iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 **Issue:** VIII **Month of publication:** August 2021

DOI: https://doi.org/10.22214/ijraset.2021.37576

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 9 Issue VIII Aug 2021- Available at www.ijraset.com

A Satellite Town Development for Ambad MIDC Nashik

Ar. Nikita Deshmukh[1], Pro. Shraddha S. Chavan[2]
[1]*M.Tech Town and Country Planning, Department of Civil Engineering, Sandip University, Mahiravani, Nashik, Maharashtra, India*
[2]*Assistant Professor. Town and Country Planning, Department of Civil Engineering, Sandip University, Mahiravani, Nashik, Maharashtra, India*

Abstract: ***The concept of a satellite town is not a new one in India. Many efforts were made during the British era, and following independence, the Indian government made large-scale initiatives through policies, acts, and corporate partnerships. As is well acknowledged, India is experiencing rapid urbanization, resulting in city expansion and pseudo-urbanization due to land constraints. As a result, the satellite town concept must be implemented in order to develop new urban space, limit city boundaries, maximize land utilization, and raise the livability index of the city in order to attract investment.***
The study takes a multi-level approach, including a review of the literature, policies to better understand parameters, the identification of a new town site, and mitigation techniques. Following the identification of the area, a qualitative and quantitative study involving sampling, area-based observation, and public engagement was used to profile socioeconomic status.
Chunchale village was chosen for the study, and it was discovered that this region has farm land on entire site. And can easily convert in NA land and use for proposal. In proposal most of the land will be proposed for residential as well as infrastructure purpose, as the project is dedicated to people working in Ambad MIDC for their occupation purpose.
Based on area-based observation, the surrounding area appears to be ideal for commercial use too. It is suggested that a commercial hub be created near the rehab facility to stimulate the local economy and provide work opportunities for people. As land value rises and infilling area develops, such development also helps the surrounding area's development.
Keywords: Satellite town, Redevelopment, Mix Land used, urban renewal policies, spatial planning, socio economic analysis

I. INTRODUCTION

A. Satellite Town

1) A satellite town or satellite city is a concept in urban planning that refers essentially to smaller metropolitan areas which are located somewhat near to, but are mostly independent of, larger metropolitan areas.

2) Satellite cities or satellite towns are smaller municipalities that are adjacent to a major city which is the core of a metropolitan area. They differ from mere suburbs, subdivisions and especially bedroom communities in that they have municipal governments distinct from that of the core metropolis and employment bases sufficient to support their residential populations.

3) Conceptually, satellite cities could be self-sufficient communities outside of their larger metropolitan areas. However, functioning as part of a metropolis, a satellite city experiences cross-commuting (that is, residents commuting out of and employees commuting into the city).

4) The rural to urban migration is not only adding a large number of new residents to cities but also putting pressure on the resources and infrastructure of these metropolitan areas.

5) Some issues that hinder the sustainable growth and progress of metropolitan areas include:

a) Shortage and inadequate state of housing;

b) Environmental pollution;

c) Deterioration of building stock;

d) Inadequacy of infrastructures;

e) High unemployment rate; and

f) Traffic congestion.

6) ‘Satellite city’ is a concept lacking clear definitional boundaries. In recent academic and policy debates, the term ‘satellite city’ most often refers to planned new developments around existing (large) cities, meant to solve large city problems or to raise urban competitiveness, targeting specific population groups and/or economic sectors with a specific theme or ‘brand’. By many national, regional and city governments, satellite cities are considered one of the main vehicles of contemporary urban and economic development.

©IJRASET: All Rights are Reserved

7) At the same time though, many satellite city developments suffer from shortcomings, often unable to bridge the gap between planned and lived realities .
8) While satellite city developments across the Global South have many things in common, the contributions to this special issue also demonstrate a range of spatial, social and economic manifestations and dimensions.
9) The satellite city concept can be applied at multiple scales and with multiple meanings, and it could be situated anywhere within a city-region.
10) Its absolute location is less relevant than its relative location and position in city-regional networks.

B. *History of Satellite town*

1) The term "…Satellite town "first used by G.R. Taylor in 1915. The term Satellite town is at times used to designate a place that is at a distance from the city, but linked to it through the daily commuting of people.
2) It is limited in size built in the vicinity of large town or city. Satellite city experiences cross commuting (that is city residents commuting out of and employees commuting in to the city).

C. *General Features Of Satellite Town*

1) The basic characteristic of satellite city is that it is a smaller city near a large metropolitan city which has its own local govt. and economy which is independent of the neighboring large city.
2) Satellite cities are interconnected with larger cities but are completely independent of the larger cities nearby. Sometimes the larger cities are locally known parent city.
3) Satellite city have their own culture, own history and their own independent economic infrastructure.
4) Satellite cities are not developed as the larger cities nearby. The populations of satellite city are much smaller than that of the larger city nearby. Many amenities and infrastructure facilities that are available in large cities nearby are not prominent in the satellite cities. Residents of satellite cities are known to travel regularly to the large city nearby for work, recreational and other reason.
5) There are good transport service between the satellite city and the large parent city nearby.
6) Students often travel to higher education institutions in the parent city as often quality educational institutions are located in the large city nearby and not in the satellite town or city.
7) Satellite townships have their own local government and corporate life.
8) They have all the necessary amenities and facilities present within their limits except for a few purposes like employment and sometimes education, they have to depend on the main city i.e. the parent city.
9) Transportation means such as buses, trains etc all connect the various satellite townships to the main city so that travelling to the main city for work is not an issue.
10) It is free to decide its economic, social and cultural activities.
11) Like we discussed earlier that people are well equipped with various amenities and facilities but have to depend on the parent city for work or higher education. The reason why people have to depend on the parent city for work is that setting up of industries is prohibited in Satellite townships. It is mainly a residential area having only local shops, schools for children, etc.

D. *Need of Study of Satellite Town*

1) Severe uncontrolled growth of urban population Problem in managing already over strained cities increase in the demand for infrastructure facilities and amenities.
2) Land shortage, housing shortfall, inadequate transportation.
3) Tremendous strain on the delivery of services in major cities due to the concentration of economic activities and population.
4) Need for decentralization of activities so as to reduce the burden on these cities.
5) Challenges in management of essential infrastructure like

a) water supply
b) Sewerage
c) Drainage
d) Solid waste Disposal

©IJRASET: All Rights are Reserved

E. Aim

To study the Satellite town approach for the Nashik city.

F. Objectives

1) To analyze and study Satellite town development in India through various case studies and research papers.
2) To identify the need of satellite town development for Nashik city and study the site.
3) To study, compare and workout the solution for satellite town development.
4) To propose a satellite town design for Nashik Ambad MIDC region.

G. Scope of planning

1) Habitable Units

a) Commercial buildings
b) Residential housing
c) Retail shops
d) Industrial spaces

2) Utilities

a) Water supply system
b) Drainage system
c) Sanitation works
d) Electricity supply

3) Connectivity

a) Roads
b) Overbridges
c) Underpasses
d) Skywalks
e) Subways
f) Public transportation network

H. Methodology

The methodology adopted for this study below figure. Understanding existing available literature to attain a specific objective of the study. After the retrieving parameter from literature primary area will demarcate for the proposal. Field observation and photographic data collected as per the need of study. Review of experts and public survey remarks recorded through good design and organized questionnaire. After collecting data strategy decide and proposed after analyzing the data to fulfil the study objective. The conclusion of the study at the end to summarize the work and carried out the study.

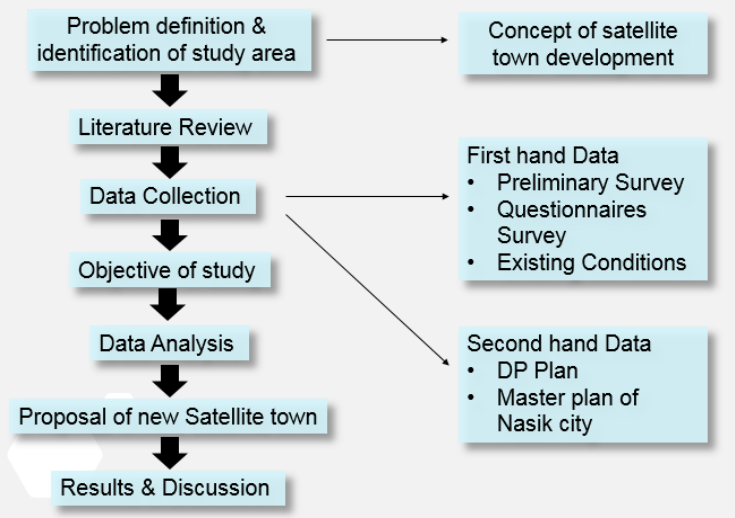


Fig no. 1.2 Methodology

©IJRASET: All Rights are Reserved

I. Outline of dissertation

This dissertation is dividing into 8 chapters as follows

1) *Chapter 1: Introduction:* This chapter explores the satellite town background such its reason to implementation, what is satellite town, history. It also managed to give outline of aim, objective, its background and significance of study as well as methodology assertively
2) *Chapter 2: Literature Review:* This gives the overall framework of satellite town in context of study objective such theory, approach and strategy of satellite town and identification area for satellite town zone
3) *Chapter 3: Policy Study:* This chapter provides and gives idea, strategy and approach governed by government through innovative steps.
4) *Chapter 4: Study area Profile:* This chapter gives background of area selected for study in terms of history, land use pattern, overall infrastructure information and gives the parameter for area identification for satellite town.
5) *Chapter 5: Data Collection:* This chapter gives the information regarding guidelines of data collection for study (TCPO norms), sample size and design, questionnaire design.
6) *Chapter 6: Data Analysis:* This chapter involve the study area observation such as physical, social and economic (activity around area) it also gives the idea bout socio economic assessment by analysis the responses of questionnaire.
7) *Chapter 7: Proposal:* The chapter includes proposal for the selected area for study with explaining strategy approach and recommendation with proposed land used.
8) *Chapter 8: Conclusion:* This chapter concludes the dissertation by providing a few concluding remarks.

J. Conclusion

Satellite town is not a nascent subject for India. There are so many design attempts occur after the independence of India. Still, there is a lot of scope for satellite town. So many people are living slum on the urban side of India. It is the right time to attempt satellite town city for Nashik ambad MIDC because of its uncontrolled growth of residential around industrial area. In the perspective of spatial planner and strategist is important to design new town in such a way that win-win situation should occur for all stakeholder belongs to the renewal process.

II. DATA ANALYSIS

A. Introduction

This chapter analyses the information, primary data, and secondary data obtained from questionnaire responses and observations of the proposed urban renewal region. It includes a full study of socioeconomic characteristics as well as public involvement in the design process. This chapter divides priority urban elements into three categories: area-based physical observation, socioeconomic profile, and domain of public participation.

B. Location

The coordinates for latitude and longitude are: 19.952959, 73.737518.

MIDC Ambad is a small suburb in Nashik, a historic city in northern Maharashtra around 190 kilometres north of Mumbai, the state capital. The MIDC Ambad campus is located southwest of the city centre. Taking Route 3 from the city centre, it takes only 15-20 minutes to get to the district. Siemens has a major office in MIDC Ambad.

Fig 2.1 location of Ambad MIDC



©IJRASET: All Rights are Reserved

C. Socio-Economic Profile of Area

This section focused on the socioeconomic characteristics of those who work and live in Ambad Midc. To investigate the profile, the researchers gathered primary data from a sample of respondents in the planned satellite town area. Gender, age category, employment status, method of transportation, work location, travel duration, cost, respondent dependency number, and experience of providing basic facilities and infrastructure to region are all considered in the socioeconomic assessment of respondents.

1) *Gender of Respondent:* Table and figure give gender wise percentage of respondents. Sample respondent of study is mostly head of family or property tax issued on that name. In respondent, 40 (67%) respondent are male and 20 (33%) are female respondent. It is clearly observed that male dominance on ownership of existing house and in redevelopment significant no female get ownership of new house.

Table 2.1 Gender Percentage of Respondent

Sr.no.	Gender	No. Of count	Percentage
1	Male	40	67%
2	Female	20	33%
Total		60	100%

2) *Education of Respondent:* Education level respondent given in table and figure 10. it shows most of respondent having education less than 10th standard followed by range between 11-12 standard and significant no of graduation.

Table 2.2 Education Percentage of Respondent

Sr no.	Education	No. Of count	Percentage
1	Less than 10^{th} standard	48	80%
2	$11^{th} – 12^{th}$	7	11.6%
3	Graduation	5	8.33%

3) *Age of Respondent:* Table and figure give the age wise percentage of respondent. Sample respondent of study is mostly belonging to 17-67 age group that area having majority working people and their responses useful in further study.

4) *Income Source of Respondent:* Table no and figure no gives the source of earing of respondent. Sample respondent of study is mostly belonging to informal activity, most of respondent are worker and do job in surrounding and existing industry in area, some respondent significantly involve in 3-wheeler service and automobile related work. In respondent,50 (83.33%) are earning money from private job and 10 (16.66%) are doing business like owing shop of vegetable and grocery.

5) *Condition of structure (Dwell Unit) of Respondent:* Table no and figure no gives the condition of dwell units of respondents. sample respondent of the study is mostly living in load bearing poor condition houses or in rented houses and few are also living in slum area.

Table 2.3 Dwelling unit type Percentage of Respondent

Sr no.	Type of structure	No. of count	Percentage
1	Rented	17	28.3%
2	Owned	40	66.7%
3	Slum	3	5%
	Total	60	100%

©IJRASET: All Rights are Reserved

6) *Daily Transportation of Respondent:* Table and figure give daily transportation mode of respondent and its family. Sample respondent of study is mostly using own private vehicle followed by use of auto rickshaw and public transport.

Table 2.4 Percentage of transportation of Respondent

Sr no.	Mode of transport	No. of count	Percentage
1	Bus	7	11.7%
2	Private vehicle	48	80%
3	Autorikshaw	5	8.3%

7) *Effect of Daily Transportation of Respondent:* Table and figure give daily transportation time, distance and money spent on travelling of respondent and its family. Observation is due to lack of nearby residences respondents have to travel a lot resulting time and money consumption.

Table 2.5 Percentage of time for transportation

Sr no.	Travelling time	No. of count	Percentage
1	0-30 min	43	71.7%
2	30min -1 hr	10	16.7%
3	More than 1 hr	7	11.7%

Table 2.6 Percentage of No. of respondents interested to shift to new satellite town..

Sr no.	Answer	No. of count	Percentage
1	Yes	44	73.3%
2	No	3	5 %
3	May be	13	21.7%

III. CONCLUSION

India is hardly a newcomer to urban regeneration. During the pre-independence period, the British carried out urban redevelopment in a few places, but the scale was limited due to a lack of policy. In the post-independence era, the Indian government embarked on a series of innovative urban redevelopment strategies based on the socioeconomic and habitation patterns of cities and regions. Cities in India are becoming more urbanized and older as time goes on. Our cities must be administered efficiently in order to fulfil and grow the country's economy. According to Mumford, it is usually preferable to employ urban redevelopment practices when cities exhibit metropolis characteristics. Ambd MIDC has a significant impact on the Nashik. The most crucial element is to identify areas for urban regeneration and to propose new town. The second most significant aspect is assessing the socioeconomic character of the designated area, which provides a clear picture of where and what needs to be changed, such as governance, infrastructure, and encroachment-free land potential. The practice of satellite town in a certain area not only transforms the area in question, but it also has an impact on the surrounding area. Real estate has received a lot of attention, as it contributes to a thriving economy and generates cash for the government. Many informal sectors will be brought into the main stream, improving the living conditions of the poor.

To conclude this thesis, we have the following objective-based conclusion: - In this report, we investigate important urban renewal policies and understand the evolution of strategies utilised in new town development practices.

On the basis of a spatial-economic integrated strategy and a parameter established from a literature research, Ambad MIDC of nashik have been selected as areas in need of new satellite town. This type of environment not only transforms a sector, but also attracts investment to a city. Give a concept of an appropriate plan and policy for satellite town and generation in the socioeconomic assessment of Chunchale village. The use of a questionnaire to engage the public helps to achieve the goal of long-term urban development. (societal stability)

©IJRASET: All Rights are Reserved

In this concept, the region is managed to be more regularized in land use, which aids in the provision of suitable infrastructure to the area, such as parking spaces and basic amenities, as well as attracting private stakeholders. (Sustainability in terms of both the environment and the economy)

A. Future Scope

To accommodate an ever-increasing population, the jurisdiction of urban local governments is expanding. Because of shifting industry, stagnation of communication, and basic infrastructure, most of the region around the industrial district, the city's core, has become dilapidated. There is a need to maximise the potential of land in the municipal jurisdiction's core region and other deteriorated areas. Satellite town strategies can help you achieve this goal.

The future of Indian cities is urban rejuvenation. The majority of cities are ageing and becoming more urbanised. If planned urban planning for city extension and urban renewal for decaying areas of cities is implemented, the ideal of becoming an economically superpower can become a reality, unlocking the true potential of cities to become regional growth centres. In India, the next ten years will be a decade of urban redevelopment.

IV. ACKNOWLEDGMENT

At the end of my dissertation, it is a pleasant task to express my thanks to all those who contributed in many ways to the success of this study and made it an unforgettable experience
for me. It is indeed a great pleasure and proud privilege for me to present this report. First and foremost, I am highly indebted to my guide Prof. SHRADDHA CHAVAN, Asst. Professor and PG Coordinator, Town and Country Planning, CED for their valuable support and immerse knowledge provided me.

My special thanks to Prof. Mdhuri Nikam , Asst. Professor, Town and Country Planning, for their valuable support and immerse knowledge provided me.

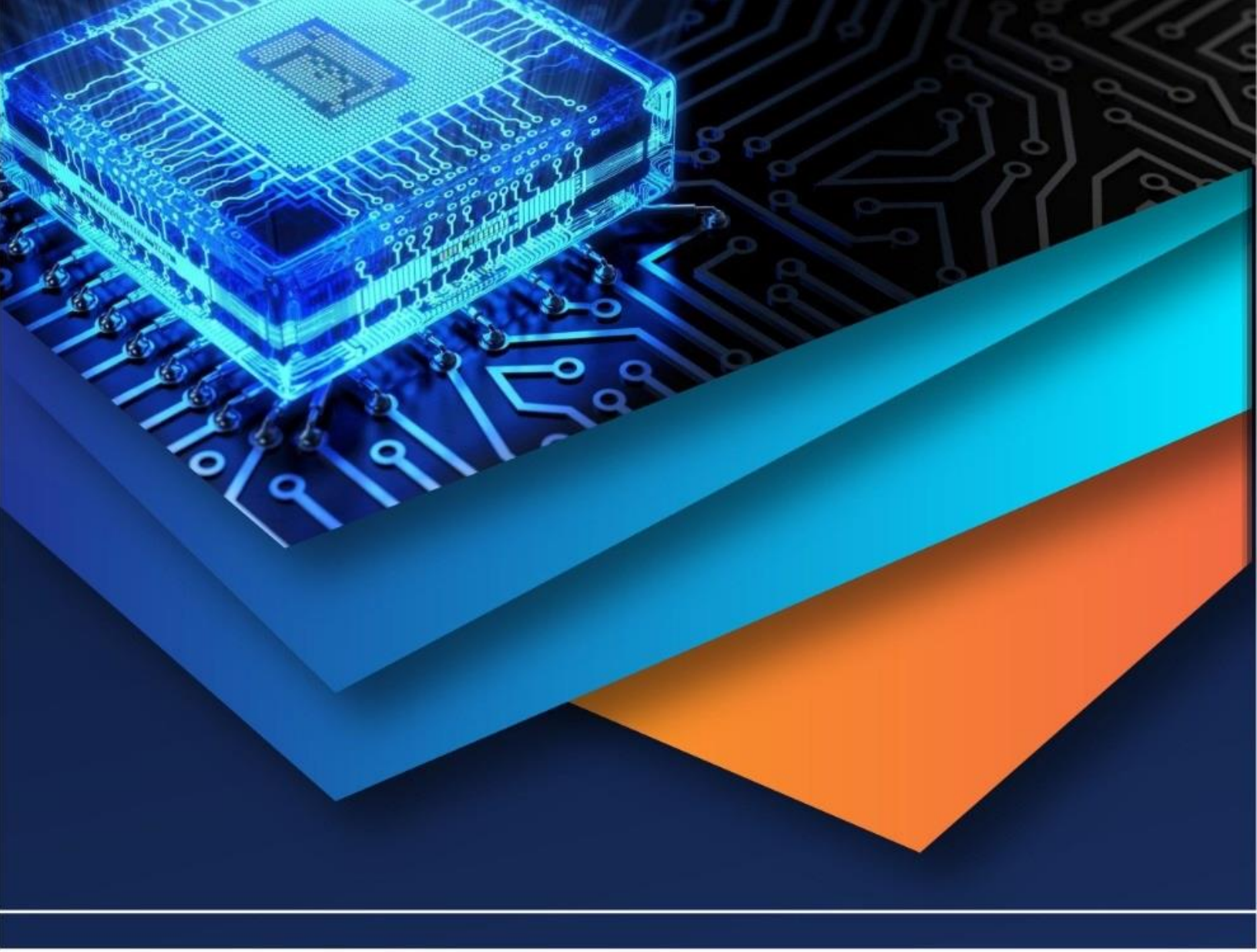
I am grateful to our Professor and Head of Department Dr. P.L. Naktode, for showing interest in all activities related to the graduate report preparation period.

Last but not least, I acknowledge all those who helped me directly or indirectly during making of this graduate report. My classmates Dipesh Patil, Shrikant Ransubhe. I would like to thanks my husband Dr. Darshan Patil for supporting me in every possible way. Finally, I would like to thank my parents, Mrs Sandhya Deshmukh and Mr. Prakash Deshmukh, from whom I learnt the value of hard work and its fruitful results, who helped me guided me and supported me in every possible way, without them I would not be able to achieve this success.

REFERENCES

[1] Introduction to town planning by prof. Samirsinh P Parmar, LECTURE 4, Samirddu@gmail.Com Asst. Prof. Dept. Of civil engineering, A dharmasinh desai university, nadiad, Gujarat.
[2] Migrant informal workers: A study of delhi And satellite towns Ram singh bora,Institute of economic growth, delhi, india Received 14 december 2013; revised 20 january 2014; accepted 20 february 2014 Copyright © 2014 by author and scientific research publishing inc.
[3] Satellite town development in asia: The case of new bombay, india Annapurna shaw a A indian institute of management, joka, diamond harbour road, post Box 16757, calcutta 700 027 india Published online: 15 may 2013.
[4] IACSIT international journal of engineering and technology, vol. 8, no. 1, january 2016 Developing satellite towns: A solution to housing Problem or creation of new problems Md. Mehedi hasnat and md. Shamsul hoque
[5] Evolution of Satellite township development in Pune: A Case Study January 9-11, 2015 Ramakrishna Nallathiga, Khyati Tewari, Anchal Saboo ,Susan Varghese 1Associate Professor, National Institute of Construction Management and Research, 25/1, Balewadi, Pune 411 045 (MAH) e-mail: nramakrishna@nicmar.ac.in 2Post-Graduate Students (REUIM), National Institute of Construction Management and Research, 25/1, Balewadi, Pune 411 045 (MAH)
[6] Unified Development Control and Promotion Regulations for Maharashtra State.
[7] Maharashtra State New Housing Policy & Action Plan, 2015
[8] Satellite Towns In Neo-Metropolitan Development In India-Lessons From Selected Cities - Amit Chatterjee • R. N. Chattopadhyay - Springer
[9] The Scheme Of Urban Infrastructure Development In Satellite Towns Around Seven Million Plus Cities - Town And Country Planning Organization Government Of India Ministry Of Urban Development
[10] Census of India (http://censusindia.gov.in/) (http://data.gov.in/)
[11] Industrial centers of Nashik (https://nashik.gov.in/)
[12] Nashik Municipal Corporation

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)