

A Planning Proposal for Developing KIM as Satellite Town of Surat City

Moxali N. Malaviya¹

¹Student of Town & Country Planning, Sarvajanic College of Engineering & Technology

Abstract - In the early 1960's and 1970's urban development policies in India focused on growth control strategies of metropolitan cities and the idea of new town/satellite town emerged widely. Town, self-contained and limited in size, built in the vicinity of a large town to house and employ those who would otherwise create a demand for expansion of the existing settlement, but dependent on the parent-city to a certain extent for population and major services. The purpose of satellite town is to provide a perfect balance between the population and resources, with respect to environment-friendly development. The population residing in urban areas has been rapidly increasing, an urbanization cope with the various problems brought about by over-expansion of the big cities. The main objective of dissertation is to reduce the pressure on the Surat city by developing satellite town. There is need to develop Kim into satellite town. GIDC and other industries like plastic, textile and chemicals are the identity of Kim. Which provide employment opportunity in Kim. After the gap analysis we can develop the urban infrastructure facilities and propose the city development plan of Kim.

Key Words: Metropolitan Cities, Satellite town, Surat city, Kim, City Development Plan

1. INTRODUCTION

As per 2001 Census, the urban population of the country was 286.11 million, which constituted 27.8% of the total population. The 35 million plus cities contained more than one-third of the total urban population. During the last decade, the number of million plus cities increased from 23 to 35 and this number is likely to increase to 50 by 2011. The average increase in population per million plus city would be of the order of 1.2 million during 2001-2011. This magnitude is bound to lead to massive problems in managing already over strained mega / million plus cities. Excessive concentration of population in these cities and unprecedented increase in the demand for infrastructure facilities and amenities has led to problems of land shortage, housing shortfall, inadequate transportation etc. Management of essential infrastructure like water supply, sewerage, drainage, solid waste disposal has become more challenging.

The concentration of economic activities and population in some of the mega cities like Mumbai, Kolkata, Delhi, Chennai, Hyderabad, Bangalore and Ahmedabad has put tremendous strain on the delivery of services. At the same time there has been growing realization that there is a need for decentralization of activities so as to reduce the pressure on these cities. Taking into account, the existing scenario and the urgency to augment urban infrastructure backed by strengthening of urban governance of the cities / towns, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched by Ministry of Urban Development in December, 2005 for implementation of urban infrastructure improvement programme in a time bound manner in 63 selected cities. The Mission aims at creating economically productive, efficient, equitable and responsive cities in an integrated framework with focus on economic and social infrastructure, basic services to urban poor, urban sector reforms and strengthening Municipal Governments and their functioning. While the JNNURM has been envisaged to cater to the infrastructure requirements of these 63 cities, there is an imperative need to plan for development of new satellite towns around million plus / large cities.

2. SATELLITE TOWN

The satellite towns/ counter magnets should be spatially separated from the mother city. A satellite is a reference derived from astronomy which is a study of space and celestial objects. As a definition, an artificial satellite is an object that is sent to space which is within the orbit of the earth but not part of the earth. Planets in space often have natural satellites that are within the orbit of the planet but not actually part of the planet. The best example of this is the moon which orbits the earth and is a natural satellite of earth but is not part of the earth itself. This concept is used in describing a satellite city. The Oxford dictionary of Architecture define satellite towns as:

“Towns that are self-contained and limited in size, built in the vicinity of a large town or city to house and employ those who would otherwise create a demand for expansion of the existing settlement, but dependent on the parent---city for population and major services.”

There are many large metropolitan cities all over the world. Cities like Delhi, New York, London, Sydney, Los Angeles, Mumbai, Shanghai, Beijing, and Rio de Janeiro have large populations. There are hundreds of cities all over the world today that have populations of more than a million people. Some cities have populations over 20 million people. These are extremely large

metropolitan areas in various different parts of the world. Satellite Cities are metropolitan cities that are smaller cities that are near large cities but are not part of the large city near them and have a separate local government and are characterized as separate cities.

According to Howard, when the second garden city, Welwyn Garden City, was planned, he had called it a “satellite town”. During the 1920s it was suggested in the advisory planning for London made by R. Unwin, a British architect, that population and employment be evacuated to nearby satellite towns. The term “satellite town” became popular and has been widely used ever since. Around the 1930s, London County Council used the term “quasi-sovereign satellite city”, which referred to a residential area with the characteristics of a dormitory town London suburb. According to the Greater London Plan initiated and composed by Patrick Abercrombie in 1944, eight towns were to be built in Outer London so as to evacuate the excess population; they were called satellite towns first and new towns later. The first-generation satellite towns are dormitory Towns: people live there but travel to work in the main city. The second-generation satellite towns have some factories and public facilities where people can work close to home. The third-generation satellite towns, almost independent of the main city, supply employment opportunities and the center are modern too. The fourth-generation satellite towns nowadays have a multi-centered and open city structure, in which the satellite city and the main city are connected by high-speed traffic lines so that the function of the main city can be extended to the satellite cities.

The major purpose of building satellite towns is to control overpopulation of big cities, disperse some industry and population, and, in the meanwhile, offset population attractiveness of the big cities towards the surrounding area.

2.1 Characteristics of Satellite town

The basic characteristic of a satellite city is that it is a smaller city near a large metropolitan city which has its own local government and economy which is independent of the neighbouring large city.

There are a lot of influences from the large city nearby on the satellite city. Satellite cities have their own culture, own history, and their own independent economic infrastructure.

The satellite cities are interconnected with the larger cities but are completely independent of the large city nearby. Sometimes the large city nearby is called the parent city and these satellite cities are locally known within the state but are not as famous all over the world as much as the larger parent city nearby.

Satellite cities are not an extension of the large city nearby. Geographically there is a clear distinction between a large parent city and a satellite city. This means that there is

some area or a few kilometres between the two cities. There is generally a small rural area between the large parent city and the satellite city which completely separates the two cities.

Satellite cities are not as developed as the larger cities nearby. The population of satellite cities is much smaller than that of the larger cities nearby. Many amenities and infrastructural facilities that are available in large cities nearby are not as prominent in the satellite cities. Residents of satellite cities are known to travel regularly to the large city nearby for work, recreational and other reasons.

Labour force living in the satellite city travels daily to the large city for work purposes and satellite cities provide manpower to major cities. As the property rates and cost of living are often lower in satellite cities as compared to the parent city, many people find it affordable to live in the small satellite city and work in the larger greater metropolitan area of the large city nearby.

2.2 Advantages of Satellite town

There are various advantages that Satellite cities offers more than being just being mixed-use realty developments. Besides providing its residents with superior quality of living in the form of road connectivity, electricity, water, drainage and other important amenities, it also enables to propel the local economy.

- It leads to appreciation in prices of land and residential property in and around the Satellite city.
- For residents in the main city who wish to escape from the stress, pollution and hassles of city life, it provides them with a viable alternative.
- Transport infrastructure developed in Satellite cities not only provides its residents easy accessibility but also enables to decongest traffic in the main city.

Moreover, Satellite cities provides a scientific balance between the population and the resources needed by them leading to environment-friendly and sustainable development.

3. STUDY AREA PROFILE

Gujarat is currently attracting huge investments due to its massive economic growth. Ahmedabad has been declared a mega city. There is a huge demand for residential as well as commercial properties. Simultaneously, unlike cities such as Mumbai, developers need not look outside city limits to satisfy customer demand as there is abundance of land within city limits. This allows developers to plan projects inside the city. Huge investments are made in luxury projects.

Many developers are focusing on coming up with large integrated townships with a focus on making these townships self-sufficient by providing all amenities such as malls, post office, petrol pump and multiplex. High-end homes are being designed with digital security and solar passive architecture. Ahmedabad is also planning an earthquake-resistant scheme to protect its buildings.

While cities like Ahmedabad and Vadodara have immense potential for urban development, there are some developers who are influenced by the bug of satellite towns, due to their economic growth potential. For example, in the case Gurgaon, it was once a sluggish market. But today, it is a very important satellite town to Delhi and for the country. Due to this potential, several land owners have shown interest in becoming partners in town-planning.

Many developers believe that excellent infrastructure in terms of road connectivity can make these satellite towns self-sufficient. Ahmedabad and Surat already have the BRTS corridor, rings roads and is well connected. An area around any of these roads has the potential of becoming an excellent satellite town. Bopal, Ranip, Narol and Sanand are few good examples. However, all these plans are for the future, as there is a vast space to be developed within the cities.

Three satellite cities of Gujrat state are selected as a case study that are mentioned below:

- 1) GIFT City, Gandhinagar
- 2) Dholera SIR
- 3) DREAM City, Surat

3.1 Location Profile

Kim is satellite city of Surat. Surat district is divided into ten revenue Taluka. Olpad is one of the Taluka of Surat districts. It combines 103 villages and 2 census town (Kim & Sayan) and total population of the Olpad taluka is 185841 (census 2011). Kim is a Village in Olpad Taluka in Surat District of Gujarat State, India. It is located 30 KM towards North from District headquarters Surat. 20 KM from Olpad. 239 KM from State capital Gandhinagar. KIM Gram Panchayat covers approximately 230 hac. area extending between 21°24'23.10"N latitude and 72°55'20.40"E longitude and 19 m altitude from sea level. It is situated on crossing of Gujarat state highway 65 and on Surat Vadodara Railway Line.

3.2 Demography

Population of the census town has increased by 46% in last 10 years. In 2001 census total population here were about 13 thousand.

- Population as per 2011 census: 18,638
 - Males (9,969)
 - Females (8,669)
- Population under 6 years of age is 2308 which is 12.38 % of total population of Kim
- Population density of the census town is 8139 persons per km²
- Sex ratio: Female Sex Ratio is of 870 against state average of 919
- Literacy rate of Kim city is 89.25 % higher than state average of 78.03 %
- Male Literacy Rate: 92.74 %
- Female literacy Rate: 85.22 %

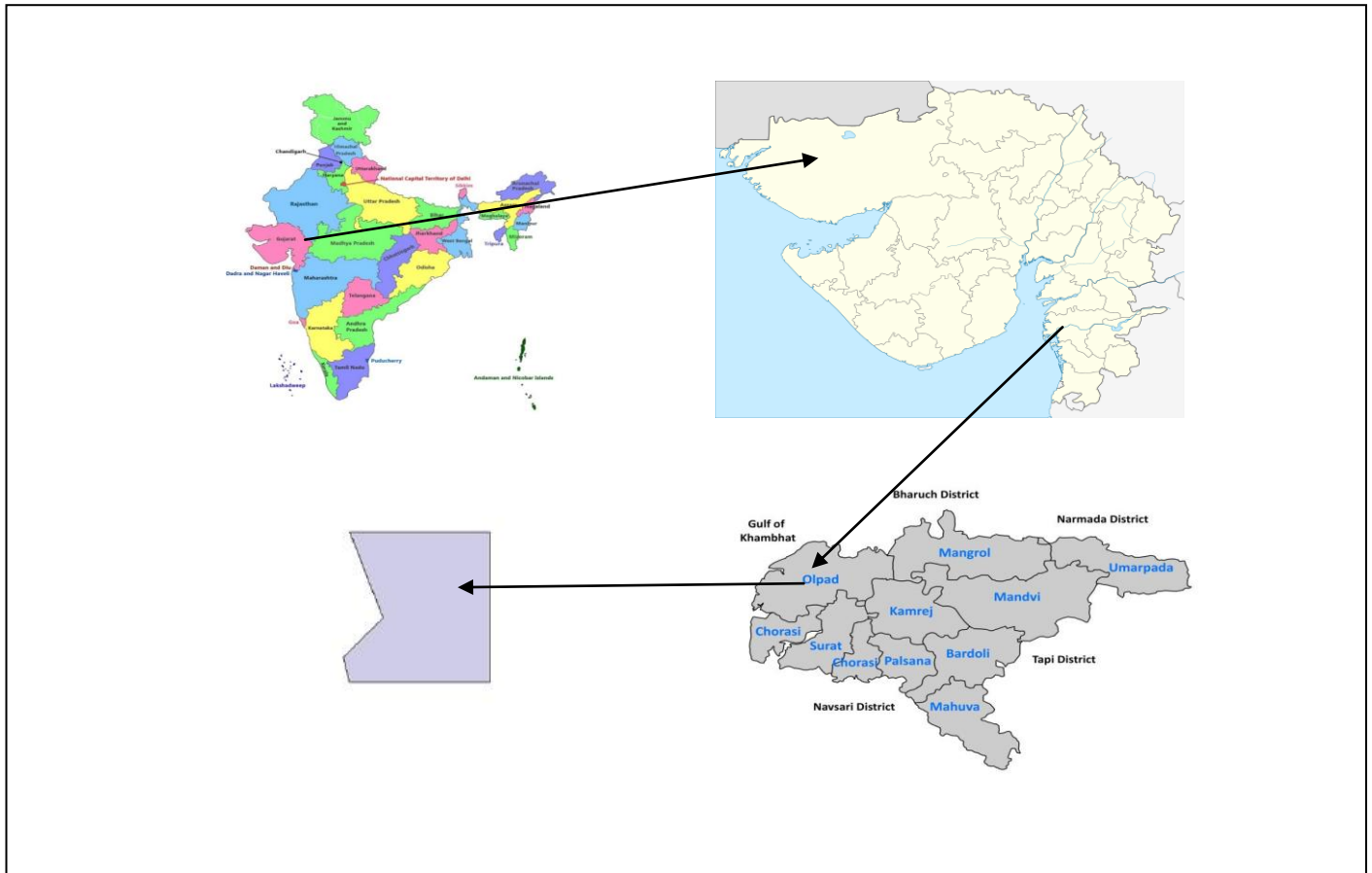


Fig -1: Location of Study Area

3.3 Land Use of Kim

Table -1: Land Use

Particulars	Area	
	Ha.	Percentage
Residential	87.9	67.6
Commercial	7.1	5.4
Industrial	0.2	0.2
Waterbody	0.9	0.7
Transportation	16.1	12.4
Greenery	0.6	0.5
Recreational	0.7	0.6
Semi-Public	3.0	2.3
Public Use	2.0	1.5
Open Space	11.5	8.8
Total	130.1	100.0

(Source: Census, 2011)

3.4 Working Population

Table -2: Working Population of Kim

Work	Total	Male	Female
Main Workers	6,675	5,629	1,046
Cultivators	98	89	9
Agriculture Labour	348	170	178
Household Industries	71	50	21
Other Workers	6,158	5,320	838
Marginal Workers	250	131	119
Non-Working	11,713	4,209	7,504

(Source: Census, 2011)

3.5 Connectivity

Nearest railway station is Kim which is within the census town which is 24 km far away from Surat railway station.

Kim railway station	0.4 KM
Kudsad railway station	3.1 KM
Kosamba Jn railway station	7.5 KM
Velachha railway station	9.6 KM
Sayan railway station	10.2 KM

Kim 's nearest airport is Surat Airport situated at 36.7 KM distance

3.6 Connectivity

They have hierarchy of educational facilities from pre- primary school to college. There are 3-government pre- primary schools, 1-primary school, 1- trust school, and 2 colleges. Also it is noted that there is 100% enrolment and 0% dropout ration in schools.

3.7 Drinking water and Sanitation

There is timely cleaning of the water tank, checking cleanness of drinking water. They have 2 overhead tanks for the drinking purpose with separate connections to individual houses. Total 15 – Bore & 1- Jam is also available. Cleanliness is observed by regular means by regular chlorination in accordance with Gujarat state water supply board and public participation. There is a toilet in almost all the individual houses.

3.8 Drinking water and Sanitation

There is 1 PHC & One Jan – Aushadhi Centre in the village. 100% children are vaccinated. They use the technology for delivery of the pregnant women.

4. RECOMMENDATION

GIDC and other industries like plastic, textile and chemicals are the identity of Kim. Which provide employment Opportunity Kim. There are industries for production but there is no proper market for the selling of that product. And lack of other infrastructure Facilities. By developing the infrastructure Facilities and proper market development the burden on the Surat city can be decrease.

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