

**LAND AND DEVELOPMENT AND MANAGEMENT
CASE STUDY OF PUNE CITY, INDIA****Prof. APARNA RAHUL MHETRAS****-Dr. PARAG GOVARDHAN NARKHEDE**

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Abstract:

Cities in India are growing at a tremendous rate. At the same time, infrastructure facilities and the capacity to accommodate the ever-growing population is not growing at the same pace, creating a huge gap. The increasing population pressure on urban land calls for measures for ensuring proper management of land with its supply, utilization and servicing. Thus, a sustainable development is the need of time due to limited availability of land. A directed growth can efficiently tackle the congestion problems, overburdened infrastructure and public transport.

Considering this scenario, it is necessary to review existing development controls and suggest a planning framework for accommodating high intensity utilization of land because of the inherent benefits of a compact development. Basic factors that determine the intensity of utilization are ratio of salable and non-salable land, capacity of physical infrastructure, density and transportation.

India has adopted many land management mechanisms with varying level of success. Some of these tools were readily accepted in some cities while the others were a total failure. None has qualified as a single tool to direct the growth pattern in a desirable, sustainable manner. Thus, a comparative study to find out the reasons for success or failure can lead us in better implementation of such tools in conjunction. The study also tries to make a balance between public/ private use of land, density and cost of infrastructure for a more intense development.

The study aims at developing a framework of all the land development mechanisms in India and the level of sustainability they offer for a given city considering different parameters. The study proposes to take up a comparative study of various land management tools in India. Identifying the optimum land requirement to accommodate the population and the infrastructure provisions is the core of the study. It also includes the reasons that affect the success and the need for these land management mechanisms. Both primary and secondary information sources would be used. The study shall also include simulations to find out workability of these tools.

PUNE is one of the metro cities of India which also has witnessed considerably long history. It is one of the fast-developing cities, situated in Maharashtra, the most urbanized state of India. Its Development planning for the city is under revision in these years. The paper aims to study the growth pattern of Pune city and to find appropriate land management tool for the same. Land management with fore vision will direct the growth of city as the sustainable growth. Selected areas are to be taken as the case studies and policy proposal is the outcome of the research.

Key Words: Land, Land Management, Sustainable Growth, Pune, Indian cities

1.1 INTRODUCTION & PROBLEM IDENTIFICATION

Indian cities are growing at a tremendous rate. At the same time, infrastructure facilities and the capacity to accommodate the ever-growing population is not growing at the same pace, thereby creating a huge gap. The increasing population pressure on urban land calls for measures for ensuring proper management of land with its supply, utilization and servicing.

A sustainable development is the need of time due to limited availability of land. A directed growth can efficiently tackle the congestion problems, overburdened infrastructure and public transport.

India has adopted many land management techniques with varying level of success. Some of these tools were readily accepted in some cities while the others were a total failure. None has qualified as a single tool to direct the growth pattern in a desirable, sustainable manner. Thus, a comparative study to find out the reasons for success or failure can lead us in better implementation of such tools in conjunction.

Any development must confirm to sustainability and make optimum use of resources. In this research, sustainable use of land, a scarce resource, will be dealt with. It shall also assess the role of land development mechanisms in urban growth.

1.2 AIM

To evolve a framework for intense land management using land development mechanisms (LDM) to achieve sustainable growth.

1.3 OBJECTIVES

The proposed study aims to assess the impact of land management tools on the settlement growth pattern and the factors affecting development

- . To understand sustainable growth in view of land utilization and development.
 - To identify optimum land requirements for various uses (residential use/ physical infrastructure/ transportation)
- To examine existing land development tools
 - To examine various land development models in terms of land utilization & infrastructure
 - To identify issues regarding the successful implementation of these land management mechanisms
 - To identify the key players in implementation of land development mechanisms and their role
- To find out various levels of development factors through simulation for various densities.
 - To evolve optimum FSI and other factors by comparing the cost of development.
 - Suggest mechanism for achieving this high intensity development.

1.4 RESEARCH QUESTIONS

- Understand the co relationship between development, land development mechanisms and sustainable growth?
- What are the issues related to land development mechanisms?
- Which land development mechanisms are adopted in Pune and their impact on development?

1.5 APPROACH

The study aims at developing a guideline framework of the land development mechanisms which will help attain sustainable growth. It proposes to take up a comparative study of various land management tools that

exist all over the world and in India, and discuss the loopholes in it. The guidelines will try to fill in the gaps which are preventing the desired growth pattern. Both primary and secondary information sources would be used. The study proposes to use quantitative and qualitative methods of data collection and analysis. The study shall also include simulations to find out workability of the tools.

1.7 SCOPE & LIMITATIONS

- The findings may vary from city to city according to its size, population, governance, etc., but they are generalized to certain extent.
- The study for simulations is limited to Pune municipal corporation area.
- The proposed guidelines will be helpful in densifying already developed areas.
- The guidelines will also prove to be helpful in developing the urban area in a sustainable way-improved quality of life, enhanced economy, enhanced transport, housing choice.

2.0 INTRODUCTION

2.1 LAND_ as a resource for urban development

Cities transform over a period of time. The reasons for transformation are changing economic conditions, rapid industrialization, emerging technologies, societal aspirations and evolving nature of urban governance system. If this transformation is not guided, the result is overcrowding, congestion and deteriorating neighbourhoods. Also the problems faced by Indian cities differ from those of European and American cities. Thus, A guided transformation however can lead to sustainable cities

Land is critical to urban planning and development, and is a finite resource with limited supply. There are several activities pertaining to agriculture, industries, housing, commercial centres, infrastructure provision, and others which compete for land for their location. This competition among activities generates demand for land.

Land value depends on demand and supply, land use, intensity of use and location of use. With innovative planning strategies, land value can be used as potential tools for financial resource generation for sustainable and efficient urban development.

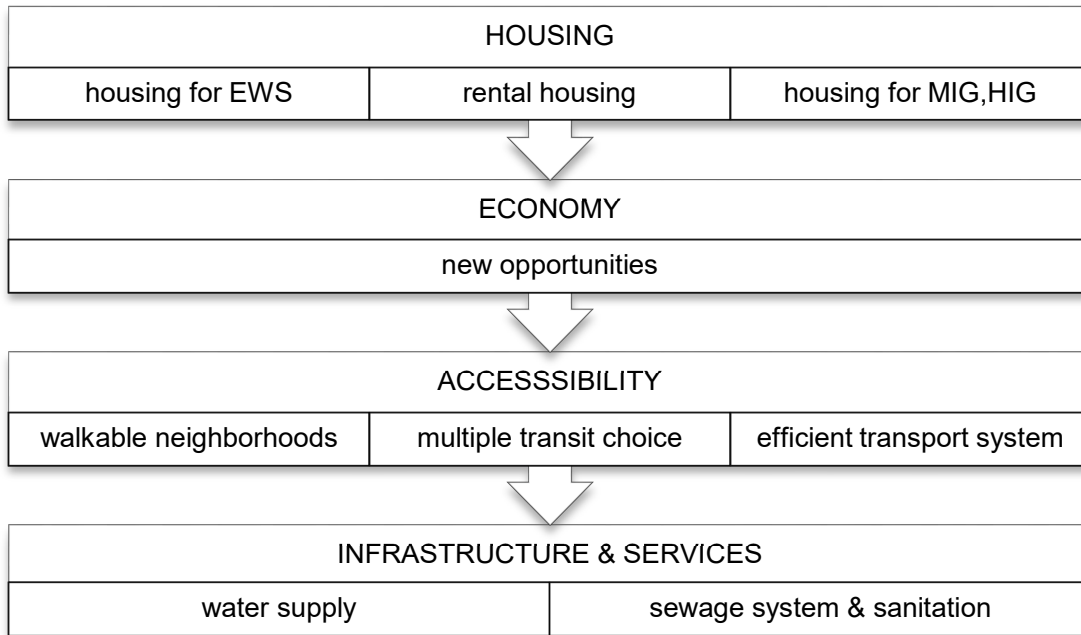
Land in cities is a valuable resource. Building and construction is an endless activity in metropolitan cities, creating urgency to acquire land. This has serious consequences for the environment and food security as large tracts of productive agricultural land in the peripheries is undertaken for urban development.

Unprecedented population pressures and demands of society on scarce land for urban development are exacerbating conflicts over access and rights to land and increasing competition between agriculture and other sectors. Globally the expansion of human settlements and infrastructure, intensification of agriculture, and expansion of development into fragile eco- systems emphasizes the need for integrated planning and management of land resource. our main challenge is to develop and promote sustainable and productive land use systems, providing a basis for negotiation, participatory decision- making and conflict resolution among stakeholders, as well as providing an enabling political ,social and economic environment.

2.2 LAND DEVELOPMENT

Land development is needed to provide housing to accommodate the ever-increasing population. supplementary to housing, commercial activities need to be developed for economy generation. Good transport system is needed to improve mobility of communities. In order to support the housing and economy, infrastructure and services needs to be in place. And thus, land development tools and mechanisms need to be efficiently formulated and effectively implemented to enhance the quality of life, check environmental

degradation, and improve walkability, availability of multiple transit choice. All these factors are but the indicators of sustainable development.



URBAN DEVELOPMENT-

Any urban area can be broadly classified into- urban old core & newly developed areas

OLD CORE DEVELOPMENT

Urban renewal & rebuilding process:

It is the process in which the public efforts are aimed at revitalizing decaying urban old core. It includes massive demolition, slum clearance and rehabilitation leading to destruction of vibrant neighbourhoods. Land redevelopment is carried out in areas of moderate to high density.

Capital projects like parks, streetscape improvement, community centres which would not happen on their own.

NEW DEVELOPMENT

New development comprises of the fringe areas added to the existing boundary.

2.4 LITERATURE

2.4.1 SUSTAINABLE LAND DEVELOPMENT

Focus on built form and allied activities

- Mix land use
- Quality of life
- Affordable housing
- Urban core revitalisation
- Transportation

2.4.2 LAND DEVELOPMENT TOOLS AND MECHANISMS

Sustainable Urban transformation is needed to absorb the need of changing growth as well as land use pattern. The key to this transformation lies in land development. The key players in this development process are the land owners, land developers and the local authorities. Thus, all the various below mentioned land management tools were devised to accommodate the behavioural aspect of the land owners. Ownership constraints govern the land market which in turn affects the development planning or redevelopment projects.

LAND DEVELOPEMNT MECHANISMS

LAND DEVELOPMENT MECHANISM	COUNTRIES/ CITIES
Land pooling / readjustment/ consolidation/ assembly	
Land banking	
Land acquisition	India
Land ceiling act	India
Land tenure ship	
TDR/ FSI/ FAR	USA, India
Town planning schemes	India
Haryana model	India
DDA model	India
CIDCO MODEL	India

3.0 STUDY AREA

3.1 PUNE

3.1.1. INTRODUCTION

PUNE is the second largest city in the state of Maharashtra in western India. It is the administrative capital of Pune district and the eighth most populous metropolitan area in India. It is called as the “Oxford of the East” due to the presence of a large number of Educational Institutions. The city is fast emerging as IT destination. The city shelters several Industrial Parks within its Industrial Belt, among which outstand Ranjangaon, Chakan, Pimpri Chinchwad, Hinjewadi, Pirangut, Hadapsar and Talegaon. These Parks have attracted a substantial number of industrial companies, both local and international.



3.1.2. REGIONAL SETTINGS

Pune is the capital town of Pune district. It is located at 18° 31' 22.45" North 73° 52' 32.69" East near the western margin of the Deccan Plateau. Pune lies on the leeward side of the Sahyadri ranges and Western Ghats, 560 m (1837 ft) above the sea level, at the confluence of Mula and Mutha rivers, which are tributaries of the Bhima. It is located roughly 120 kilometres east of Mumbai.

3.1.3. CONNECTIVITY

ROADWAYS- Pune is connected to Mumbai, Nasik and Solapur by National Highways i.e. NH-4, NH-50 and NH-9 respectively. State Highways connecting Pune to different parts of Maharashtra are Ahmednagar, Saswad, Satara, Poud Road, Pashan Road, Ganeshkhind Road and Alandi.

RAILWAYS- Broad gauge railway lines connect it to Mumbai, Solapur and Miraj.

3.1.4. CLIMATE

Pune experiences three distinct seasons: summer, monsoon and winter. The maximum temperature ranges between 35 to 39°C , while the minimum temperature ranges between 5 or 6°C .

Pune receives moderate rainfall. The city receives an annual rainfall of 722 mm, mainly between June and September as the result of southwest monsoon. However, the weather is very pleasant in the city with temperature ranging from 20 to 28°C (68 to 82°F).

3.1.5. TRANSFORMATION

PHYSICAL

Pune's origins can be traced to the 8th century A.D. The city has grown from 2 sq km in 1821 to 243.95 sq km today on the southern banks of the river Mutha at its confluence with river Mula. The city has experienced an area growth of 700% between 1951 and 1991 and its population is growing at a rate of 40% decadal. Pune became a municipal corporation in 1950. The areas within the municipal limits, increased from 44-139 km, putting tremendous pressure on the civic body to provide amenities and services well beyond the resources to the new corporation.

URBAN FABRIC

Pune has a history of about 400 years. It was ruled by Marathas, Mughals, Peshwas and Britishers in the course of evolution. Each regime altered the physical character of the city. A unique urban fabric has emerged as a result of over lapping of socio-cultural and architectural layers developed through each period to become the identity of the city. This unique characteristic is concentrated in the old core and has started showing signs of physical, social and environmental degeneration.

Indiscriminate demolition of buildings and unregulated construction activity on one hand and old dilapidated structures on the other hand is leading to loss of the historic character of Pune.

ZONE	AREAS	REMARK
Central old city	Peths, Laxmi road, Bajirao road, Tilak Road, Saras Baug	<ul style="list-style-type: none"> ▪ congested areas ▪ little scope for new development ▪ redevelopment
Eastern Zone	Wanowrie, Camp, Hadapsar, Koregaon Park, Kalyani Nagar, Viman nagar	<ul style="list-style-type: none"> ▪ Well developed ▪ Still developing with fast pace to cater to the educated cosmopolitan class of the society
Southern Zone	Dhankavadi, Katraj, Ambegaon-Narhe, Dhayari, Kondhwa, Mohammadwadi, Sinhgadh Road etc.	<ul style="list-style-type: none"> ▪ Before 5 years, considered as backward area ▪ various large scale upcoming residential and commercial projects ▪ Scope for further development
Western Zone	Kothrud, Erandawne, Warje, Bavdhan, Pashan, Aundh, Balewadi, Hinjewadi, Wakad	<ul style="list-style-type: none"> ▪ Most vibrant zone for recent residential and commercial development ▪ Rich and preferable locations ▪ Newly developed IT parks at Hinjewadi are the magnets developers
Northern zone		

3.1.6. PRESENT CITY STRUCTURE

CITY OF PETHS

Peths (smaller residential zones) are the unique feature of Pune city. The city of peths derived its structure from it being occupied by distinct social and ethnic groups and not clearly differentiated landuse. As migrants, traders, shopkeepers, bankers etc. were enticed to come in and settle, the spaces were allotted for shops, houses and workshops. Soon temples, shrines, bazars, gardens, ward offices police posts would appear and thus the locality would grow. Lanes and by- lanes were created from leftover spaces between houses. Water supply was ensured by provision of wells or connecting up the peth to the city's elaborate aqueduct system. Hindus who were the first to settle in Pune occupied the central wards like Kasba, Shanwar, Budhwar which developed first while the Muslims who came afterwards could not find access to the old wards and had to reside in the new eastern wards.

By the 18th century, the peths were specialized in certain functions. Peths were almost self-sufficient units of administration. Each peth had a number of wadas (mansions) of the rich and some even had surrounding walls like Rasta Wada. There were weekly as well as permanent markets, gardens, orchards and a number of temples. Wells supplied water needs and there were four drinking water systems. Highly efficient, these were a system of aqueducts bringing potable water from as far away as Katraj and Kondhwa to the heart of the city for the public and water was collected in a system of *howds* or tanks. The river supplied the rest of what was needed. Some street fronts were an unbroken façade of beautiful *wadas* with their ornate windows and carved brackets, balconies and beams. Some of these streets had the smaller courtyard type houses with the ground floor used as shops, offices or workshops, while the owners lived on the storeys above. The scale was low, often not more than two storeys.

The government *wadas* (mainly used as offices, record stores) were large and there was at least one in each peth. There were also stables for elephants and horses and the artillery factory (Shukrawar Peth). Lanes were narrow except in some newer peths like Rasta Peth.

There were no grand vistas or procession ways. The only grand public space was the front of the Shaniwar Wada and the surroundings of Parvati Hill with its man-made lake and garden at its foot, and the complex of temples on top. The large middle belt of peths consisting of Rawiwar, Ganj, Ganesh and Shukrawar as well as Nana and Bhavani were predominantly commercial, with a mixed population though always with a considerable residential component. The bankers, moneylenders, jewellers and the hardware shops at Bohri Ali in Rawiwar, the grain and the timber trade at Nana and Bhavani, the main vegetable market (Mandai) at Shukrawar and the varied shops that stocked the articles of the European at Sardar Bazaar, this sector was quite a commercial district or market place

3.1.7. CIVIC ADMINISTRATIVE STRUCTURE OF PUNE:

Pune Development Authority or The Ministry of Urban Development Pune has four counterparts that look after Pune Development or development of Pune Metropolitan Area and lay the basics for Pune Development Plan. These include:

- Public Works Department
- **Pune Municipal Corporation**
- Pimpri - Chinchwad Municipal Corporation
- Pune Cantonment Board

- Dehu Road Cantonment Board
- Khadki Cantonment Board

ADMINISTRATIVE AND ELECTORAL WARDS-

PMC show the presence of 14 administrative and 48 electoral wards within its limits.

ZONES: PMC jurisdiction has been divided into four major zones viz. A, B, C and D, according to the congestion level of the area for the ease of DCR applications for various zones as per their densities

WARD NAME	AREA (sq.km)	POPULATION	DENSITY(PPHa)
Aundh	44.63	1,79,886	40
Yerawada	30.75	1,54,425	50
Hadapsar	28.01	2,05,009	73
Warje Karvenagar	12.04	1,16,985	97
Sangamwadi	21.72	2,13,718	98
Bibvewadi	22.43	2,39,532	107
Tilak Road	18.14	2,11,103	116
Dhole Patil Road	8.48	1,00,059	118
Ghole Road	12.78	2,01,527	158
Sahakarnagar	9.92	1,61,665	163
Karve Road	10.05	2,04,316	203
Vishrambaug Wada	3.61	2,51,100	696
Kasba Peth	2.8	2,39,370	855
Bhavani Peth	2.32	2,18,306	941
Total	227.68	26,97,001	118



WARDWISE DENSITIES:

Range of ward wise population densities have been grouped under three titles viz. High, Medium and Low density. The minimum average density is 71 PPHa, medium is 144 PPHa and maximum is 830 PPHa. Density decreases as one move from centre of the city towards the periphery.

3.1.8. ECONOMY-

Pune is 7th ranked city in India based on economic survey. Pune is hometown to many automobile, electronic, IT, biotechnology and large and small-scale units and companies. Pune is one of the fastest growing industrial areas. The significant migration of foreign students and IT professionals has led to boost of several sectors like hospitality, hotels and real estate.

3.1.9. LAND USE-

The central part of the city is predominantly residential. Very less green areas are visible in this part of the city. The growth of the city is towards mainly south and west.

Educational institution areas are mainly around Vetal hill. The industrial areas are mainly in the eastern part of the corporation area. The residential area has grown over the last decade from 33% to 43% and doubled in terms of actual area. The ratio of forest area to city area remains the same over the decade as in the area added Panchgaon Forest and forest area in Warje get added. Though the area of agriculture has remained the same its

percentage to the total landuse has decreased. All other landuse areas have been added more or less in the same proportion as was in the 1987 DP.

Table 3.1. DP Land Use Distribution & comparison with UDPFI standards, PMC

LAND USE CATEGORY	1987 DP		1997 DP		DIFFERENCES		UDPFI Standards	Deviation (%)
	Area (Sq.km.)	%	Area (Sq.km.)	%	ADDED AREA (Sq.km.)	%		
RESIDENTIAL	50.58	33	103.74	43	53.2	59	35	8
INDUSTRIAL	7.26	5	9.88	4	2.6	3	12	-8
COMMERCIAL	2.35	2	3.93	2	1.6	2	4	-2
TRANSPORT	22	14	31.81	13	9.8	11	15	-2
PUBLIC AND SEMIPUBLIC	15.22	10	16.67	7	1.5	2	12	-5
PUBLIC UTILITIES	1.38	1	1.38	1	0.0	0	2	-1
RECREATIONAL	12.73	8	20.52	8	7.8	9	20	-12
FORESTS	7.53	5	13.82	6	6.3	7	NA	NA
AGRICULTURAL	15.23	10	15.23	6	0.0	0	NA	NA
HILLS	7.65	5	12.45	5	4.8	5	NA	NA
WATER BODIES	12.04	8	14.52	6	2.5	3	NA	NA
TOTAL	153.97	100	243.95	100	90.0	100	100	

3.1.10. DEMOGRAPHY-

In the last 50 years, the city's population has grown 5 times. Since last 4 decades the city's population is consistently growing by about 3.64% annual growth rate against the state average of about 3.33%.

Pleasant climate, presence of reputed educational institutes, proximity to Mumbai which is the capital of the state, upcoming of IT sector has been some of the influential factors which attract migrants to this city. It is estimated that about 48% increase in population is due to migration.

Other demographic indicators:

Total population According to 2001 census expected by 2011	3.8 million
Household size as per 2001 census	4.57
Total number of household	555771
Dependent population	32%
Working age group	61%
Sex ratio	916
Literacy rate	77%

3.1.11 TRAFFIC AND TRANSPORTATION

Traffic planning and transportation systems in Pune city involves- Municipal Corporation, NHAI, PWD, State Highways, Indian Railways, Interstate bus operators, PMT, private bus operators

The road infrastructure has not expanded in tandem with the increase in the number of vehicles in the city. In the last four decades, the population of the city has increased four times whereas the vehicle population has increased 87 times and the road length has increased by only five times. With the projections indicating that PMC would have a population of about 45 lakhs by 2021 and 57 lakhs by 2031, the road and transportation infrastructure has to not only meet the existing demand but also cater to the demand that will be generated by the increasing population.

3.1.12 PUNE DEVELOPMENT PLAN

Pune Municipal Corporation was established in the year 1950 under the BPMC Act 1949. In 1952 the municipal corporation prepared the master plan for corporation area. Government resolution-Local Self Government and Public Health Department No-PCR/3156 dated 18-1-58 have accorded the sanction to the building bye-laws. These bye laws have been published in Official Gazette dated 22-5-58 and made applicable to corporation area. These bye-laws cover different development control rules for different areas.

1. General bye –laws of corporation areas excepting town planning scheme area
2. Bye-laws for different town planning schemes
3. Separate bye-laws for Wilson Garden scheme Development scheme.
4. Separate bye-laws for Parvati Area, Laxmi Road Area.
5. Separate bye-laws for Koregoan Park Area
6. Bye-laws for Mutha River Control Area
7. Bye-laws for Hadapsar Industrial Estate

With a view to stream line the Bye-Laws and Development control rules, the set of standardized development control rules framed by the Building Bye Laws Committee appointed by the Govt has been recommended with certain modifications as may be necessary to suit the condition prevailing in

Pune by the Technical group and Advisory committee for adoption in the corporation area by restoring to actions u/s 37 of MRTP act 1966.

Pune Municipal Corporation adopted standardized Buildings Bye-Laws for corporation area by suspending earlier bye-laws. These bye-laws came into force from 1982. Thereafter revised Development Plan for Pune Municipal Corporation Area was sanctioned in 1987. The standardized buildings bye-laws were made applicable with certain modification while sanctioning the development plan. Then these bye-laws modified in light of provision of Transfer of Development Rights (TDR), Accommodation of reservations etc, and modified DCRs were made applicable from 1997. Now these DCRs are in operation.

New set of DCRs have been published for newly added 23 villages in the outskirts, from the year 2002. As the development plan 2007-27 is in process, there should be an entirely new, modified, set of DCRs which will guide the further growth of the city.

3.2 ISSUES

- Over congestion and overcrowding in core
- Allotment of FSI 4 along Pune metro corridor
- Concentration of commercial activities in core
- Need for decentralization
- Need for provision of huge housing stock for EWS and immigrants

3.3 FIELD WORK

A survey of about 100 households is done by random sampling method. The samples were selected according to the densities from each ward.

3.3.1 METHODOLOGY:

Primary data		
Household survey	Travel pattern Neighbourhood perception Availability of infrastructure and services	Quality of life in neighborhood Preferred areas for growth
Stake holder preferences-developers/ architects	Preferred areas for growth Reasons Cost of construction Cost of land	Growth trends
Secondary data		
PMC	Land use Cost of infrastructure Administrative cost	Costing and estimation

5.0 RESULTS & DISCUSSIONS / RECOMMENDATIONS

Mixed-Use Development purposefully combines residential, commercial, and public uses together in one development, creating a more walk able community. Walk able communities imply less dependence on vehicles, thereby preserving the environment. Inter-regional dispersal of industries and commercial activities help to reduce immigration. This is important because most of the issues regarding development are due to heavy influx of people moving to the cities. Decentralised pattern of growth would be cost effective in terms of investment requirement for infrastructure. Urban growth necessarily should be confined to well define areas based on desirable densities and population distribution. Infill Development uses vacant or underdeveloped land in existing communities for redevelopment, thereby minimizing the need for construction in currently undeveloped areas.

Transport is a major issue in unplanned cities which grew organic manner. One of the solutions to tackle traffic congestion is pedestrianisation. Pedestrianisation proves to be effective in urban cores, areas with narrow roads, where scope for road widening is nil. Land acquisition is required for road widening but the land owners are reluctant to give up their land. To keep the land owners' interest, incentives like granting TDR, or raising the FSI is a good option. But as seen in the case of upcoming Pune metro project, the rise in FSI from 1 to 4 is bound to spoil the urban form along its length.

The second most viable solution, in newly developing areas, for roads and transportation is the Town planning schemes. The roads are designed according to their hierarchy considering the density and flow of traffic to the area. Here, since the land is redistributed to the owners equitably, this eliminates the hassles of land acquisition.

FSI artificially caps supply, increases the cost of commerce and housing and pushes development further out causing the city and infrastructure to expand spatially, creates large scale environmental problems, and increases the commuting distances and isolates the poor from areas of employment. It do not respond to the existing urban fabric.

Density metrics should always be a range and not a specific number so that it helps achieve the desired density.

The FSI based regulatory framework has failed to produce results throughout the world. In the US, a few urbanists from varied backgrounds and locations have developed Form-Based Coding (FBC) adopted in Miami, Denver, etc. FBCs produce predictable results and high-quality streets and parks by using physical form as the organizing principle. Rather than abstract mathematical calculations, the FBC creates few and specific standards important to deliver the desired vision for a place.

- Cluster Development permits houses on smaller lots and retains the saved space for shared open space and community purposes.
- Creation of land banks by the public agencies for utilization for future requirements for EWS housing, infrastructure projects and service plots.
- Urban villages need to have different set of norms/DCR to avoid congestion, haphazardous growth.
- EWS slum
- Indiscriminate use of higher FSI ruin the character of the city
- Low FSI + TDR in other parts of city+ set of DC rules
- Rent control act- rental housing in order to cater the needs of immigrants
- Flexibility in DCR

- How many DU required?- FAR bar should depend on plot size in order to accommodate desired density

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