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MIXED USED DEVELOPMENT IN URBAN AREAS

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ABSTRACT

Urban areas are becoming increasingly important in a world of rapidly growing populations and increasing pressures on natural resources. Several key problems exist about the development and management of urban areas, many associated with their increasing size. These include congestion, environmental degradation, loss of open space, pollution and overcrowding which results in urban slums and uncontrolled development.

Mixed-use planning is used to recall inner-city developments that integrate land uses and urban design to produce a place where people can work, shop and live. The principal aim of mixed-use development is generally to strengthen the link between public investment in community infrastructure and private investment in housing, shops and businesses. The concept came into existence during the post-war period, as part of an attempt to improve social interactions that play an important role in increasing social welfare and quality of life.

KEYWORDS

The mixed-use development, urban areas, social interactions, and quality of life.

INTRODUCTION

Million people lived within the city walls around the 7th and 8th centuries, living and shopping near their work (Wright 1967). Most people walked everywhere in the ancient city. Uses were distributed widely. Small shops, workshops, homes, and places of worship intermingled throughout the urban fabric.

From the early days of the modern town planning movement, mixed-use became part of the philosophy of town planning. Ebenezer Howard's (1902) garden city movement advocated complete new towns that would be reasonably self-contained, and modest in size. The concept provided well-planned areas for each kind of use, linked by transportation systems that facilitated mobility. Another mandate of the garden city idea, of course, was to generate safe and comfortable residential areas. Homes were located away from industry through a carefully patterned coarse-grain mix.

Then, the garden city generated a loose mix necessitated by the externalities of industrial production and enabled by the new 3 transportation technologies. In practice, however, few self-contained garden cities were built. Elements of the garden city model instead became principles employed for generating residential suburbs whose primary purpose was to protect the family from the risks of the city.

Facilitated by public transportation systems, and later by private automobiles that made longer-distance commuting possible, developers found new niches for building residential suburbs around the turn of the 19th to 20th century. Zoning, widely adopted in the 1920s and 1930s, entrenched the idea of separated uses throughout North America.

Through the early 20th century, the expansion of large-scale retail and large-scale office uses in city centres often forced alternative uses out because they drove up land values. Thus a combination of technologies (e.g., street cars, elevators) and cultural behaviour (e.g., rising middle class looking for privacy) enabled and supported separating land uses.

AIM

- To investigate ways to improve the development of mixed-use and its impact on urban development.
- To examine one principle of mixed-use development. How mixed use came to be seen as key to good urban form, discuss the barriers to implementing it.
- To this end, we take a brief look at the introduction, history and benefits, components and design strategies for mixed-use typology, so we can practice this type of architecture and urban development considered successful strategy.

OBJECTIVE

- To study the history, concept of mixed-use typology, and characteristics of mixed-used development.
- To study requirements & and design strategies for mix-used development.

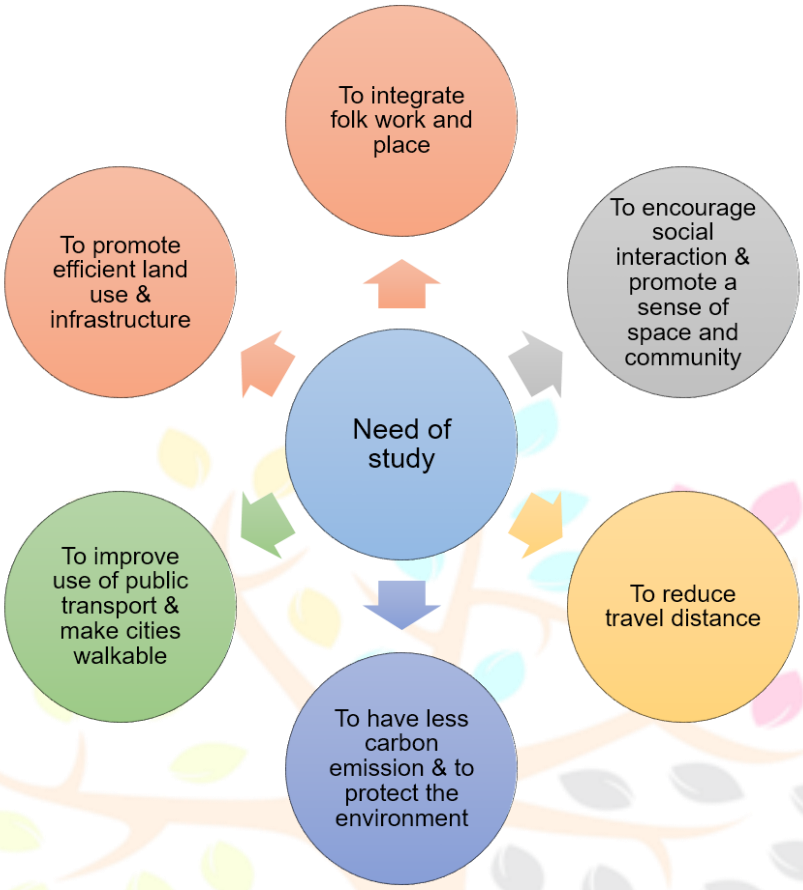
SCOPE

- To study the importance of mixed-use development economically, socially, and environmentally — and why it's crucial for cities to adopt this model going forward.
- To study the design strategies which is important while designing the multi-used design which includes – zoning, circulation, design, setbacks, the relationship between building, pedestrian access & and connectivity, etc.

LIMITATIONS

- The study only focuses on the introduction of multiuse development its typologies, advantages & importance.
- Take a brief look at design strategies including – multi-used areas typology, zoning, the relationship between buildings, pedestrian access & and connectivity, etc.

NEED OF STUDY



EVERYDAY NEEDS SHOULD BE CLOSE ENOUGH TO RESIDENTIAL NEIGHBORHOODS THAT THEY CAN BE REACHED BY WALKING BICYCLING OR PUBLIC TRANCPORT.

HUMAN SCALE NAIGHBHORHOODS ENCOURAGE DIFFERENT ACTIVITIES AND SOCIAL INTERACTION, RECREATING THE STREETS AND SIDE WALKS & VIABLE PUBLIC SPACE

WHAT IS MIXED USE?

Mixed-use development refers to a type of urban planning that combines multiple developments in close. The idea behind this type of planning is to create a liveable city where all residents can enjoy the benefits of living in an urban area without having to sacrifice their privacy, safety, or quality of life. As time goes on, more and more people are realizing how important it is to have these types of developments around them so they can live comfortably while still being able to work and go shopping without having to travel too far away from home.

Mixed-use developments are becoming more popular than ever before because they allow residents and businesses alike to enjoy the benefits of being part of something larger than themselves — the community itself. These developments can be thought of as "mini towns" where people from all walks of life can come together at all hours of the day or night without disturbing one another's daily routine (or their peace). It has been utilized as a popular method for community revitalization, helping to increase density which helps grow communities with limited land space or empty city centres and create a vibrant space for people to enjoy

Additionally, the developments provide benefits to the environment, retailers, residents, and municipalities. Increasing the walkability of an area can reduce commuting distance and auto mode share *(Lee, 2020)* and thus reduce pollution. Offices and retailers within a mixed-use development become immersed in potential customers from the diverse residents and other businesses *(Chinburg Properties, n.d; slowly, 2016)*. Because amenities are closer to home, mixed-use developments promote walking, which provides health benefits for residents *(University of Delaware De)*. Further, it is estimated that nearly 33% of people would prefer to live in a diverse, walkable community *(Slowly, 2016)*.

DIFFERENT DEFINITIONS

Mixed-use development means a building, or buildings, in which two or more uses are carried out" City of Sydney (CoS, 2005 page 50)

"A single building or site accommodating three or more uses such as residential, hotel, commercial, industrial, entertainment, education, medical or recreation" Property Council of Australia (McDonald, 2008)

"Provision of a mix of complementary uses, such as residential, community and leisure uses, on a site or within a particular area" Planning Portal UK (Planning Portal, 2009)

"Mixed-use development means a building or place comprising two or more different land uses" Parramatta City Council (PCC, 2009 page 97)

"The provision for non-residential activities in residential premises" (MPD-2021).

Mixed-use development is the practice of allowing more than one type of use in a building or set of buildings. Such that there are several different, but compatible and interdependent land uses located on the same or adjacent lots for mutual benefit.

In planning terms, this can mean some combination of residential, commercial, industrial, office, institutional, or other land uses. This tends to create shorter distance work, residence, and recreation and goes a long way to enhance the livelihood of the inhabitants. The Mixed land use concept in today's time is oriented towards the integration of commercial and residential land uses on a scale that is: - **Smaller, Pedestrian friendly, Linked to transit**

Mixed land use enables a range of land uses including residential, commercial, cultural, institutional, and where appropriate, industrial uses, to be co-located in an integrated way that supports sustainable forms of transport such as public transport, walking and cycling, and increases neighbourhood amenity.

THE BASIC CONCEPT OF MIXED-USE DEVELOPMENT

- Seek to create pedestrian-friendly environments with a variety of uses that enable people to live, work, play, and shop in one place.
- Include several different uses that work together and share infrastructure, utilities, and public amenities.
- Typically higher in density than a single-use development.

Types of mixed-use developments:

Vertical Use Buildings

Combo of different users within the same building o generally the lower floor would be utilized by a commercial user with residential use located above.

Horizontal Mixed Use

In one mixed area, there are several building blocks with different functions. Each building has a single function (both public and private functions). Buildings with public functions and private functions are integrated into one mixed area.

Mixed-Use Walkable Areas

- Combines vertical and horizontal Mixed Areas in one area, with an average reach distance to

the activity centre of about 10 minutes on foot.

- This type combines vertical and horizontal forms of development in one area.
- Ideally a ten-minute walk. As much as 25% of the site area is a vertical mixed-use building.

THE EVOLUTION OF MIXED-USE DEVELOPMENT (HISTORY)

The concept of mixed-use is one of the oldest in human history from the ancient towns of Greece, China, and India to the present mix of land uses that continue today in major cities of London, Tokyo, Paris & and Beijing. All the old cities in the world which have developed organically, exhibit a mix of land uses (Irrespective of their scale).

The medieval cities in the West usually developed inside the fortified areas for defence purposes and had multiple uses of spaces, which were an integrated fabric to a human scale. The medieval towns (e.g. Thanjavur) in India which were planned based on caste & and occupation, also consisted of self-sufficient neighbourhoods. Thus, land uses were typically mixed throughout history until the emergence of the “Industrial City” where the modern planned cities variegated different land uses, i.e., residential, commercial, and industrial were created. Mixed-use was side-lined and segregated land use became popular during the first half of the 20th century.

The medieval village is a perfect example of a functional, productive, community, incorporating all of the rules of mixed-use development. Mixed-use development has evolved over time and in each era it has been either, a natural, an undesirable, or a preferred occurrence depending on the external trends of the time. Mixed-use has had many faces and as such has been treated differently through the ages by each respective urban authority.

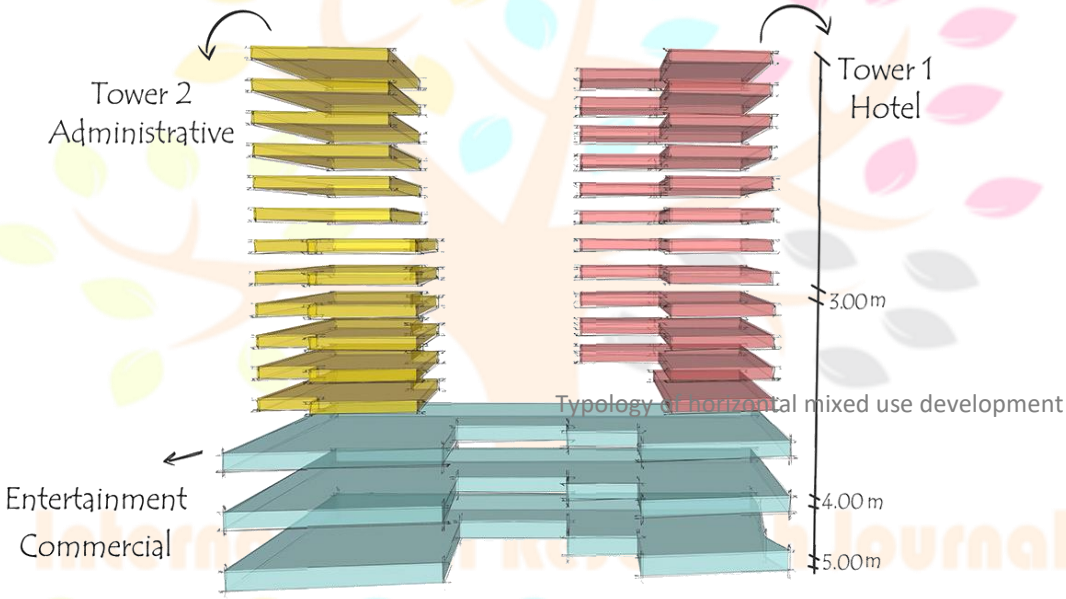
Market of Thanjavur (chola dynasty)

TYPOLOGY AND CHARACTERISTICS OF MIXED AREAS

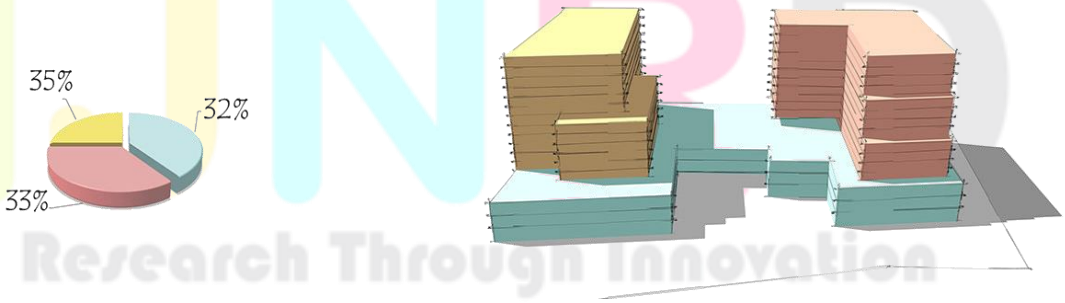
Vertical mixed-use development

This type combines several different spatial functions in one building. The ground floor is generally used for public zones (public facilities) such as commerce, restaurants and services. The top floor of the building is for private zones such as residential, hotel and office spaces which are more private. Usually, its use is in the form of a mix of commercial (retail, restaurant, and office) and residential (condos and apartments) activities. This vertical development is an efficient form because it can accommodate a high population density and the need for facilities and infrastructure.

Horizontal Mixed-Use Development



Typology of horizontal mixed use development



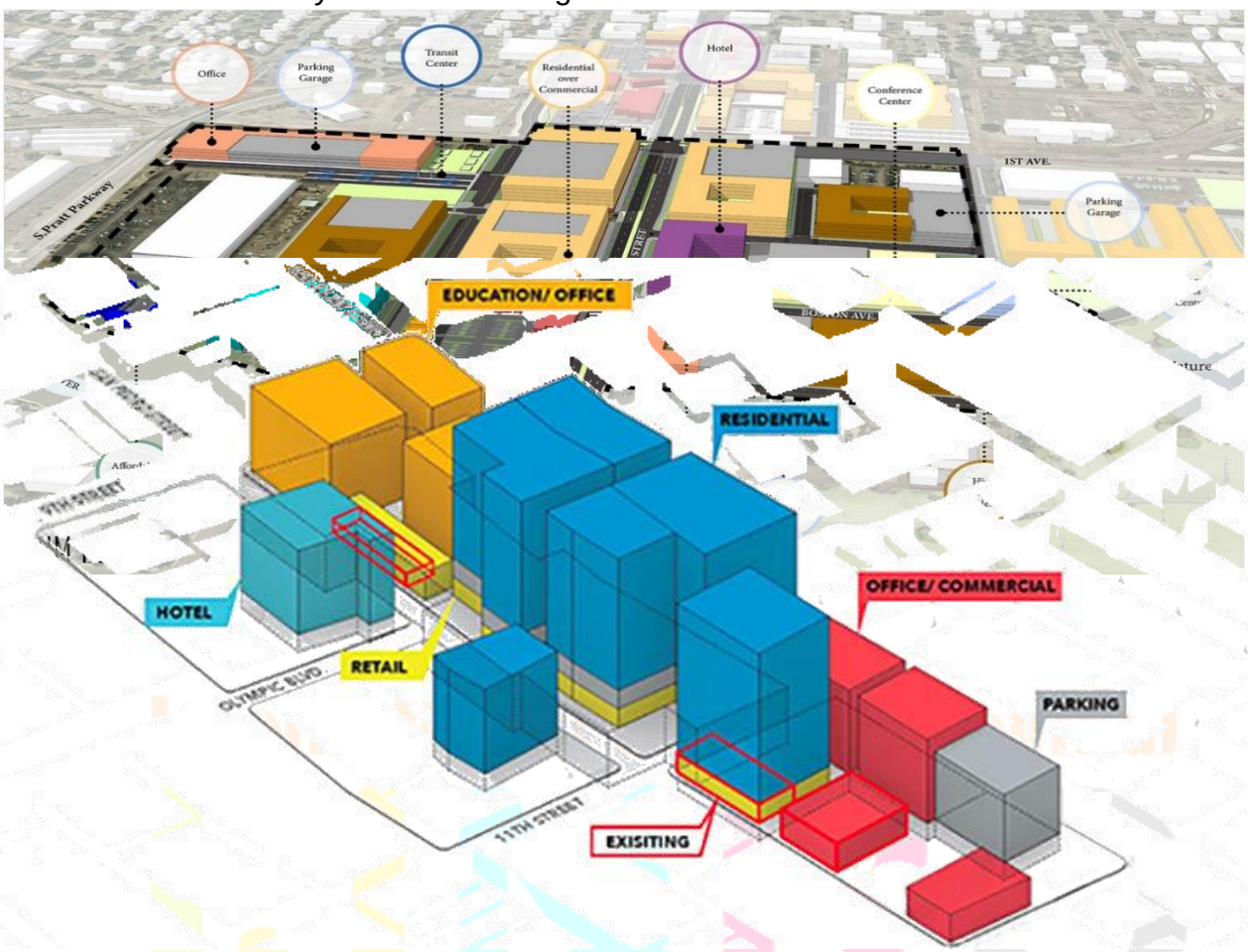
Typology of vertical mixed use development

In one mixed area, there are several building blocks with different functions. Each building has a single function (both public and private functions). Buildings with public functions and private functions are integrated into one mixed area.

This type combines buildings with different functions in one construction site. This horizontal strategy is especially useful in locations where the e building height is sensitive, as it allows denser occupancy and concentration of activities without the need for tall buildings. Conditions that need to be

considered for developments of this type consisting of residential, commercial and office areas include: -

- The location must have the right size and shape to accommodate all elements of the development.
- Easy access from and to the location and parking area, access to other modes of transportation other than a car.
- Comfortable and attractive for pedestrians to use, with good access and connectivity with surrounding land uses.



Typology of walkable mixed use development

- Has high visibility, Attractive and clear internal visualization.
- Appropriate topography and attractive landscape and streetscape

Mixed land use development with this type must balance activities during the day and night. So that its utilization can be optimal throughout the day and

Mixed-Use Walkable Area

Combines vertical and horizontal Mixed Areas in one area, with an average reach distance to the activity centre of about 10 minutes on foot. This type combines vertical and horizontal forms of

development in one area. Ideally a ten-minute walk. As much as 25% of the site area is a vertical mixed-use building. This type is highly oriented towards pedestrians, therefore in its development, the things that need to be considered include the streetscape, the scale and orientation of buildings, the type of mix and distribution of land use and the availability of open space.

It is especially important to encourage walking, with places to live, work, retail, entertainment and services within walking distance, reducing the number of daily trips. The goal is for those who live and work in the area to be able to walk from home to work, shopping, entertainment, and other services, while those who are visiting can park once and then walk to all of their destinations. Things that need to be considered in the development of this building include having pedestrian space on the ground floor, and the availability of a parking area that can serve the needs of residents and visitors to commercial facilities.

PRINCIPLES OF MIXED-USE DEVELOPMENT

Some of the principles that form the basis of mixed-area development are found in several kinds of literature, including - Commercial and Mixed-Use Development, building land use & and zoning. etc. as follows:-

Compact Development:-

Public spaces are developed in such a way as to shorten trips, and reduce dependence on motorized vehicles, the level of land consumption, energy use, and reduce air pollution

Accessibility:-

Accessibility for Pedestrians, Safety and Comfort (Pedestrian Access, Safety and Comfort). Building an internal circulation system in the area so that pedestrians feel safe, easy and comfortable.

Street connection:-

Externally, the mixed area is connected by a network of roads serving various modes of transportation. Internally, there is a road network system within the area that connects residential areas, shopping areas, public facilities/ facilities, and other functions that are close to each other.

Security:-

Crime Prevention and Security by implementing planning and design solutions to improve public safety. This is important considering that increasing the density (crowding) of a city will lead to crimes such as vandalism, theft, and other social problems.

Creating and Protecting Public Spaces:-

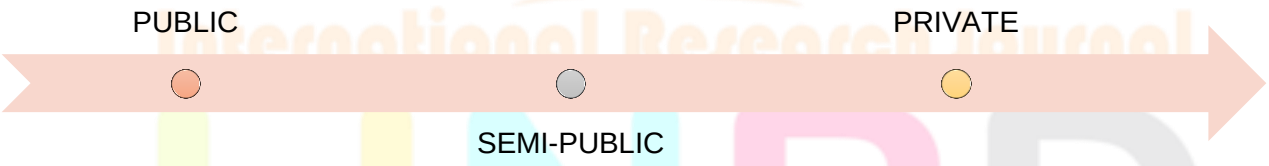
Build, maintain and enhance public spaces, such as sidewalks, plazas, parks, public buildings and gathering places, to facilitate informal meetings and social interaction within the community.

The development of this aspect includes: -

- Territoriality (region)
- Supervision
- Access
- Control
- Support activities
- Maintenance

Efficient Land Use:-

Design and manage parking areas efficiently. The application of mixed-use will limit parking, especially in areas where activities are very congested. Provide proper circulation in parking areas to avoid traffic, and segregated areas according to privacy Level



Building Design:-

(Human Scaled Building Design). Designing buildings that are aesthetically appealing, comfortable for pedestrians, and compatible with other land uses. Key elements to consider are building size, architectural continuity between horizontal and vertical buildings, roof shapes, window and door rhythms, and the relationship between buildings and public spaces such as streets, plazas, other open spaces, and parking.

Ideal location:-

Search locations according to building types ex: - For commercial multiuse buildings search favourable locations that increase sales & and attract users. For the convention program search for favourable locations near the transportation facilities, adjacent to the developed zone for easy

transportation.

ADVANTAGES OF MIXED-USE DEVELOPMENT

- Greater housing variety and density, more affordable housing (smaller units), and lifecycle housing (LIG, MIG, HIG).
- Creation of an economically efficient blend compatible with Land use.
- Land May be utilized efficiently & and optimally, with more compact development, and land-use synergy (e.g. residents provide customers for retail which provides amenities for residents).
- Stronger neighbourhood character, sense of place, walkable, bike-able neighbourhoods, and increased accessibility via transit, both resulting in reduced transportation costs.
- Convenience in Business, nearness of residence low operating cost.
- Creates a Suitable Environment for Small Investments that does not easily find a place in specialized zones.
- Reduce travel Distances and time between housing, workplaces, retail businesses, and other amenities and destinations.
- Provides earning opportunities to Female members, old people and others.
- Reduction in Crime (UK studies show Reduction in Crime rate).
- Can Use obsolete property including Listed Buildings.
- Better access to fresh, healthy foods (as food retail and farmers' markets can be accessed on foot/bike or by transit).

DISADVANTAGES OF MIXED-USE DEVELOPMENT

- Mixed type of traffic resulting in traffic congestion.
- Spilling of activities on the roads causing congestion
- Environmental pollution & noise pollution.
- Very high density sometimes leading to a slum-like condition
- If designated parking spaces are not provided for non-residential uses customers or visitors tend to park the Vehicles on the streets hence taking away a good amount of portion of the carriageway.
- When non-residential uses operate from residential premises they tend to pay the taxes under the residential slab thus causing huge losses to the local governments.
- Neighbourhoods tend to lose the residential character when other uses begin to dominate.
- Variety of uses increases the pressure on the infrastructure like water, sewerage etc.
- Mixed-use commercial space is often seen as being best suited for retail and small offices. This precludes its widespread adoption by large corporations and government facilities.
- Construction costs for mixed-use development currently exceed those for similarly sized, single-use buildings; challenges include fire separations, sound attenuation, ventilation, and egress.
- Additional costs arise from meeting the design needs. In some designs, the large, high-ceilinged, column-less low floor for commercial uses may not be entirely compatible with the smaller scale of the walled residential space above.

MIXED-USE AND SMART GROWTH

Smart growth was originally an initiative principally of higher levels of government, especially states and provinces. More recently, cities and regions have also signed on to promote smart growth. Higher levels of government generally looked to incentives to push smart growth: for example, they offered loans, tax relief, rapid approvals, or other ways to facilitate preferred options. Mixed-use constitutes a central principle of smart growth, along with compact form, walkable neighbourhoods, transportation choices, housing choices, sense of place, open space protection, and community collaboration *(Smart Growth Network 2004)*

Smart growth advocates mixed-use to generate economic and social diversity. Mixing can enhance

economic activity to create vibrant urban districts: 24-hour business zones with something for everyone. The side benefits of mixed-use should include a reduced need for car travel and enhanced demand for public transportation. In zones with a wide range of uses nearby, people will be able to walk to work, school, or shops. Achieving this level of diversity is not easy for most city districts, though. People cannot always live near their work, especially in two-income households.

The full range of local shops needed for daily requirements is missing in many neighbourhoods. Big-box retail is located for optimal automobile accessibility. Most office space is not built in mixed-use areas, but either in the central city or in amorphous zones around the urban periphery *(Lang and LeFurgy 2004)*. Industry shows little interest in mixing *(Grant et al 1994)*.

How much mixing is appropriate? *Duany et al (2000:53)* suggest that "When it comes to the integration of different housing types, there is no established formula, but it seems safe to say that a neighbourhood can easily absorb a one-in-ten insertion of affordable housing without adverse effects." Where do the rest of the poor go? Too much mixing, or the wrong elements in the mix, experts appear to argue, may unbalance an area. Mixed housing types promise to generate social diversity. Smart growth reflects a normative position that values heterogeneous and integrated communities. The focus of planning efforts would thus be to promote equity, access, and affordability. However, achieving a social mix is also a challenge.

DESIGN GUIDELINES FOR MIXED-USED DEVELOPMENT

Street character

This is achieved through the following:

- Articulation of horizontal & vertical form.
- Fenestration and opening.
- Materials and finishes.
- Weather protection and awning.
- Building entries & setbacks.

Well design building

Maintaining continuity of ground-level activity, pedestrian safety and comfort along streets. This

principle is achieved through the following guidelines and requirements:

- Weather protection and awnings.
- Building entries.
- Materials and finishes.
- Services.

Quality materials

Using hard-wearing, natural and familiar materials in new buildings to provide continuity with existing built form. This principle is achieved through the following guidelines and requirements:

- Materials and finishes

Commercial priority

Delivering diverse and flexible accommodation that serves the needs of trade and commerce. This principle is achieved through the following guidelines and requirements:

- Land use and commercial mix
- Parking and access
- Signage & Façades

Public spaces

Providing adequate public spaces that serve the needs of existing and new residents and visitors. This principle is achieved through the following guidelines and requirements:

- Active streets, laneways and cross-block links.
- Interface with public open space.
- Community benefit.
- Public open space.

Access and parking

Reducing the visual presence of vehicle accessways and parking on streetscapes while maintaining

safe pedestrian access to parking areas. This principle is achieved through the following guidelines and requirements:

- Pedestrian access.
- Vehicle access and parking.
- Bicycle access, parking and end-of-trip facilities.
- Loading and unloading vehicles.
- Interface with laneways.

Environmentally sustainable design

Reducing the environmental impact of new development. This principle is achieved through the following guidelines and requirements:

- Roof design.
- Materials.
- Building services.

Access and parking

Reducing the visual presence of vehicle accessways and parking on streetscapes while maintaining safe pedestrian access to parking areas. This principle is achieved through the following guidelines and requirements:

- Pedestrian access.
- Vehicle access and parking.
- Bicycle access, parking and end-of-trip facilities.
- Loading and unloading vehicles.
- Interface with laneways.

Built form

- Focus on human-scale design.

- Use a podium and tower form with detailing emphasised on the ground floor to achieve a human scale with an attractive and active street-level experience.

- Provide active edges on the ground floor, with weather protection (awnings), openings and architectural detailing providing activity and interest for people.

- Separation between a low-scale podium and upper level 'tower' assists in grounding taller buildings and integration with traditional low-scale streetscapes.

Building entries

- Provide building entries that are visible and welcoming.

- Incorporate feature awnings, signage or landscape treatments to highlight entries. Provide good lighting and weather protection.

- Separate the resident and visitor entries from commercial entries, service areas and loading zones. Avoid recessed side entries with limited visibility.

Urban greenery and landscaping

- Provide high-quality landscaping that softens built forms and positively contributes to urban amenities.

- Prioritise green urban gardens by planting on structures, planter boxes and green walls in building entries, rooftop decks, private and common outdoor areas and balconies.

- Internal planting in areas such as in lobbies is also encouraged to improve internal amenities and re-introduce a connection to nature for people in urban environments.

Sustainable building design

- Incorporate sustainable design elements into roofing (eg. solar panels; skylights and ventilation systems; and green roofs on larger developments).

- Use sustainable building materials with low embodied energy or high proportions of recycled materials to significantly reduce the greenhouse gas emissions of a development.

Parking and access

- Prioritise high-quality streetscapes and pleasant people environments through considered parking and access design that minimises visual and physical impacts.

- Focus on maintaining active land uses at street level.
- Vehicle access is preferred from side streets or rear laneways if available.
- Minimise access and crossover widths as much as practicable.
- Ensure that bicycle parking is secure, convenient and readily accessible.
- Ensure that the arrangements of loading and servicing of commercial premises cause minimum disruption for pedestrians and cyclists.

Waste management

- Provide adequately sized waste and recycling storage areas for bins in discrete locations away from the building frontage, entries, or the public realm. Storage areas should be sufficiently sized, well-ventilated, and have a water point and drainage area.
- Ensure bins can be easily manoeuvred between storage and collection points. Provide a continuous path with no steps.
- Prepare a waste management plan to ensure the overall building design accommodates waste management effectively.

Minimising waste

- Encourage innovative waste storage and disposal practices.
- Provide alternative waste disposal methods like composting and green waste facilities.
- Provide all dwellings with separate waste and recycling cupboards/bins.
- Communal waste and recycling areas should be in convenient and accessible locations. Provide separate waste and recycling chutes in taller buildings.
- In mixed-use developments, ensure that residential waste and recycling areas are separate and secure.
- Collect and use stormwater and recycled water for landscape irrigation, toilet flushing and cleaning.
- *https://www.gleneira.vic.gov.au/media/3654/quality-design-guidelines-commercial-and-mixed-use-areas.pdf*

CASE STUDY

Case studies are chosen to gain an understanding of the mixed-use development practice through the building environment. They illustrate the purpose behind the design and provide insight into the spatial qualities of mixed-use development. In this research, one primary case studies are covered:

FUTURE TOWERS / MVRDV

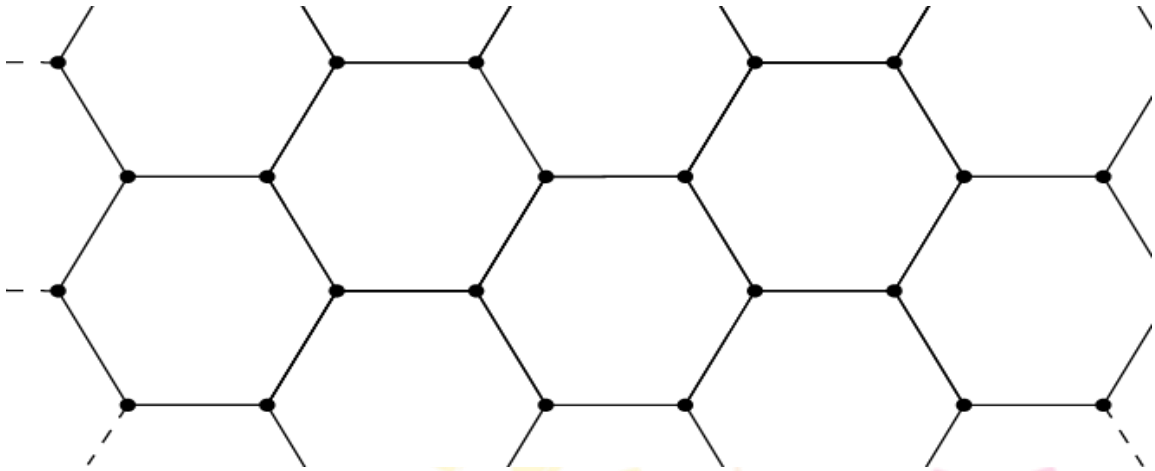
Amanora Park Town, which was created in 2007, includes Future Towers. It is located in Pune, India's eighth-largest metropolitan area and one of the country's fastest-expanding cities. Future Towers is a genuine vertical town that will be able to fit around 5,000 individuals in a single skyscraper, having 1068 apartments catering to diverse segments of the constantly rising population. The townships located in Pune help to accommodate the young professionals drawn to the city by its auto-manufacturing and technological sectors. However, the majority of the newly built structures on Pune's outskirts are generic, repeating residential towers, as is the case with much of India's rapid development.

MVRDV's idea for the Future Towers aims to provide an alternative to this pattern while maintaining delivering apartments at the normal low price (due to vigorous rivalry for new inhabitants among different housing schemes). MVRDV's approach to the brief was a single mountainous structure with peaks and valleys, under which 1,068 flats are unified in one building, rather than a collection of freestanding buildings. Despite its expressive appearance, the Future Towers' design is the result of a series of orderly actions based on MVRDV's research into Indian housing.

The primary deviation from the norm was convincing the client that a mix of different units would make the entire development more vibrant. In this way, the building would ensure that users from India's growing mix, including young, mobile professionals new to the city, older, established residents, and families of all sizes and income levels. Apartments ranging in size from 45 to 450 square meters are mixed, a variety is given by the building's mountainous structure and shifting floor plans.

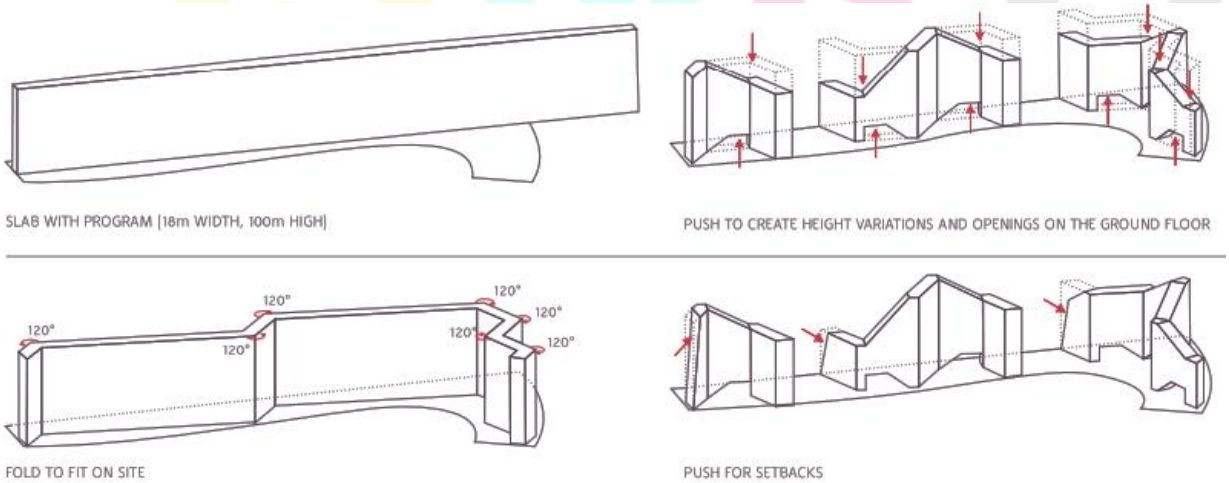
CONCEPT

The design concept is based on a hexagonal grid. The 120–degree angle optimizes abundant inflow of natural sunlight and ensures a great view.

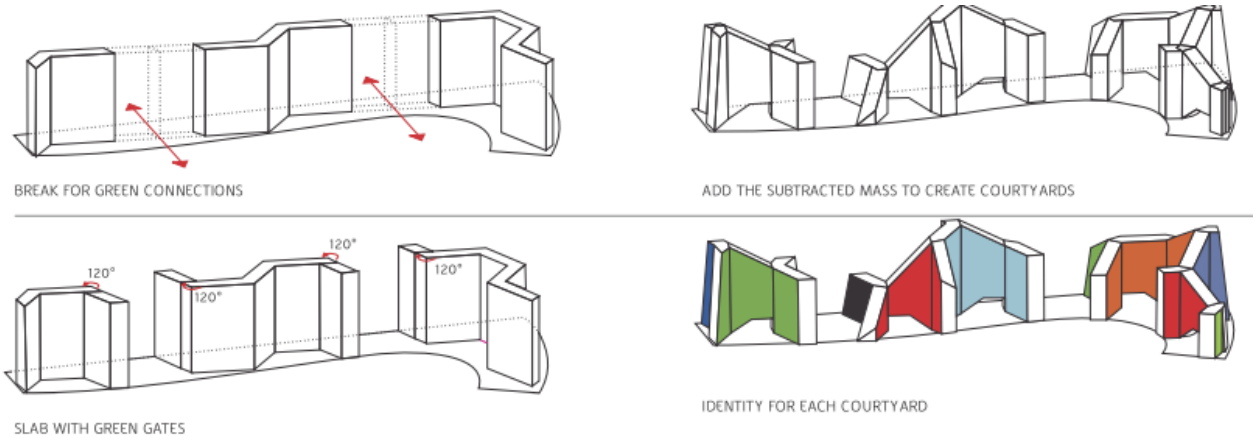


It is placed on the site in such a way that when cut along the site's boundaries, it gives rise to three unique building fragments, which correspond to the project's three phases.

Courtyards have traditionally been an important feature of Indian architecture. Taking the Indian courtyard concept a step further, there would be six courtyards housing various convenience zones.

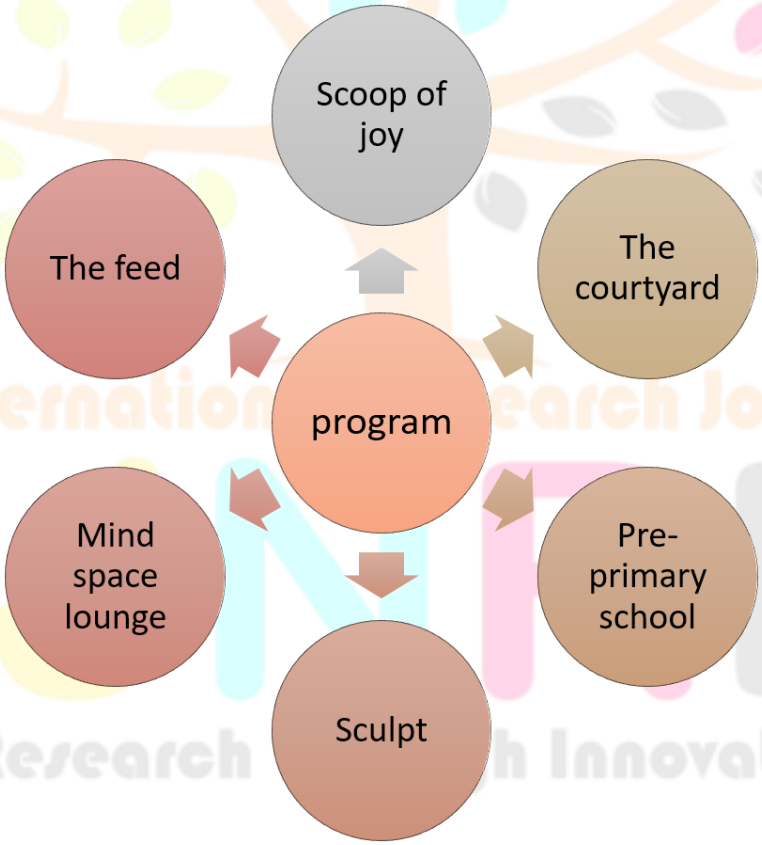


The unique design shapes like a landscape formation, which features mountains and valleys, rivers and bays, grottos, and caves. Aside from a unique profile, the volume has a wide range of spatial circumstances that are ideal for accommodating the "vertical city."



PROGRAMS

It is for like-minded people to come together and indulge in life. Each building fragments host amenities like



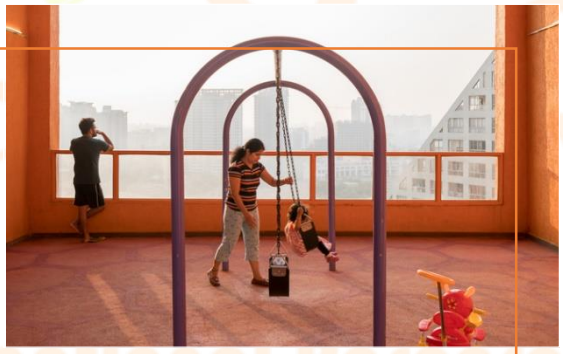
Scoop of joy

- It is a hub for like-minded people to come together and indulge in life.
- The Scoop hosts amenities like

- Coffee shop
- Amphitheatre
- Play area
- Games room
- Senior citizen zone

yoga area for cenior citizon

cafe



pay area for kids

The courtyard

- Central breathing space of neighbourhood with amenities and comfort, spared like a spider web overall levels to encourage social interactions.

podium level courtyard

Pre-primary school

Sculpt

- The sculpt has a well-equipped gym area with world-class trainers including a spa & sauna & and swimming pools.

Mind space lounge

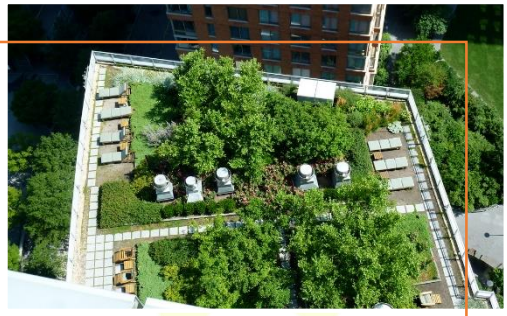
- The mind space has luxurious lounges for interactions parties & and small meetings including a library area, café, bar

Site plan

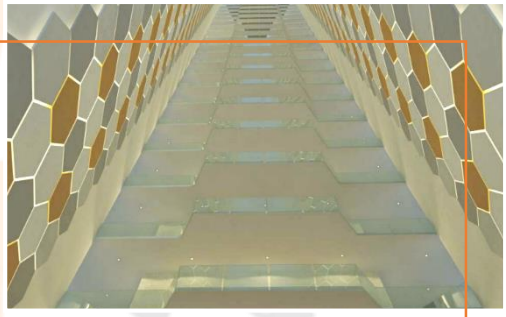
Floor plan

Sustainability ideas

- The future tower has various environment-friendly design concepts.
- Natural ventilation & daylighting.
- Vertical garden acts as a green chimney in every core.
- There is the provision of rainwater harvesting on all roofs which will be collected and stored in the lakes and later to be used for greenspace & and toiles flushing.
- Each wing is divided into two sides by a corridor. & ventilation shaft runs through the floors, opening into the corridor, enhancing daylight & and ventilation.
- The project has a solar tree plantation, spread across the site. The branches of this tree have solar lamps with rechargeable batteries.
- They will mostly be used on driveways gardens & remote locations.



Roof garden



Shaft for ventilation & dayligh

Solar tree

(*https://www.zricks.com/ImagesPostProject/37648//64e1a5d1-011c-4dac-8db1-4e3203b89c9fFuture_Towers.pdf*)

CONCLUSION

Currently, streets are no longer safe places to spend your free time. Spending too much time on the streets is mocked. People's active presence, dynamism, and liability are increased in return if streets provide a safe and favourable place and uses, activities, and healthy recreations have been organised based on social principles. Taking into account residents, on which cities take shape, is a widely recognised idea in the world's current modernisation to tackle interactions, behaviours, and that result in difficulties, as well as creating an active, dynamic, and functional city. The presence of people is an undeniable truth that is required for the vitality of urban spaces.

A city can be renewed by discovering and applying beneficial parameters on urban space dynamism, as well as creating vital and active places. This type of development aims to provide a space for urban development that takes into consideration economic, social, environmental, and physical factors. Experience in developing countries with such an approach shows that obstacles originating from improper and wrong views about the nature of mixed-use development have acted as an impediment to fully leveraging the potential of such development. A blend of applications with a new and different approach to the city from the traditional one, and also adopting compressed development principles, promises a beginning point to end challenges faced by many cities. The current paper discusses the resulting principles, solutions, and policies.

A proper ground must be provided to maximise the benefits of such a Development. As a result, in addition to mixed-use development and its good effects on environmental, cultural, and economic elements, active, dynamic, and safe spaces for citizens can be developed. It is also anticipated that the current study will give an essential basis for addressing the ideas, characteristics, and requirements of using mixed-use patterns of development and models. This study will also describe the impact of mixed-use development on individual behaviours and relationships in organising urban planning and administrative measures, especially in the country's major cities.

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