

To Identify the Factors Affecting on Setup of New Township in MIDC Area

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Abstract

Increasing expenditures and financing charges on housing credits guarantee a property in a linked township springing up in the city's borders, making city home ownership increasingly inconvenient and expensive. These townships are billed as India's new land improvement strategy to satisfy urbanites' wealth and goals. Despite their initial launch, these independent townships with private, retail, and business operations will quickly spread across the country.

Demographically, urbanization is the growing urban population of a nation. Due to rising urbanization, 52 percent of Maharashtra's population lived in urban areas in 2021, compared to 39 percent nationally. Given the expanding population in urban Maharashtra and Mumbai, the government has prioritized connecting new townships to better communication.

Development is typically thought to improve people's lives. Net rural-to-urban migration drives most urbanization. Due to increased migration from rural to Pune city, population growth, traffic, drinking water, and other issues affect Pune residents' lifestyles. This study concentrates on Town-1 MIDC Park Project near Dehu and Jadhav Wadi. This area is neglected, but Maharashtra has allocated about 100 crores to develop it.

1. Introduction

A consolidated township is a self-supportable township fundamentally begun by private specialists to give, early, improvements and workplaces required by an arranged township Integrated townships in Pune refer to planned urban developments that incorporate residential, commercial, recreational, and institutional facilities within a single area. This study includes an examination of market dynamics, demographic shifts, regulatory frameworks, and economic factors influencing real estate development. The survey encompasses recent publications, industry reports, and academic research to provide a holistic understanding of the sector.

These townships are designed to be self-sustaining and offer a comprehensive living experience to residents. Some key features typically found in integrated townships in Pune include:

1. Residential Zones: Various types of housing options such as apartments, villas, and townhouses catering to different income groups.



2. Commercial Spaces: Offices, retail outlets, shopping complexes, and sometimes even industrial areas to provide employment opportunities within the township.
3. Recreational Facilities: Parks, playgrounds, sports complexes, gyms, swimming pools, and community centers for leisure and fitness activities.
4. Educational and Healthcare Facilities: Schools, colleges, hospitals, and clinics to cater to the educational and healthcare needs of residents.
5. Infrastructure: Well-planned roads, public transport facilities, water supply, sewage treatment, and waste management systems.
6. Green Spaces: Emphasis on landscaping, green belts, and eco-friendly practices to enhance the quality of life and sustainability of the township. The Pune's limits are developing in every direction. Adding another absolutely new measurement to the city is the surge of incorporated townships into Pune. Pune is on a most optimized plan of attack in modern and monetary development. Fuelled by the IT blast, there is a tremendous interest for lodging in the city evaluated at 80,000 houses included each year; the test is give fundamental lodging foundation related offices.

2. Methodology

The process used to collect information and data for the purpose of decisions. The methodology may include publication research, analysis of data, quantitative analysis, surveys and other research techniques, and could include both present and historical information. In this project following methodology has been adopted to study, collect and analyze the data of project. Following step by step study is been carried out to achieve the objectives of this project work. Study of Current Real Estate Scenario and Trends in India A comprehensive literature survey is conducted to analyze the current real estate scenario and trends in India.

Identification of Major Forces Influencing Integrated Township Development

2.1 The development of integrated townships is driven by several key forces, including:

1. **Economic Factors:** Market demand, investment trends, and economic growth.
2. **Regulatory Frameworks:** Urban planning regulations, zoning laws, and environmental policies.
3. **Technological Advancements:** Integration of smart technologies and sustainable building practices.
4. **Socio-Demographic Changes:** Population growth, urbanization trends, and lifestyle preferences.

2.3 Key Issues in Integrated Township Development in Contemporary Context

1. **Sustainability:** Ensuring environmentally sustainable practices in construction and urban management.
2. **Infrastructure:** Developing robust infrastructure to support residential, commercial, and recreational needs.
3. **Affordability:** Balancing development costs with affordability for end-users.
4. **Community Integration:** Designing townships that promote social cohesion and community interaction.
5. **Regulatory Compliance:** Navigating complex regulatory environments and ensuring compliance with legal requirements.

1. **Primary Data:** Surveys, interviews, and site visits to gather firsthand information from stakeholders.
2. **Secondary Data:** Analysis of existing reports, market studies, and academic publications.



The collected data is processed using statistical and analytical tools to derive meaningful insights and identify patterns. Problem Formulation and Case Analysis. Defining assumptions based on realistic scenarios and existing data.

1. **Problem Definition:** Identifying specific challenges and objectives related to the integrated township development.
2. **Analytical Framework:** Developing a framework to analyze the case, including SWOT analysis, cost-benefit analysis, and impact assessment.

3. The Data Collection and The Data Analysis

The analysis of the data via statistical measures and/or narrative themes should provide answers to your assessment questions. Interpreting the analyzed data from the appropriate perspective allows for determination of the significance and implications of the assessment. Analysis and evaluation has been drawn by considering the comparative factors in a township with respect to advantages and disadvantages. With respect to the preference point given by the public we have evaluated.

3.1 Types of Data Collected

1. **Demographic Data** Population size, age distribution, and household characteristics of the area surrounding the township.
2. **Geographical Data** Topographical maps, soil reports, and climate data to assess the suitability of the land for construction, particularly for major infrastructure elements like bridges and flyovers.
3. **Economic Data** Information on local economic activities, employment rates, and average income levels to gauge the economic viability of the township.
4. **Regulatory Data** Zoning laws, building codes, environmental regulations, and permits required for construction within the Maharashtra Industrial Development Corporation (MIDC) area.
5. **Infrastructure Data** Existing infrastructure such as roads, utilities, and public services, and the need for new infrastructure development like schools, hospitals, and recreational facilities.
6. **Technical Data** Detailed architectural plans, structural designs, and material specifications for buildings, bridges, flyovers, and other critical structures within the township.
7. **Environmental Data** Environmental impact assessments, sustainability metrics, and resource availability to ensure eco-friendly and sustainable development.
8. **Market Data** Real estate market trends, demand forecasts, and competitive analysis of similar township Questionnaire and Rating Methodology

The data collection involves using a questionnaire designed to capture the importance of each project success factor. Each factor is rated on a five-point Likert scale, where '1' represents 'very poor' and '5' represents 'very good.' This statistical method allows for the quantification of subjective data, making it possible to analyze and interpret the results systematically.

Each of these main factors includes various sub-factors, which are evaluated to provide a comprehensive assessment of the township's development. The structured approach using the Likert scale facilitates the collection of quantifiable data, which is crucial for performing statistical analysis to identify strengths, weaknesses, and areas for improvement in the township project.

4. Data Analysis

The use of statistical principles in data collection for township projects ensures that the information gathered is reliable, valid, and representative of the overall project performance. By analyzing the collected data, stakeholders can make informed decisions, optimize resources, and enhance the overall

success of the township development. The structured methodology and systematic rating provide a clear and objective framework for evaluating the critical factors impacting the project's success.

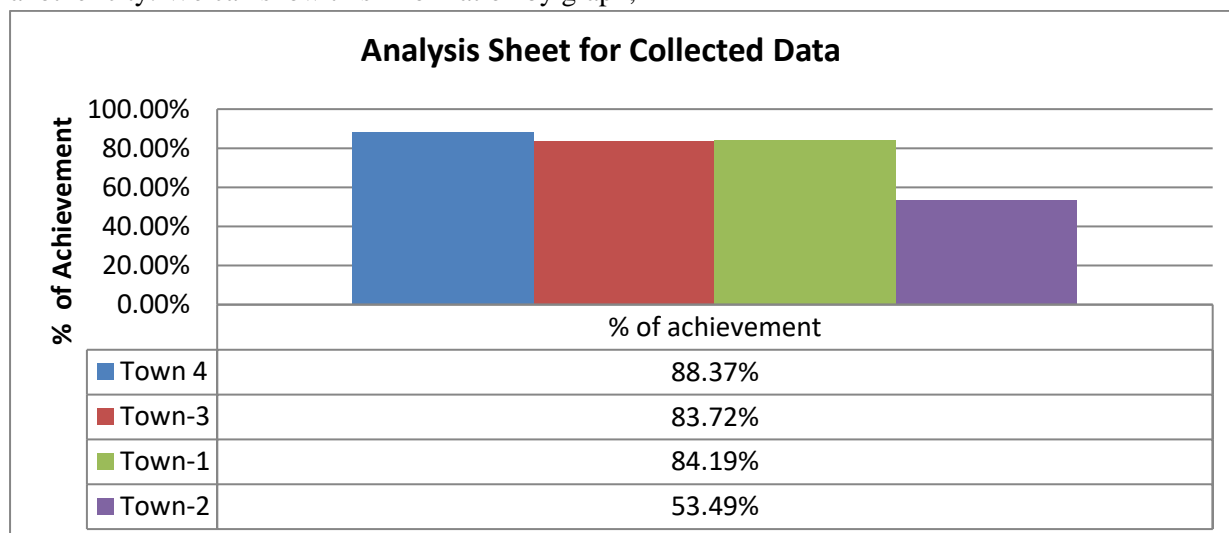
By taking personal interview, data collected according to questionnaire and rating is given to each factor. Rating is done according to importance of each project success factor by means of scoring from 1 to 5. Five point Likert scale used to rate the factors on five-point scale, in which '1' represented very poor and '5' represented very good. The questionnaire includes total main 5 factors and other sub factors. Will give color coding as well.

4.1 Comparative Evaluation Sheet

City That Study	Town-4	Town-3	Town-1	Town-2
TOTAL Question Answered	202	190	112	126
Total Question in asked	225	225	225	225
% of achievement=	89.77	84.44	51.55	56.00

With the help of above feedback calculation, we can easily identify that Town-4 is better than another city. We can show this information by graph,

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Graph 4.1 Comparative Analysis of Integrated Township

4.2 Comparative Analysis of Integrated Township

The above graph is clear that Town-4 is highly advantage for living than other Project. No doubt that one of above project is under construction but if the government or development organization consider the above all points which we consider in our feedback questioner, no doubt the Town – 3 project may also been a good integrated township.

1. **Town-4** has the highest overall achievement percentage (89.77%) followed closely by **Town-3** (84.44%). **Town-2** and **Town-1** City trail behind with significantly lower scores, 56.00% and 51.55% respectively.

2. **Amenities and Facilities:**

- Town-4 and Town-3 consistently score high across most amenities and facilities, indicating a well-rounded development.
- Town-1 City and Town-2 show significant gaps in several amenities such as adventure parks, broadband connectivity, cycle tracks, and swimming pools.

3. **Infrastructure:**



- Town-4 and Town-3 have robust infrastructure, scoring high in categories like well-lit roads, power & water supply, and sewage treatment plants. Town-1 City and Town-2 need improvement in infrastructure, especially in sewage treatment, water treatment, and internal road maintenance.
- 4. **Environmental Sustainability:**
 - Town-4 leads in sustainability practices like rainwater harvesting, garbage segregation, and solar lighting. Town-2 scores well in rainwater harvesting but lacks in other sustainability measures like biogas and vermiculture plants.
- 5. **Safety and Technology:**
 - Town-4 and Town-3 are well-equipped with advanced safety and technology features such as digital locking systems, Wi-Fi connectivity, and comprehensive fire-fighting systems.
 - Town-1 City and Town-2 show gaps in digital locking, home automation, and smart city solutions.

Focus Areas for Improvement:

1. Town-1 City:

- **Priority Areas:** Adventure parks, broadband connectivity, cycle tracks, security measures, and environmental sustainability (e.g., sewage treatment, garbage disposal).
- **Recommendations:** Invest in adventure and recreational facilities, improve internet infrastructure, enhance security systems, and implement comprehensive environmental sustainability initiatives.

2. Town-2:

- **Priority Areas:** Adventure parks, broadband connectivity, swimming pools, and environmental sustainability (e.g., biogas and vermiculture plants).
- **Recommendations:** Develop more recreational facilities, upgrade internet services, focus on environmental sustainability projects, and improve infrastructure like internal roads and sewage treatment.

3. Town-3:

- **Priority Areas:** Minor improvements in amenities like banks and security systems.
- **Recommendations:** Enhance banking facilities within the township and update security measures to ensure resident safety.

4. Town-4:

- **Priority Areas:** Maintain current standards and focus on continuous improvement.
- **Recommendations:** Continue investing in sustainability and smart city solutions, and ensure the upkeep of existing infrastructure and amenities.

Town-1 City Needing More Management: Town-1 City

How to Manage:

1. **Enhance Recreational Facilities:** Develop adventure parks and other recreational amenities to improve the quality of life.
2. **Upgrade Connectivity:** Focus on providing high-speed broadband and reliable internet services.
3. **Improve Infrastructure:** Invest in the maintenance and development of internal roads, sewage treatment plants, and consistent power supply.
4. **Environmental Initiatives:** Implement rainwater harvesting, improve garbage segregation, and establish biogas and vermiculture plants.
5. **Security and Safety:** Enhance security measures including digital locking systems, CCTV surveillance, and robust fire-fighting systems.

Gaps Identified:

- **Town-1 City:** Significant gaps in recreational facilities, internet connectivity, environmental sustainability, and security.



- **Town-2:** Lacks in several amenities and environmental sustainability measures.
- **Town-3:** Minor gaps in amenities and security measures.
- **Town-4:** Least gaps, but needs continuous improvement to maintain high standards.

5. Conclusion and Recommendation

The Overall Performance of Town-4 is of highest achievement percentage at 89.77%., Town-3: Second highest at 84.44%, Town-2: Moderate performance at 56.00%., Town-1 City: Lowest at 51.55%. The performance as per the Amenities and Facilities as High Scores by Town-4 and Town-3 excel in most amenities and Low Scores by Town-1 City and Town-2 need improvement in areas like adventure parks, broadband connectivity, cycle tracks, and swimming pools. The performance according to Infrastructure we can say the Strong remark for Town-4 and Town-3 have robust infrastructure and the Weak remark for rrtown-1 City and Town-2 require significant improvements, particularly in sewage treatment, water supply, and internal road maintenance. The Environmental Sustainability study shows the Leader remark for Town-4 excels in sustainability practices. Lagging for Town-2 and Town-1 City need to enhance their environmental initiatives. The Safety and Technology: Advanced: Town-4 and Town-3 have comprehensive safety and technology systems Gaps in Town-1 City and Town-2 lack in digital locking, home automation, and smart city solutions.

Focus Areas for Improvement:

1. Town-1 City:

- **Priority Areas:** Adventure parks, broadband connectivity, cycle tracks, security measures, and environmental sustainability. **Recommendations:** Invest in recreational facilities, improve internet infrastructure, enhance security systems, and implement comprehensive environmental sustainability initiatives.

2. Town-2:

- **Priority Areas:** Adventure parks, broadband connectivity, swimming pools, and environmental sustainability. **Recommendations:** Develop more recreational facilities, upgrade internet services, focus on environmental sustainability projects, and improve infrastructure.

3. Town-3:

- **Priority Areas:** Minor improvements in amenities like banks and security systems.
- **Recommendations:** Enhance banking facilities and update security measures.

4. Town-4:

- **Priority Areas:** Maintain current standards and focus on continuous improvement.
- Recommendations:** Continue investing in sustainability and smart city solutions, and ensure the upkeep of existing infrastructure and amenities.

Town 3 City Needing More Management: Town-1 City, How to Manage:

1. **Enhance Recreational Facilities:** Develop adventure parks and other recreational amenities.
2. **Upgrade Connectivity:** Focus on providing high-speed broadband and reliable internet services.
3. **Improve Infrastructure:** Invest in the maintenance and development of internal roads, sewage treatment plants, and consistent power supply.
4. **Environmental Initiatives:** Implement rainwater harvesting, improve garbage segregation, and establish biogas and vermiculture plants.
5. **Security and Safety:** Enhance security measures including digital locking systems, CCTV surveillance, and robust fire-fighting systems.

Gaps Identified:uby

- **Town-1 City:** Significant gaps in recreational facilities, internet connectivity, environmental sustainability, and security.
- **Town-2:** Lacks in several amenities and environmental sustainability measures.
- **Town-3:** Minor gaps in amenities and security measures.
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The Town-1 MIDC Tech Park project focuses on developing an industrial and residential area in Town-1, Pune. The project aims to enhance the infrastructure, facilities, and overall attractiveness of the park to foster economic growth and attract new businesses.

Major Factors Affecting Development

1. Zoning Restrictions:

- **Red Zone Restrictions:** The current red zone restrictions limit development, reducing available land for industrial and residential use.
- **River Policy:** Stringent river policy restrictions further limit the land available for development, hampering growth.

2. Basic Amenities and Infrastructure:

- **Transportation:** Lack of efficient public transportation and poor road infrastructure make the area less accessible.
- **Water Supply and Sanitation:** Inadequate water supply and sanitation facilities hinder residential development.
- **Educational Facilities:** Limited educational institutions in the vicinity affect the attractiveness of the area for families and employees.

3. Public-Private Partnerships (PPP):

- Insufficient collaborative investments between the public and private sectors slow down the development of necessary infrastructure and amenities.

Gaps and Lacunas

1. Underutilization of Land:

- Significant portions of land remain underutilized due to restrictive zoning and river policies.

2. Infrastructure Development:

- **Roads and Transportation:** Inadequate road networks and public transportation facilities.
- **Water Supply:** Unreliable and insufficient water supply.
- **Sanitation:** Poor sanitation infrastructure.
- **Educational Facilities:** Lack of quality educational institutions.

Suggestions and Recommendations

1. Reducing Zoning Restrictions:

- Advocate for reducing red zone restrictions from 2000 yards to a more feasible limit.
- Modify river policies to reduce restrictions from 1000 meters to 500 meters.

2. Enhancing Basic Amenities:

- Develop commercial spaces, hotels, and malls to support the business community.
- Improve public transportation connectivity and road infrastructure.

3. Public-Private Partnerships (PPP):

- Encourage PPPs to leverage private sector efficiency and investment capacity for developing infrastructure and amenities.

4. Sustainable Development Practices:

- Implement eco-efficiency and sustainability guidelines in urban infrastructure development plans.

5. Improving Water Supply and Sanitation:

- Invest in reliable water supply systems and enhance sanitation facilities.

6. Expanding Educational Facilities:

- Develop and attract quality educational institutions to the area.

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