

## “COMPARITIVE ANYLYSIS OF INTEGRATED TOWNSHIP DEVELOPMENT IN PUNE REGION “

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### ABSTRACT

An Integrated Township is a self sustainable township to provide Amenities and Facilities to Residential, Commercial, Recreational, Public etc required by a fully groomed Township. Integrated Townships can be defined as "The Housing schemes that provide affordable housing to various sections of the society in urban areas of the State". Integrated townships are the way to go as they bring together all the elements that customer's demand which is "walk to work' lifestyle, shopping complexes, facilities for leisure and entertainment. The purpose of this study is to give insight into integrated townships, research the development of integrated township project going on in Mahalunge - Man area and suggest ways to improve it by analyzing its pros and cons by comparing it to Other City.

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**KEYWORDS:** *Integrated Townships, Comparative Evaluation, Mahalunge – Man.*

### 1. INTRODUCTION

Integrated townships are an important segment and certainly a good business proposition. They are the way to go because they bring together all the elements that customer's demand which is "walk to work' lifestyle, shopping complexes, facilities for leisure and entertainment. As the cities are expanding and traffic congestion becoming a common hindrance, integrated townships promise a congestion-free living environment within them and help in decongesting the city. They offer standard of living and ambience, which are much ahead of the times.

The rapid rate of urbanization and its attendant socio-economic and spatial consequences have been of tremendous concern especially to all professionals in human settlements and to policy makers and analysts. The precise demographic definition of urbanization is the increasing share of a nation's population living in urban areas. Maharashtra is one of the most urbanized states in India, whereas nationally 39 percent of the population was living in urban area as per Census 2011, the urban areas in Maharashtra, the figure was 52 percent a census 2021. In view of the rapid urbanization process the growing population in the urban areas of Maharashtra and Mumbai in particular, Govt. has decided to give importance in providing the connectivity and better means of communication to the new townships.

When the comprehensive planning of the land uses is designated and densities distributed, thus the carrying capacity of a land in a city is measured. Development is generally accepted to be a process that attempts to improve the living conditions of people. Most urbanization is the result of net rural to

urban migration. Due to high rate of migration from villages to Pune city, there is a problem of high population growth rate, worst traffic situation, problem of drinking water etc. which hamper the life style of Pune citizens. This paper is mostly focus on Mhalunge Man Project which is very near to Baner area and adjoins to Hinjewadi area. This area is underdeveloped now, but government of Maharashtra already make a provision of more than 100 crores to develop this area. So here we try to find out different parameters which is essential for development of this township through literature survey, questioner survey etc.

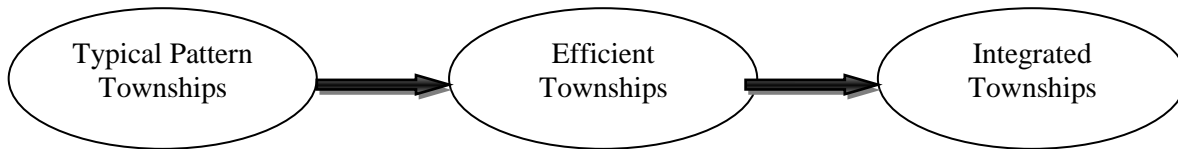


Figure 1 Township Evaluation Model in India

## 2. LITERATURE REVIEW

As per Rupali Zope, the author who focus on planning strategies for pune says that, due to the rapid rate of population and urbanisation increase in India it's requires social and physical infrastructure to fulfil the growing demand from the people on space. The fast growing metropolitan cities in India have taking a major share of urban population, but at the same time such city is not ready or to say not prepared to sustain pressure of large population regarding demand of water, space etc. Due to uneven pattern of urbanisation and insufficient fund availability for infrastructure has led to serious deficiencies in urban infrastructure and services like housing, transport, water supply, sanitation and social infrastructure especially in metropolitan city. AS per author provision of potable water supply, solid waste management, sanitation, mass transportation system should be the priorities for the planning agencies for complete balanced development of Pune city.

As per Government of Maharashtra and Ramakrishna Nallathiga et.al, the requirement for any township is as follows,

- A minimum area of 100 acres
- Abundant and clean water supply available 24\*7
- A reliable power infrastructure
- A well knit road structure of widths varying between 30 feet and 80 feet
- 60% of the area to be dedicated purely to residences and a minimum of 20% area to be dedicated to open spaces
- Should have EIA clearance
- Clearance from various government bodies including CFO
- It should have facilities like school, hospitals, etc.

AS per Deepali J.Chavan and Ravindra H.Sarnaik, most of townships are planned today has been neglected in Sustainable planning point of view for next coming generations upto whole life of township. Any township made up of one or more neighbourhood sector. And this neighbourhood concept was originally comes from America. Township is the place where residential facilities are provided along with recreational facilities, commercial facilities educational and health facilities are introduce within a walking distance in a single township or we can say 'walk to work' lifestyle within township boundaries. The authors focus on sustainable indicator like Environmental indicators, Social indicators, Economical indicators. In Environmental indicators- Rain water harvesting Waste management Gardens and open spaces Provision etc. Incorporate. Social indicators- Social interaction space provisions in township, Provision of a recreational areas like malls , multiplex, shopping centres, Safety measures for the

residents, hospitals and schools within a short distance etc. Incorporate. While in Economical indicator – Offices, work station etc incorporate.

**As per Amit Ashok Hasape, Prof. Satish S. Deshmukh**, growing population, migration of people from rural to urban areas, increasing housing demand inadequate infrastructure of the city etc and much such problems-integrated township development is the need of the day. As per author social infrastructure must have Medicare, School, Recreation, Community hall Entertainment center Mall etc. while In Physical infrastructure must have road network, Water supply and sanitary management system, Electricity along with offices, work station, commercial zone, ware houses etc. In this paper author consider the Magarpatta city, Nanded city for evaluation.

**As per Bello, Ismail, K et.al.**, Ogun state Government of Nigeria in transforming the rural areas in to urban centers through the provision of basic infrastructure in all the parts of the state. That is urbanization or simply we say transform of people from rural to urban area. The authors of this paper take a detail reviews of more than 15 researcher paper and conclude the remark that, Cities now form a major source of environmental problems which have effects not only within their vicinity but, oftentimes, of global significance. The situation of urban management in many developing countries is still confronted with difficulties in the area of policy and implementation. most developments are still along the line of the old strategy of housing estates. Integrated Townships development strategy is still in its infancy in Nigeria, but gradually picking up.

### 3. DATA COLLECTION

Data collection is the process of gathering and measuring information on targeted variables in an established systematic fashion, which then enables one to answer relevant questions and evaluate outcomes. By taking personal interview, data collected according to questionnaire and rating is given to each factor. Rating is done according to importance of each project success factor by means of scoring from 1 to 5. Five point Likert scale used to rate the factors on five-point scale, in which ‘1’ represented very poor and ‘5’ represented very good. The questionnaire includes total main 5 factors and other sub factors.

- Location of Township
- Amenities and Other facility available in Township
- Infrastructure Facilities available within Township
- Environmental sustainable development in Township
- Safety and technology used in Township

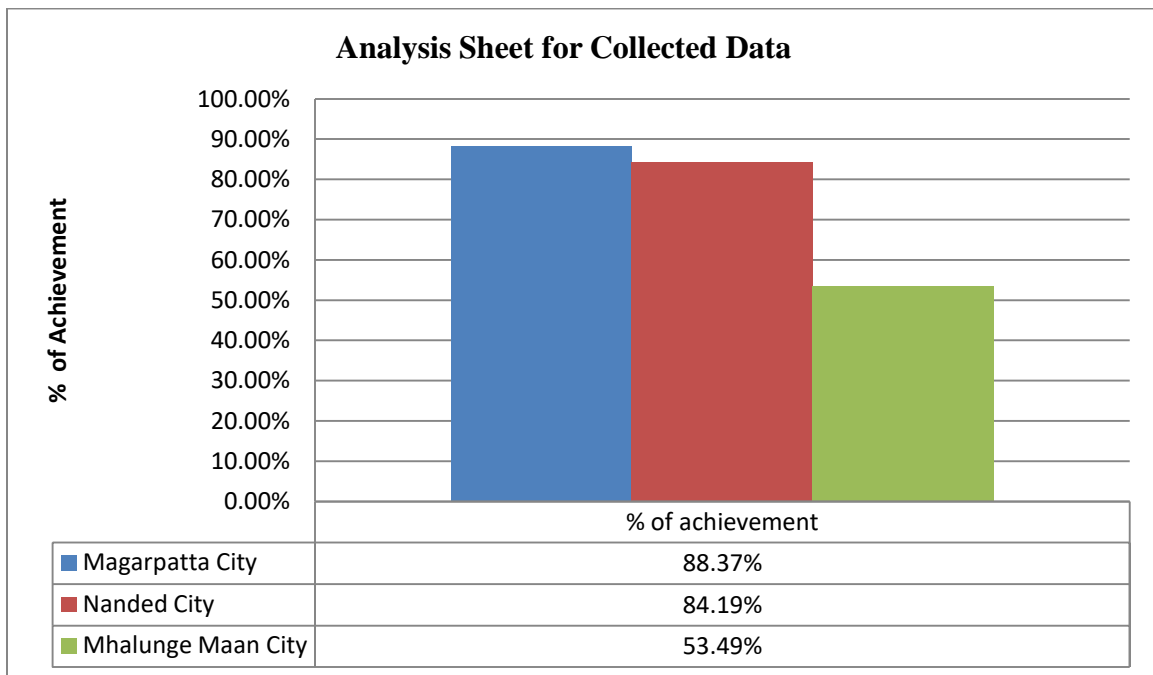
In this survey we just not asking the availability of infrastructure but also condition of services, so that we can propose this thing to new township.

**Table No.-01 Analysis Sheet for Collected Data**

Sr. No.	Question	Magarpatta City	Lavasa City	Mhalunge Man City
1	Location of Township	5	2	5
2	Amenities and Other facility available in Township			
2a	Public Park	5	5	5
2b	Adventure Park	4	4	1

2c	Health & Nature Cure	5	5	5
2d	Cycle Track	5	5	1
2e	Broadband Connectivity	5	5	1
2f	Power back-up through DG sets	5	5	1
<b>Sr. No.</b>	<b>Question</b>	<b>Lavasa City</b>	<b>Lavasa City</b>	<b>Mhalunge Man City</b>
2g	Piped Gas Supply	5	1	4
2h	Intercom Facility	5	5	3
2i	Car Washing Facility	4	5	3
2j	Security.	5	5	4
2k	Banks Facility	4	4	5
2l	Gift Shops	5	4	3
2m	Restaurant	5	5	5
2n	Beauty Parlours	5	3	3
2o	Well Equipped Gymnasium	5	5	3
2p	Swimming Pool,	5	5	3
2q	Jogging Tracks	5	5	2
2r	Yoga & Meditation Centres	5	5	2
2s	Tennis Court	4	5	2
2t	Amphitheatres	5	5	1
2u	Cultural Centres	5	5	3
2v	Entertainment Centres	5	5	3
<b>3</b>	<b>Infrastructure Facilities available within Township</b>			
3a	Broad Wide Roads	5	5	3
3b	Well Built & Well Lit Wide Internal Roads	4	4	3
3c	Traffic Islands	3	3	1
3d	Power & Water Supply	4	4	3
3e	Water treatment plant	4	4	1
3f	Sewage Treatment Plant	4	4	1
<b>4</b>	<b>Environmental sustainable development in Township</b>			
4a	Rain Water Harvesting	5	5	5
4b	Garbage segregation at Source	4	4	4
4c	Biogas Plant	1	1	1
4d	Vermiculture Plant	1	1	1
4e	Use of Fly-ash in Construction	3	3	3
4f	Solar Water Heating System	3	3	3
4g	Solar Lighting	4	4	1
4h	Hygienic Garbage Disposal	4	4	1

5	Safety & technology used in Township			
5a	Telephone Exchange and broad band connectivity	4	4	2
5b	Digital Locking System and security	5	5	2
5c	Wi-Fi Connectivity and video conferencing	5	5	2
5d	Fire Fighting	5	5	2
5e	Electricity	5	5	5
5f	In-City Traffic Controls	4	4	3
TOTAL=		190	180	115
Total Question(43)*5=		215	215	215
% of achievement=		88.37	83.72	53.49



**Chart No.-1 Analysis Sheet for Collected Data**

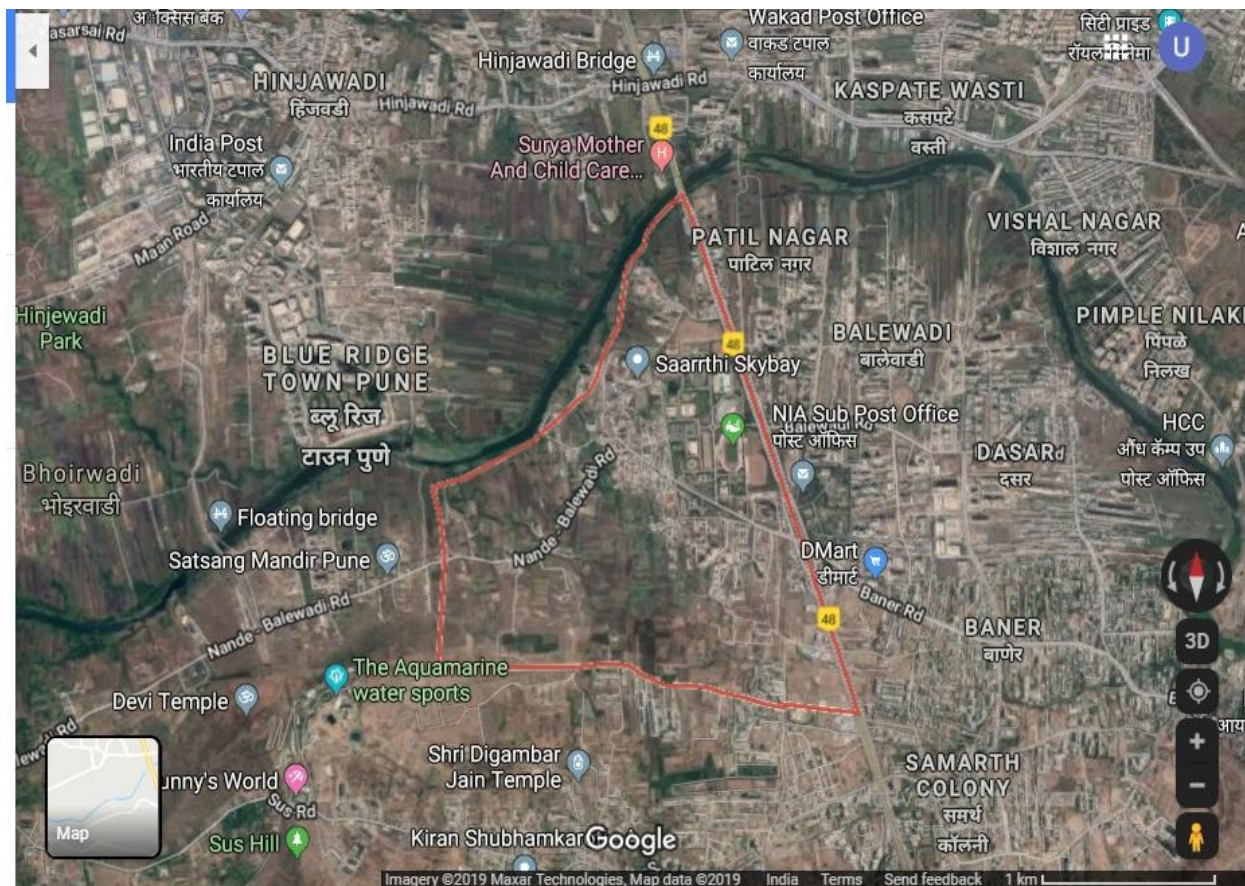
The above chart is based on feedback which we received from participant of respected area. This chart is clearly shown that, as comparatively with Magarpatta & Nanded City Mhalunge-Naan city is under constructed and under development so it having a chance to develop this entire city under the category of Integrated township.

#### 4. OVERVIEW OF MAHALUNGE-MAN PROJECT IN PUNE REGION

The Mahalunge town planning scheme in Pune serves as a model development scheme for all the other 45 town planning schemes in the pipeline. Covering an area of 700 acres and engaging about 6,500 landowners, the planning for the scheme at Mahalunge near Hinjewadi IT Park.

Here are the noteworthy highlights of the Mahalunge town planning scheme:

- [1] Total area in Mahalunge Maan: 50 hectares
- [2] Total investment opportunity: ₹ 21,300 cr
- [3] Total development area: 26.4 million square feet
- [4] Total development worth: ₹ 9,230 crore
- [5] Prime residential area: 38.4 million square feet worth ₹ 7,600 crore
- [6] Retail and commercial area: 16.4 million square feet worth ₹ 3,300 crore
- [7] Total affordable housing unit: 500 worth ₹600 crore



Photograph No.-1 Google Map of Mhalunge-Maan Project

## 5. CONCLUSION

As per the above we conclude that, An Integrated Township is a self sustainable township to provide Amenities and Facilities to Residential, Commercial, Recreational, Public etc required by a fully groomed

Township. The questionnaire is design for this project to collect data from personal interviews which includes total main 5 factors like Location of Township, Amenities and Other facility available in Township, Infrastructure Facilities available within Township, Environmental sustainable development in Township, Safety and technology used in Township. This is a review paper so directly we include an Analysis Sheet for collected data which gives clear idea regarding facility we required for integrated township. The feedback chart is clearly shown that, as comparatively with Magarpatta & Nanded City Mhalunge-Naan city is under constructed and under development so it having a chance to develop this entire city under the category of Integrated township.

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