

Feasibility Study and Planning Proposal of Changodar Industrial Region

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Abstract - Industrialization is the first and foremost requirement of rapid economic development of a country. It increases employment opportunities, national income, per capita income and living standard of the populace. Gujarat is one of the most developed states of India and it has experienced a rapid rate of urbanization and industrialization in last four decades. Ahmedabad is the seventh largest metropolitan area and third fastest growing cities of India in Gujarat. The city is well connected, not only to major towns within the state but also to neighboring states through strong transportation linkages all by rail, road and air. The proposed study area namely Changodar village is located in sanand tehsil of Ahmedabad district. there is continuous spread of haphazard industrial agglomeration because industries are located on both side of NH47 and inadequate infrastructure faciit. In this paper it is demonstared that which has urgent need of planned development and suggestive measures.

Key Words: Industrialization, Ahmedabad, Changodar, Haphazard Growth, Planning Proposal

1. INTRODUCTION

Industrialization is the Most Important requirement of rapid economic development of a country. The industrialization is not only helpful in the development of industries, but it also promotes agriculture, trade, transport, foreign trade, services and social sectors of the economy. It increases employment opportunities, national income, per capita income and living standard of the populace.

Gujarat is one of the most developed states of India and it has experienced a rapid rate of urbanization and industrialization in last four decades. Ahmedabad is the seventh largest metropolitan area and third fastest growing cities of India . Looking at its growth rate and rapid expansion, there is a pressing need to reconsider and redirect the development and growth patterns in the next decade. Ahmedabad, since its foundation has been a critical political and economic centre of Gujarat and western India.

Ahmedabad is strategically located in the centre of Gujarat, in the Sabarmati basin. It is spread on both banks of Sabarmati River which cuts through the city. It forms a vital transport & trade link to the vast areas in the north & east. The city is well connected, not only to major towns within the state but also to neighboring states through strong transportation linkages all by rail, road and air. The Dedicated Freight Corridor (DFC) passes through AUDA on the western side of the city of Ahmedabad.

Ahmedabad is considered as one of the most livable cities in the country. However as it continues to grow and expand, the residents of the city are facing the issues similar to those faced by many other cities of similar size in India, such as high cost of housing and real estate, increased distances and travel times between home and work places, traffic congestion, increased demand for amenities, gardens, open spaces and much more.

Our prroposed study area namely changodar village is located in sanand tehsil of ahmedabad district.its native language is gujrati. there is continous spread of haphazard industrial agglomeration because industraias are located on both side of NH47 and inadequate infrastructure faciit. In which there is proposal of logistic park to reduce traffic congetion

1.1 Need of project

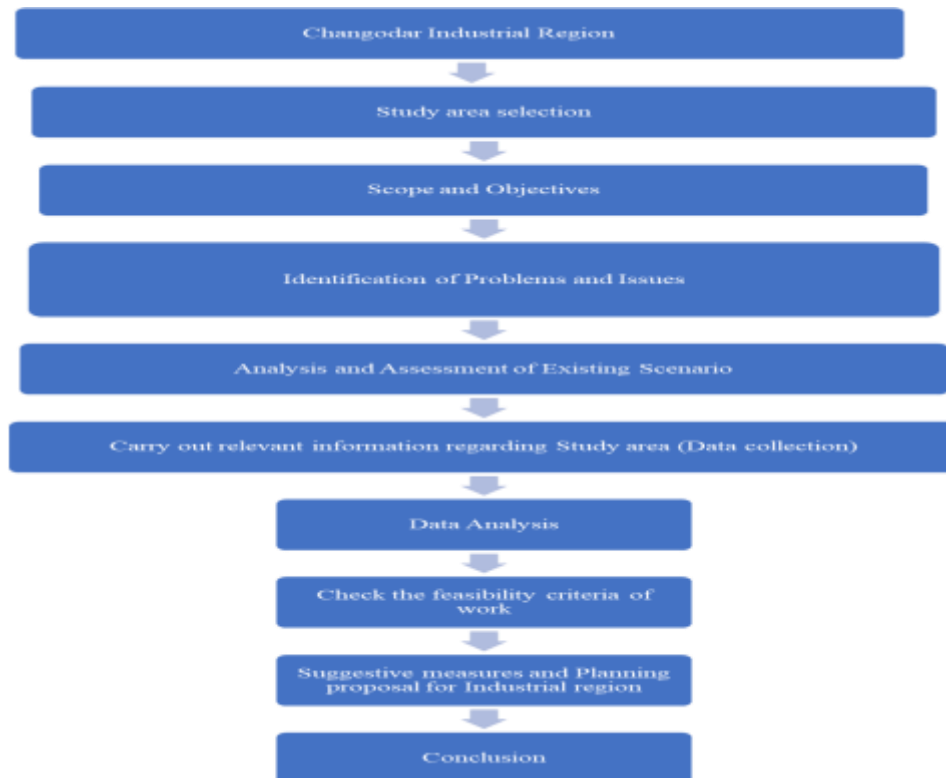
Because of following parameters there is need of planning of industrial region.

- Rapid industrialization because of proximity to Ahmedabad.
- Haphazard growth leading to ribbon development and proliferation of slums.
- Inadequate industrial and social infrastructure facilities like roads/parking water supply, drainage and disposal facilities of its waste.
- Need for adequa te institutional framework to mänge rapid development of this area.

1.2 Objectives

- Provide efficient transportation and mobility
- Provision of fire safety in industrial region
- Provision of modes of internal connectivity
- Provision of logistic hub to perform logistic activities
- Provision of safety against logistic activities

1.3 Methodology



2. Study Area Profile

Changodar is located in Snanad tehsil of district Ahmedabad city. It is situated at 22 km Distance from Ahmedabad railway station. Its co-ordinates are latitude 23.3 longitude 72.63. The native language of Changodar is Gujarati. The Changodar City Center is located at 8 km distance from S.P Ring Road.

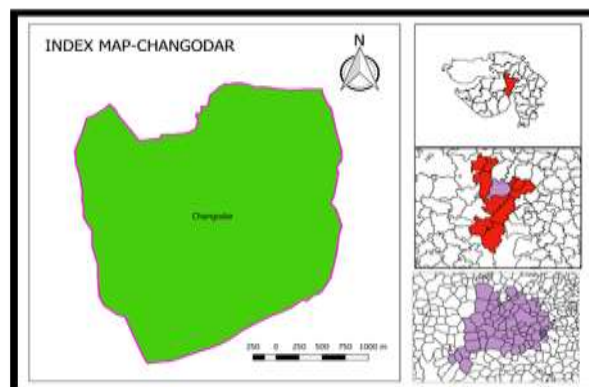


Fig -1: Index Map of Changodar Region

(Source: BISAG Village Boundary Profile)



Fig -2: Google Earth Image of Changodar Region

2.1 Connectivity

Existing Road Linkage

- NH 47 connectivity to state capital and business districts of Ahmedabad
- Linkage with S.P Ring Road
- Connected to Ahmedabad-Rajkot six lane road.
- Rail Connectivity
- Site passing along the western railway route of Ahmedabad-Baroda-Mumbai.

Air Connectivity

- Close proximity (34 km) to Ahmedabad International Airport.

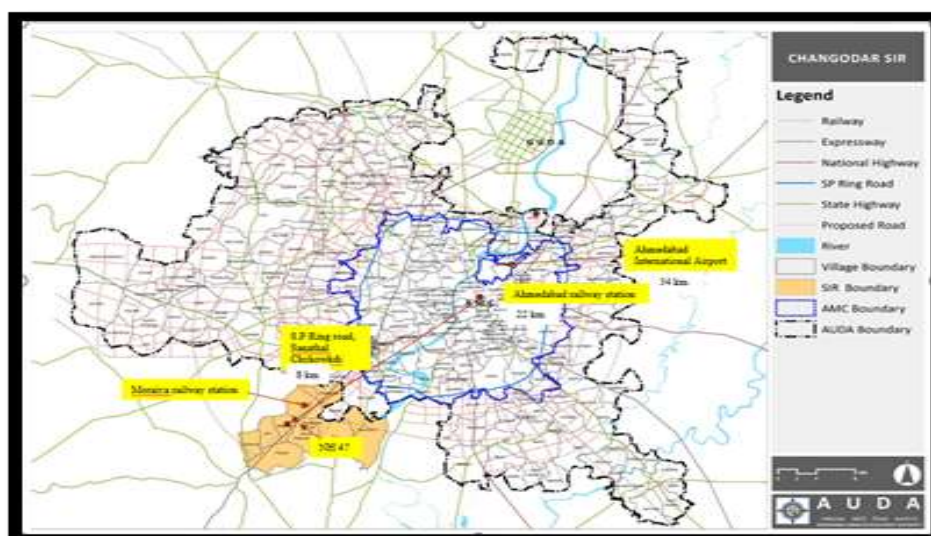


Fig -3: Connectivity of region from main modes

3. Growth Potential of Region

- Proximity to Ahmedabad.
- Important transportation linkage Ahmedabad-Rajkot national Highway 47.
- The government subsidies for promoting the industrial development.
- Infrastructure facilities such as Airport, Railway etc. located in megacity Ahmedabad for easy transportation of the raw and finished products.
- Proximity to Ahmedabad facilities easy availability of labour required for the industrial sector
- Low land price and large chunks of land available for the development.
- Most Important It is notified as a SIR (Special Investment Region) by Government

4. Existing Conditions and Industrialization of Changodar Industrial Region



Fig -4: Google Earth Image of existing Infrastructure

4.1 Observations



Fig -5: Changodar New and Old Railway Station



Fig -6: The road is being constructed by GIDC

4.2 Problems and Issues

- Minor canal is passing along both sides of boundaries of village, but which is used as a wastewater disposal.
- Water Logging on Vacant Plots
- Solid waste disposed at roadside, Side drains and vacant Plots



Fig -7: Solid waste disposed in vacant plots and side drains



Fig -8: Traffic at main T- Junction



Fig -9: Ribbon Development along both the Sides of NH47

5. Planning Proposal and Recommendations

There is continuous spread of industries on both sides of NH47 which leads to traffic congestion in industrial estates interior road network so that there is proposal of road network in terms of ring road on the periphery of Changodar region so that the trucks can't access in the interior roads and perform logistic activities outside industrial region by mini-tempos and small carriage vehicles.

First proposal is for canal corridor development and second one is for logistic park.

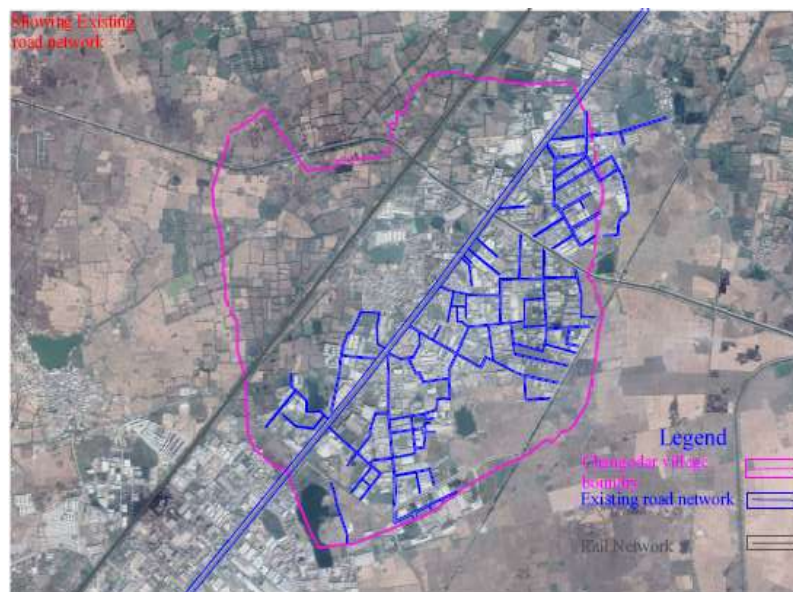


Fig -10: Existing Road Network

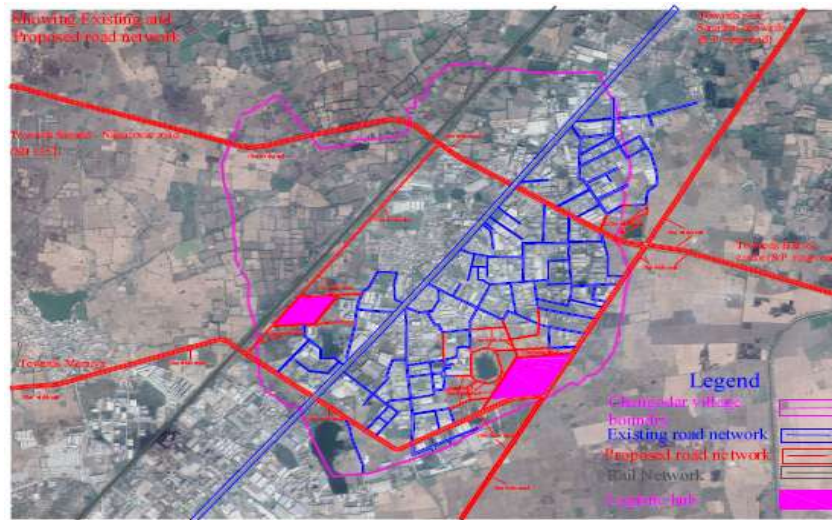


Fig -11: Proposed Road Network

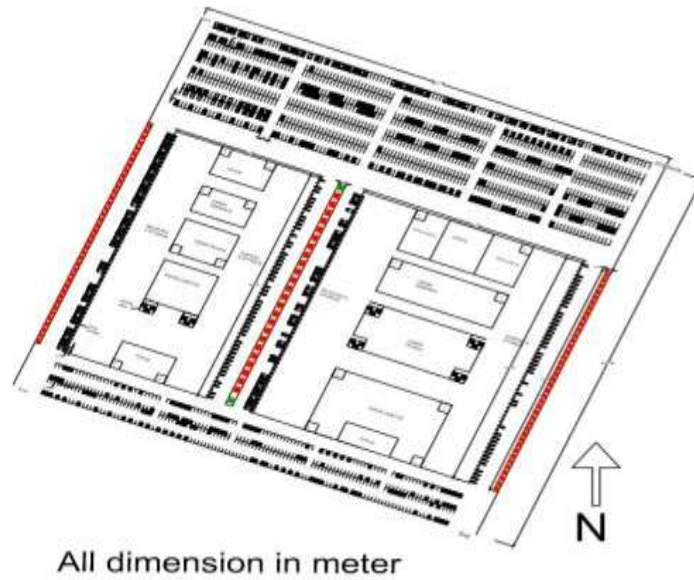


Fig -12: Proposed Logistic Park

6. Conclusions

- Changodar is already developed industrial region and industrialization is taking at very rapid rate.
- There is continuous spread of industries on both sides of NH47 which leads to traffic congestion in industrial estate's interior road network so that there is proposal of road network in terms of ring road on the periphery of Changodar region so that the trucks can't access in the interior roads and perform logistic activities outside industrial region.
- Changodar is also included in SIR (Special Investment Region), Gujarat government special owned project but it is not notified and there is no further proposed development up to 3-5 years.
- There is also diversity among the development authorities and industrial sector so that there could be provision of one regional development authority for Changodar.
- There is continuous spread of industrial development which causes traffic congestion in the interior road network by providing proposed road network and provision of logistic park in study area leads to solve many traffic congestion problems.

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- [6] Changodar Chamber of Commerce list
- [7] Changodar village profile list

BIOGRAPHY



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