (radius of 1-2 kms from the estate) change also from agriculture into developed land, housing land occupation into commercial occupation. Some *talukas* (villages) that located around the estates merged with the estate as one big area. Since 1968 to 1986, the three estates mostly generated the growth of the surrounding areas, the three became urban generator of Ahmedabad city growth particularly on eastern part. After 1986, not only the industrial activity generated the areas, but also other service development, such as school, market, and some institutions. These activity as sub-sub urban generator which firstly driven by main generator; the industrial estates.
- 3. In 2002, AMC expanded its area, both to eastern and western side of the city. There is no more protruding figurine of the three industrial estate. The three protruding shape has merged each other, hence become one solid shape with western boundary. The only boundary that remain same is on the northern side, since it is connected to boundary of capital city; Gandhinagar. Issue of urban agglomeration became major concern of AMC to expand its area. It mostly driven by the development of many ring roads and state/ national highway. Surrounding area of the estates has been appointed as commercial areas and light industrial areas.

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Above analysis has been considered based on research of AMC map and some interviews. Studying to the current development areas of Ahmedabad city based on satellite photo (Google Earth<sup>TM</sup>) it can be seen that the developed areas on eastern side mostly generated by the three estates. Study on its land coverage, nearer to the estates, more dense the area develop; and vise versa. The shape of its urban areas on eastern side actually has three protruding shape, which each shape is the location of Naroda, Odhav and Vatva industrial estates. Areas in between these protruding shape, currently is as vacant land and agricultural land. In the future, as AMC prediction, these areas will be developed and grown due to respond of urban generator of the industrial estates, as long as the industrial activity operates.

## **ACKNOWLEDGEMENT**

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## REFERENCES

<sup>[1]</sup> Balchin, P. I., David; Chen, Jean, "Urban Economics; a global perspective", New York, Palgrave, 2000 [11] Haan, H, "Urban Informal Sector Information: needs and methods", Geneva, International Labour Office, 1080

<sup>[</sup>iii] Dutta, Shyam, "Partnership in urban development: a review of Ahmedabad's experience", <a href="http://eau.sagepub.com/cgi/content/abstract/12/1/13">http://eau.sagepub.com/cgi/content/abstract/12/1/13</a>, Environment and Urbanization, 2000
[iv] Dijk, Meine Pieter, "The Theory and Practice of Urban Management" (e-book), UK, Edward Elgar Publishing Ltd, 2006

<sup>[</sup>v] Heitzman, James, "The City in South Asia- Asia's Great Cities" (e-book), NY, Routledge, 2008

<sup>[</sup>vi] Jamdar, Avni, (theses) "Generators of Urban Space of Ahmedabad, School of Planning, CEPT University, Ahmedabad, 2000

<sup>[</sup>vii] Wikipedia, "Demographics and Culture of Ahmedabad", <a href="http://en.wikipedia.org/wiki/Ahmedabad#Demographics">http://en.wikipedia.org/wiki/Ahmedabad#Demographics</a>, 2009

<sup>[</sup>viii] City population, www.citypopulation.de/India-Gujarat.html, 2009

<sup>[</sup>ix] Ravali, Shri Nayan (GIDC Advisor), interview, Gandhinagar, 9 April 2009