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Planning Intervention for Development for Hinjewadi and Its Surrounding Area

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Abstract: *The IT industry was welcomed with open arms into the city as per the IT policy of the State government of Maharashtra. Pune is widely regarded as the second major "IT hub of India" and the top automobile and manufacturing hub of India. The main objective of this Thesis is to assess the extent of development at Hinjewadi and surrounding areas and accordingly propose planning interventions with respect to development of the area. Hinjewadi IT Park is proposed and developed by Hinjewadi MIDC. Existence of IT Park offers employment and development opportunities at city level and local level. But it also offers some challenges in development. Hinjewadi comes under PMRDA as it is not a part of Pune Municipal Corporation and Pimpri Chinchwad Municipal Corporation. Hinjewadi needs a special attention because of its IT hub. There are various authorities in Hinjewadi namely, Hinjewadi gram panchayat, Hinjewadi MIDC, Software Technology Parks of India, Hinjewadi Industries Association, IT employees and local residents of Hinjewadi. All of these authorities play an important role in development of Hinjewadi. These authorities are not interdependent on each other and are confined to their specific approach towards development. They lack in coordination and holistic approach of development. Major issue is faced by daily commuters from various parts of the cities. The IT Park is challenged by chaotic traffic, insufficient security arrangements. These various authorities need to be brought under one umbrella that will be a parent organization to develop holistic approach and better future development. The proposal would be to form an urban local body for Hinjewadi and surrounding area. The area will be delineated with possible development possible for Residential - Commercial development in the area.*

Keywords: *Planning Intervention, Extent of development, daily commuters, holistic approach, IT Park.*

I. INTRODUCTION

Pune is the second largest city in the Indian State of Maharashtra, after Mumbai, and the eighth most populous city in India, with an estimated population of 7.4 million as of 2020. It has been ranked as "the most livable city in India" several times. Along with its extended city limits Pimpri Chinchwad and the three cantonment towns of Pune, Khadki and Dehu Road, Pune forms the urban core of the eponymous Pune Metropolitan Region (PMR). The industrial growth in the Pimpri, Chinchwad and nearby areas allowed these areas to incorporate as the separate city of Pimpri-Chinchwad.

The Pune Metropolitan Region (PMR), initially defined in 1967, has grown to 7,256 km² made up of the ten talukas of the Pune district. The twin cities of Pune and Pimpri-Chinchwad along with the three cantonment areas of Pune, Khadki and Dehu Road form the urban core of the PMR, which also includes seven municipal councils and 842 villages. The state government in the past rejected the demands to bring Hinjawadi area under the jurisdiction of either PMC or PCMC as the area needed special attention.

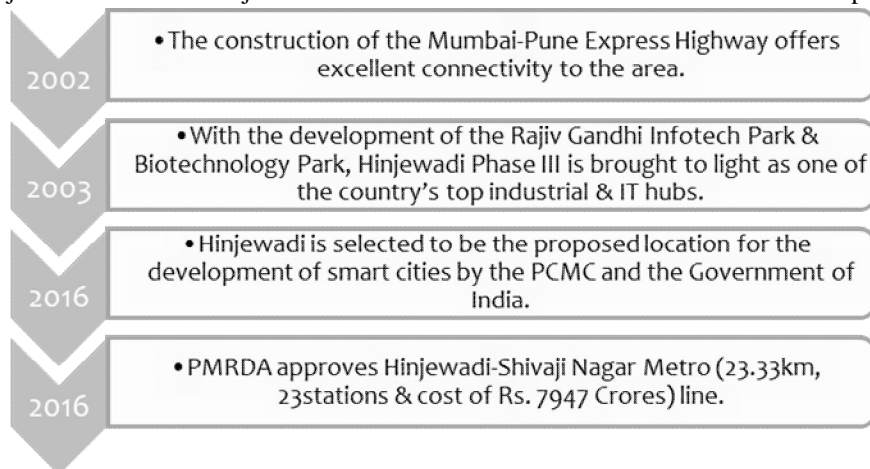


Figure 1. History of Hinjewadi

Park comprises three phases with further phases planned. Hinjawadi Industries Association (HIA) was laid out to provide a joint forum to all stakeholders based out of Hinjawadi and nearby places.

Hinjawadi is a proposed hub for integrated townships in Pimpri-Chinchwad.

Previously Hinjawadi was a village until the construction of the Rajiv Gandhi Infotech Park.

Now it is one of the epicenters of IT industry in Pune. To improve the overall planning and development of Hinjawadi area, it was brought under the jurisdiction of PMRDA.

The Rajiv Gandhi Infotech Park at Hinjawadi has been developed by the Maharashtra Industrial Development Corporation (MIDC), wherein three phases of the park are currently operational.

Hinjawadi is one of the two major IT/ITeS office clusters in Pune and accounts for almost 50 percent of all IT/ITeS office space in the city. It continues to grow as more companies set up their facilities and more phases are being developed. Unlike other areas in the city where land supply is limited, there is ample land available for further expansion in this area.

Employees working in various IT/ITeS companies in this park are the main demand-drivers for residential development in many localities in the western part of the city.

While choosing localities projects, employees balance affordability, keeping commuting time to the minimum. Residential development has taken shape in Hinjewadi through large township projects being launched under the Special Township Policy, which encourages development of self-sustaining townships away from the city to assist in dispersal of population. There are as many as five major projects in and around Hinjewadi that are being developed under this scheme.

The residential component in these projects is in various stages of construction. Hinjewadi contributes around 60% of Maharashtra's total IT exports.

II. LITERATURE REVIEW

According to Darshini Mahadevia and Appeeji Parasher, Pune city is the new IT city on the rise. The development of these IT parks has led these impacts - increase in upmarket real estate construction projects, increase in property and land prices across the city, city expansion and infrastructure requirements, land alienation and impacts.

According to D.K. Das & Prof. S.G. Sonar, IT sector has influenced the socio- economic and physical landscape of cities. Pune city had new opportunities but also faced challenges because of IT sector.

IT industries and allied activities are predominant in socio-economic development. There is higher pressure on the urban infrastructure and environmental stress.

Ujjwala Khare, Prajakta Thakur and Neeraj Bhagat, This paper explains an Urban sprawl taking place near upcoming IT parks. Development of surrounding villages plays an important role in development of fringe areas. Planning of settlements around the IT parks area is the major concern in these fringe areas.

Soham Sarda, Janhavi Chavare, Rohit Bhosale, Akshay Birajdar, Shweta Andhale, Prof. S. S. Shastri stated that the average speed of vehicles in Pune during peak hours is 22 kilometers per hour (kmph) while that in Hinjewadi is just 16 kmph. In Hinjewadi, according to various surveys conducted, the private vehicle ridership is more.

This paper explains the traffic congestion issue in Hinjewadi area. Need to lower the number of accidents. Traffic affects the daily routine of the commuters.

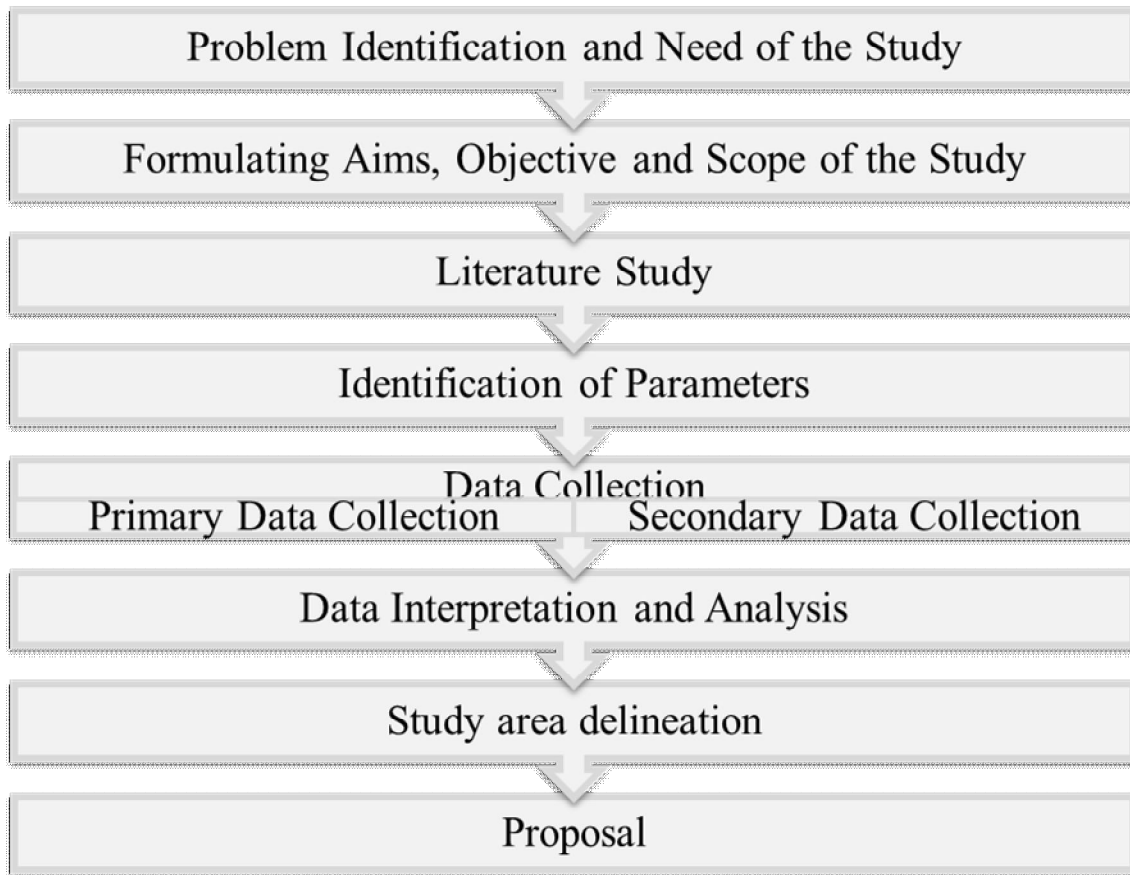
Prof. Abhijit S. Marawar stated that Environmentalists have often stated that Pune has grown out of control because of the IT industry.

The paper is studied to map the range of economic and environment effects of the IT industry. Effects of IT industry have been explored two-fold - the industry level and the employee level.

III. RESEARCH OBJECTIVES

- 1) To assess the extent of development of IT parks at Hinjewadi .
- 2) To assess the requirement of infrastructure for supporting this IT park.
- 3) To identify the problems faced by people working in IT parks at Hinjewadi.
- 4) To find out dependency of IT park on adjoining urban local bodies.
- 5) To give planning guidelines for development of Hinjewadi IT park and its surrounding areas

IV. RESEARCH METHODOLOGY



V. DATA COLLECTION

A. Hinjewadi MIDC

- *Hinjewadi Phase-I:* The park has been established in 1998 on the Government land at Hinjewadi admeasuring about 96.42Ha. All the plots from this Park have been sold out to various prominent I.T. Companies.
- *Hinjewadi Phase-II:* Land admeasuring 236.23 Ha have been acquired for this park. Out of the total area of this park 54.40 hectares of land has been reserved for Bio-Tech Park.
- *Hinjewadi Phase-III:* MIDC has acquired 352.00 Ha Infrastructure land for this park. Out of the total area, on 118.54 Ha of land, “Residential Zone” & rehabilitation has been developed & the Government of India has already granted the formal approval for 223.56 Ha of land as IT & ITES specific SEZ.
- *Hinjewadi Phase-IV:* The Government has notified 465.00 Ha of land for this park & it is under acquisition & development.

1) Questions/Survey

Aim in developing Hinjewadi IT park
 Extent of development at Hinjewadi IT park
 Problems faced in development
 Infrastructure provided by MIDC for Hinjewadi IT park
 Coordination issue with other local bodies

2) Inferences

Hinjewadi is developed to encourage employment opportunity.
 Phase I and Phase II are developed, Phase III is partially developed. Work is in progress.
 Phase IV is sanctioned, it is under acquisition and development.

Basic Infrastructure is provided by MIDC inside the MIDC boundary.

The present scenario is that the land rates are high and local people are not ready to sell their land.

Traffic and congestion was the major problem faced but they are trying to resolve by road widening and other ways.

MIDC do not provide any type of housing, they sell the residential plots to developers.

Not depending upon gram panchayat for any infrastructure facilities.

B. Software Parks of India (STPI)

Software Technology Parks of India (STPI) is a society set up by the Ministry of Electronics & Information Technology (MeitY), Government Of India, with the objective of encouraging, promoting and boosting software exports from India. STPI is statutory body, internet and incubation service provider.

1) Questions/Survey

Aim in developing and response after development Hinjewadi IT park.

Any type of Infrastructure provided by STPI

Problems faced in development

Availability of skilled human resource

2) Interpretation and Analysis

IT Park is developed to boost up the employment and provide a defined IT cluster for employees. STPI does not provide infrastructure for Hinjewadi IT Park. IT firms which are registered to STPI gets stamp duty exemption. STPI provides plug and play facility for startups/SMEs at their incubation center. Internet facility is also provided for some IT units by STPI. Other IT units use private internet facilities. Traffic related issues are already raised and MIDC is trying to resolve. Skilled human resource required is available in surrounding areas and in the city. STPI does not play any role in development of Hinjewadi IT Park.

C. Hinjewadi Grampanchayat

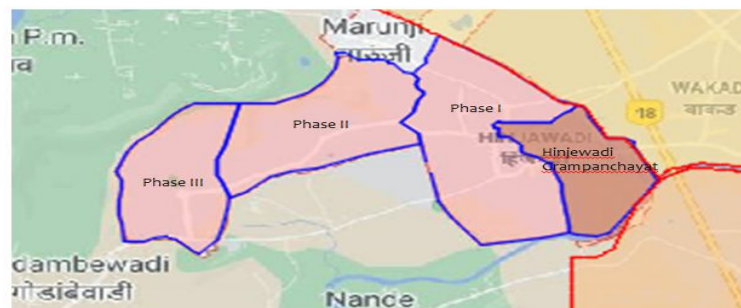


Figure 2. Map showing Hinjewadi Gram Panchayat and IT Park Phases

1) Questions/Survey

IT Park in Hinjewadi is an opportunity or threat

Development related issues in Hinjewadi gram panchayat

Issues faced due to commuting employees

Challenges faced in terms of infrastructure and development

Does IT sector and Hinjewadi gram panchayat call for special attention to development?

2) Inferences

Hinjewadi has encouraged employment opportunity. Housekeeping and other supporting staff goes from Hinjewadi gram panchayat to IT park.

There are traffic and congestion issues because of daily commuters at IT park.

Physical and Social Infrastructure is provided and maintained by Hinjewadi gram panchayat.

Hinjewadi gram panchayat does not provide any type of infrastructure within MIDC limits as it is looked upon by Hinjewadi MIDC. PMC or PCMC have not merged Hinjewadi within their boundaries because of industry/IT park area. Hinjewadi IT park and gram panchayat area calls for a special attention to development.

D. Hinjewadi Industries Association (HIA)

Hinjewadi Industries Association (HIA) started as an informal collaborative platform for all the IT /ITES and other Companies located in Rajiv Gandhi Infotech Park in MIDC.

HIA is a “Not for Profit” organization funded by the member companies.

HIA was formed as an Industries Association and registered under the Societies Registration Act, 1860 on January 11, 2008 with the Assistant -Registrar, Pune Region, Pune and under the Maharashtra Public Trusts Act, 1950 on May 14, 2008 with the Assistant Charity Commissioner, Pune Region.

As on date there are 96 plus companies are members of HIA

It interacts with all the stake holders from the State Government, local bodies and authorities to make improvements in the Infrastructure, Safety and Security, Transport and Traffic modes.

To extend co-operation to all the stake holders for creating a world class destination for IT and ITES industry at Rajiv Gandhi Infotech Park, MIDC Hinjewadi.

1) Questions/Survey

Problems faced in Hinjewadi

Infrastructure related issues faced

Interpretation and analysis:

HIA provides a collaborative platform and is recognized as a representative of all the member companies to voice their common concerns with the government authorities.

Traffic issues and congestion at peak hours.

E. Employees at Hinjewadi IT Park

Hinjewadi has provided a large scale of employment.

IT sector in Pune employees more than 1.5 lakh people, including 70,000 IT professionals.

Presently there are 165 firms based and 1.5 lakh commuters travel daily.

Most of the employees working in hinjewadi are staying in Wakad, Pimpri Chinchwad, Balewadi, Baner and Bavdhan.

1) Questions/Survey

Basic information about location of office, duration of service, residential location, mode of transport used and time required in commuting.

Problems faced in commuting

Amenities/Facilities provided/required.

Housing requirement nearby and required infrastructure.

2) Survey Analysis

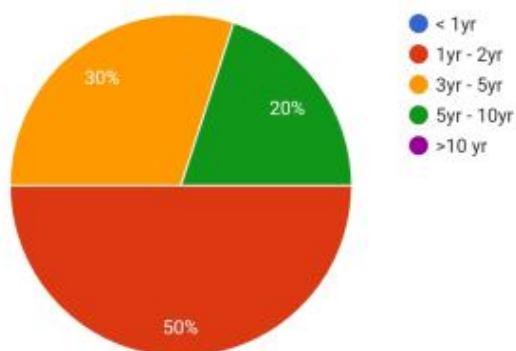


Figure 3. Duration of Service

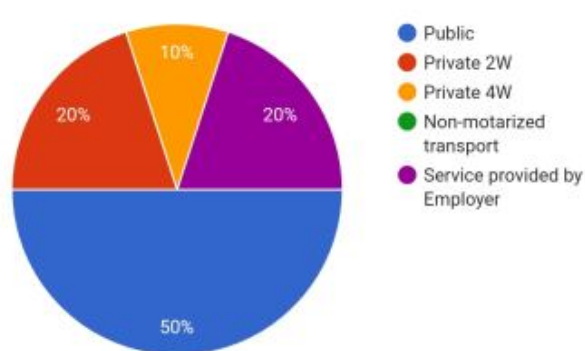


Figure 4. Mode of Transport

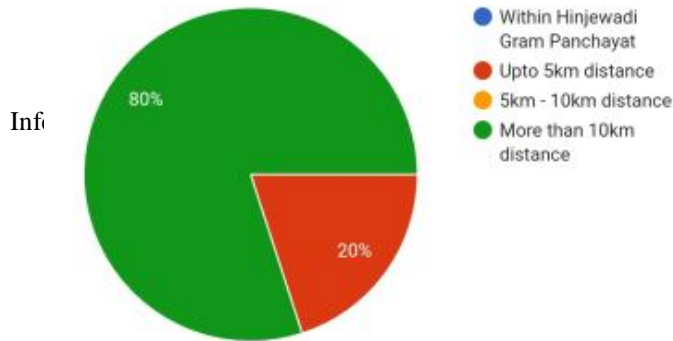


Figure 5. Where do you stay?

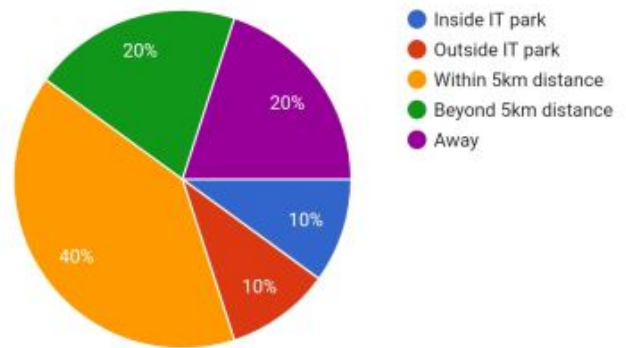


Figure 6. Location of Housing if required

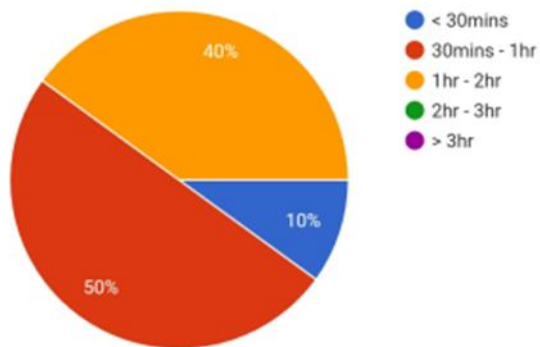


Figure 7. Time required in commuting

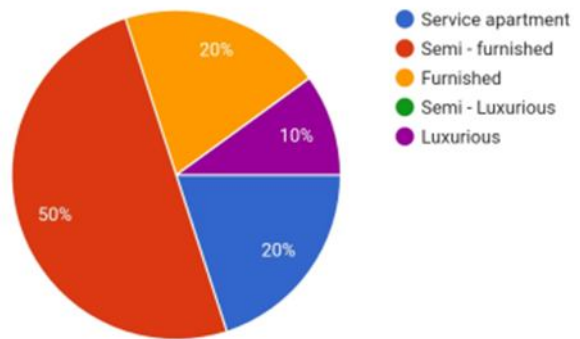


Figure 8. Type of Housing required

As per survey people are facing commuting issues. Traffic jam, congestion on roadways and delays at work places is the major problem faced by everyday commuters. Many of the employees are residing more than 10km away from Hinjewadi IT park

F. Local Residents of Hinjewadi

Previously Hinjawadi was a village until the construction of the Rajiv Gandhi InfoTech Park.

Now it is one of the epicenters of IT industry in Pune.

Hinjewadi's upsurge began in the year 1998 when the foundation of the IT zone was laid down.

As a result, the 2800 acres of the Rajiv Gandhi InfoTech Park came into existence.

1) Questions/Survey

Basic information about residential location, duration of stay, mode of transport used, availability of physical and social infrastructure.

Problems faced

Amenities/Facilities provided/required.

Housing requirement nearby and required infrastructure.

2) Inferences

There is no issue with Physical and Social Infrastructure in gram panchayat area and MIDC.

Many residential projects have already developed and some are developing.

But the development is happening in isolation by the authorities.

There is need of parent organization for development.

VI. DATA ANALYSIS

There is existence of many authorities like Hinjewadi Grampanchayat, Hinjewadi MIDC, STPI but they are working in isolation. These authorities are not interdependent on each other.

They lack in coordination and holistic approach of development.

Major issue is faced by daily commuters.

These authorities need to be brought under one umbrella that will be a parent organization to develop holistic approach and better future development.

The proposal would be to form an urban local body for Hinjewadi and surrounding area. The area will be delineated with possible development possible for Residential - Commercial development in the area.

VII. PROPOSALS

The proposal would be to form an urban local body for Hinjewadi and surrounding area.

The area will be delineated with possible development possible for Residential - Commercial development in the area.

Area delineation will be based on natural features, revenue boundaries and transport connectivity.

The delineated area is in PMRDA but some areas of PMC and PCMC will also be scoped out to make it self-sustainable.

Adding areas from already formed local bodies would help in sustaining it and the new area or villages will act for the future development.

This area will provide all type of opportunities for all economic groups.

This Urban Local Body would form a great opportunity for future development and making it self- sustainable.

A. Study Area Delineation

- 1) The delineated area would be known as Hinjewadi Municipal Council.
- 2) It consists of Hinjewadi MIDC, Hinjewadi gram panchayat and surrounding villages.
- 3) Approximate area of this delineated area would be 200 sq.km. and population according to 2011 census is 200,000.
- 4) Total of 27 villages are included in the new urban local body.
- 5) Some of the villages are already developed like Bavdhan, Baner, Balewadi, Pashan which would help the development of other villages.
- 6) It will also help in self-sustaining the ULB.
- 7) Other villages would be future developed and help in economic and social upliftment.
- 8) The new ULB includes NH-4 and SH-60 for better connectivity.
- 9) Walk to work, or decrease in commuting time and reducing distance to work will be promoted for Hinjewadi IT park.
- 10) Existence of proper Social infrastructure and Physical infrastructure within the ULB will improve the quality of life and its importance.



Figure 9. Hinjewadi Municipal Council Area delineation

B. Reason for including Villages

- 1) In the delineated area Hinjewadi MIDC and Hinjewadi Gram Panchayat is added.
- 2) The villages like Bavdhan, Baner, Pashan, Balewadi, Wakad are already developed areas of Western Metropolitan corridor of Pune.
- 3) These areas will help the ULB self-sustain and will not depend on other adjoining local bodies.
- 4) Availability of proper infrastructure facilities will improve the quality of life of the area.
- 5) A strong political body will be formed for coordination and holistic approach of development.
- 6) Local people will get a voice.
- 7) There are existing and proposed townships coming up.
- 8) The other undeveloped villages will be opportunity for future development.
- 9) The problems faced by commuters will be resolved and walk to work concept can be introduced.

VIII. CONCLUSIONS

Provision of ULB for Hinjewadi and its surrounding area will help it future develop and uplift the socio economic culture. Provision of amenities with work opportunities will improve the quality of living. A parent organization in the form of ULB will help in holistic development. Formation of ULB will give special attention to Hinjewadi focussing on Hinjewadi IT Park and its supporting infrastructure. After formation of ULB land rates will increase and revenue will be generated for future development and proper maintenance

IX. ACKNOWLEDGMENT

I wish to express my gratitude to my thesis guide Dr. S.G. Sonar. His valuable supervision in the conduct of this research and preparation of this thesis. I extend my gratitude to for his expert opinion and suggestions through the research. I wish to thank my family and friends for their encouragement and moral support. Lastly, there are many others who have directly or indirectly helped me in completing this arduous task. I wish to thank all of them from the bottom of my heart.

REFERENCES

- [1] 1. Manomani I. K (2010), Spatio – Temporal Analysis of Land Use in Fringe area using GIS – a case Study of Madurai City, Tamil Nadu, International Journal of Geomatics and Geosciences, 1(2), pp 264-270.
- [2] Madhvi Lata K, Krishna Prasad V, Badarinath, K.V.S, Raghavaswamy V, (2007), Measuring urban sprawl: A case study of Hyderabad, National Remote Sensing Agency (NRSA), Department of Space. Government of India, Hyderabad. www.GIS Development.net
- [3] Kundu Amitabh (2001), Trends and Patterns of Urbanization and there economic emplication, India Infrastructure Report 2006 Oxford University presspp-28-40.
- [4] Deaton, Angus and Jean Drèze (2002). 'Poverty and Inequality in India', Economic and Political Weekly, September.
- [5] Gordon, Jim and Poonam Gupta (2003). 'Understanding India's Service Revolution', paper prepared for the IMF-NCAER Conference, 6–12 November 2003, at NCAER, New Delhi.
- [6] Government of Maharashtra (2005). Maharashtra State Development Report 2005: Industrial Growth. Source: planningcommission.nic.in/plans/stateplan/sdr_maha/ch-5-14-02-05.pdf.
- [7] HDFC Realty (2005). Pune No Longer Step-Child, April. Source: <http://www.hdfcrealty.com/general/news646.htm>
- [8] Knight, Frank India International Property Consultants (2004a). 'Investment in Real Estate', Quarterly Property Review, Quarter 3.——— (2004b). 'Commercial Property Review', Quarterly Property Review, Quarter 3.
- [9] Mahadevia, Darshini (2005). Metropolitan Employment in India, Working Paper no.4, Centre for Development Alternatives (CFDA), Ahmedabad.——— and Harini Narayanan (2005). Shanghaing Mumbai: Politics of Evictions and



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