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## COMPARATIVE STUDY ON URBAN REGENERATION DEVELOPMENT APPROACH IN TURKIYE AND MALAYSIA CITIES

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### ABSTRACT

Urban planning and development in many nations now heavily emphasise on urban renewal. This comparative study aims to analyse the methods used for urban regeneration in Malaysian cities and Istanbul, Turkiye, with a particular concern on the key strategies, difficulties, and results of the selected projects. The study used a thorough examination of the literature and a qualitative analysis of case studies from both locations. The study compares the experiences of Malaysia and Turkiye to find similarities and variations in the methods used for urban regeneration. It is hoped that the analysis of this paper can benefit many parties such as policymakers, urban planners, and other stakeholders participating in urban development projects. To create more sustainable, inclusive, and livable cities in Turkiye, Malaysia, and other similar contexts around the world, the research's findings will help us to better understand effective strategies, best practices, and potential areas for improvement in urban regeneration for Istanbul and cities in Malaysia.

#### Keyword:

Urban regeneration, urban renewal, Turkiye, Malaysia

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### RESEARCH INTRODUCTION

Urban regeneration, which aims to revitalise and transform damaged urban areas to promote economic, social, and environmental sustainability, is an essential part of urban development (Al-Washali & Samadi, 2018). Malaysia, a Southeast Asian nation renowned for its various cities, and Istanbul, a vibrant metropolis in Turkiye, have carried out large urban regeneration efforts. Malaysia has focused on addressing urban decay and promoting sustainable development in cities like Kuala Lumpur and Penang, while Istanbul has undertaken projects to revitalise neighbourhoods and preserve cultural heritage (Karaman & Baykan, 2016; Abdul Rashid & Mohammed, 2017; Topcu & Guler, 2016; Mohd Nadzri & Mohd Noor, 2018). Thus, this paper aims to conduct a comparison study of the urban regeneration strategies used in Istanbul, Turkiye, and Malaysia offering the chance to examine commonalities, discrepancies, achievements, and difficulties. This analysis can help formulate policies and practices for urban regeneration in a variety of urban situations.

### CONCEPTUAL PROCESS

In this comparative study, the urban regeneration development strategies employed in Malaysia and Turkiye were compared and analysed in order to identify development strategies, methods, policies, practices and impact. The research intends to deepen our understanding of urban regeneration and provide recommendations for academics, decision-makers, and planners engaged in urban development projects.

- To identify the urban regeneration development strategies used in Malaysia and Istanbul.
- To determine Malaysia and Istanbul environments' urban regeneration methods, policies, and practices.
- To evaluate the results and effects of urban regeneration initiatives in Malaysia and Istanbul, including how they affected environmental sustainability, social cohesion, and economic growth.

It will be feasible to make significant findings and provide recommendations for urban regeneration practices, policy formation, and decision-making processes in other urban environments through a comparative analysis of Malaysia and Istanbul.

### DESIGN CONCEPTS

**ADAPTIVE REUSE**  
and  
**MIXED-USE INTEGRATION**

**Adaptive Reuse**

**Mixed-Use Integration**

**Connectivity & Accessibility**

**Sustainability**

**Community Engagement**



## LITERATURE REVIEW

Urban regeneration is a multifaceted, intricate process intended to improve the social, economic, and environmental aspects of damaged metropolitan areas. This study of the literature provides a thorough overview of comparative studies on urban regeneration development strategies. This study investigates many facets of urban regeneration, such as planning techniques, policy frameworks, community engagement, and sustainable development practices. It does so by reviewing pertinent literature, which includes research papers, case studies, and reports.



**Figure 1:** Urban regeneration project in Iskandar Malaysia  
(Source: New Straits Times, 2018)

Iskandar Malaysia, a key urban redevelopment project, is situated in southern region. Integrated planning, public-private partnerships, and the establishment of economic growth nodes like the Iskandar Puteri and Nusajaya regions are among the important strategies involved in this project (Ismail & Salleh, 2017). Figure 1 shows the smart and green futuristic city of Forest City which is among the key urban regeneration projects which is situated in Iskandar Puteri, Johor.



**Figure 2:** Urban regeneration project in Georgetown, Penang  
(Source: theSun, 2021)

Figure 2 illustrates the city of Georgetown, Penang, where the emphasis has been placed on historical preservation, adaptive reuse of historic structures, regeneration of public areas, and community engagement, as shown by Yahya and Rashid (2018). These actions have improved the city's cultural and tourism worth.



**Figure 3:** Urban regeneration project in Istanbul's Historic Peninsula  
(Source: Carnegie Europe, 2013)

Figure 3 illustrates Istanbul's Historic Peninsula where the focus is to conserve its incredibly rich historical and cultural history, Istanbul's Historic Peninsula has undergone substantial urban regeneration efforts. The techniques include pedestrianising streets, revitalising public spaces, and restoring and reusing old structures. The goal is to maintain the area's distinctive character while improving the area's livability and accessibility (Gokdelenler, 2018).



**Figure 4:** Urban regeneration project in Zeytinburnu  
(Source: Michael Sorokin Studio, 2012)

Zeytinburnu Urban Regeneration Project: According to Yasar and Yilmaz (2018), Istanbul's Zeytinburnu neighbourhood has seen extensive urban renewal. housing neighbourhoods, infrastructural upgrades, and the establishment of pure development of dilapidated public amenities and open spaces are some of the strategies used. The project prioritises local social and economic advancement while promoting inclusive and sustainable urban development.

## BEST PRACTICES OF URBAN REGENERATION

**Comprehensive planning and integrated approaches:** Housing, transit, infrastructure, and public spaces are just a few of the industries that must be integrated to create a holistic and sustainable strategy for the regeneration region. Integrated models also require cooperation across a variety of stakeholders, including local communities, government agencies, developers, and NGOs, to create a shared goal and coordinated implementation (Dempsey et al., 2011).

**Community Engagement and Participation:** Urban redevelopment projects must actively involve and involve the community. Participating early in the planning process with neighbourhood residents, businesses, and community organisations helps to ensure that their needs, preferences, and concerns are taken into account. The outcomes of regeneration are more inclusive and socially sustainable thanks to this participatory approach, which develops a sense of ownership and encourages people to participate in decision-making processes (Healey & Upton, 2014).

**Adaptive Reuse and Preservation:** According to Talen (2013), an effective technique for urban regeneration is the preservation and repurposing of existing structures and historical places. Old buildings being converted into mixed-use areas, such as homes, businesses, and cultural facilities, gives the revitalised region more personality and diversity, attracting investment and fostering a sense of place.

**Sustainable and Green Infrastructure:** According to the European Commission, integrating green and sustainable infrastructure is essential for resilient and ecologically responsible urban renewal. Sustainable infrastructure raises living standards, improves air and water quality, reduces the effects of climate change, and fosters both physical and mental health.

**Social and Economic Inclusion:** Urban renewal that is inclusive must address social and economic inequities. Fostering social cohesion and minimising exclusion requires designing public places and infrastructure that is accessible to everyone, including those with disabilities and from various socioeconomic backgrounds (Citu, 2018).

## METHODOLOGY

This study used a qualitative research method covering selected towns in Malaysia and Istanbul, a specific reference for Turkiye. Case studies, preliminary studies, observations, and site and context studies are examples of research method approaches. As part of the overall design process, analysis and synthesis are used to develop appropriate solutions that can meet the goal and objectives.

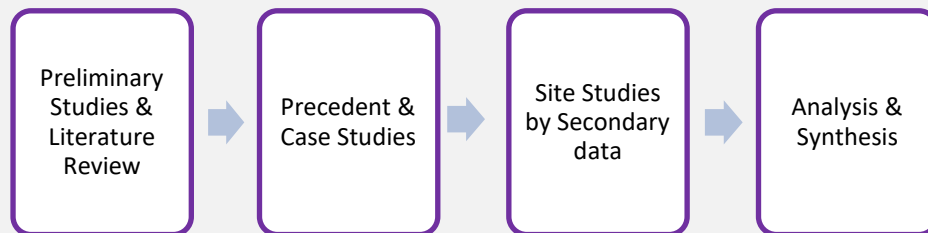


Figure 5: Data Collection Methodology

## RESEARCH FINDINGS

### URBAN REGENERATION DEVELOPMENT STRATEGIES IN MALAYSIA

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 • **Mixed-Use Development:** Emphasizing the integration of residential, commercial, and recreational spaces to create vibrant and sustainable urban environments.
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 • **Preservation and restoration of historic structures and areas** in order to strengthen cultural identity, draw tourists, and spur economic development.
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 • **Public-Private Partnerships:** Alliances between public and private sectors, as well as community stakeholders, to pool resources and skills for urban renewal initiatives.
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 • **Community Involvement and Empowerment:** Encouraging social cohesiveness, involving local communities in decision-making processes, and assuring their active involvement in directing the revitalization of their neighbourhoods.
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 • **Infrastructure improvements:** Improving the physical infrastructure, including utilities, public spaces, and transportation systems, to boost connection, accessibility, and quality of life.

### URBAN REGENERATION DEVELOPMENT STRATEGIES IN ISTANBUL



- **Urban Renewal and transformation projects:** Vast-scale regeneration programmes aimed at decrepit or underdeveloped areas in order to stimulate economic development, enhance housing conditions, and generate contemporary urban environments.



- **Repurposing and redeveloping old buildings or brownfield sites** to make room for new uses, such commercial, residential, or cultural spaces, is known as adaptive reuse and redevelopment.



- **Social housing programmes:** constructing subsidised housing for low-income areas in order to address housing issues and provide affordable housing options.



- **Urban planning that incorporates green spaces, energy-saving technologies, and sustainable design concepts** in order to improve environmental sustainability and foster a healthy urban environment.



- **Initiatives in the arts and culture:** Including cultural and artistic initiatives in urban redevelopment plans to protect cultural assets, boost neighbourhood cultural vibrancy, and draw creative industries.

It is important to keep in mind that these strategies may change depending on specific projects and regional objectives and are not all-inclusive. Additional elements that affect these strategies' effectiveness include how they are applied, stakeholder collaboration, and local context adaptation.

## URBAN REGENERATION PRACTISES, POLICIES, AND METHODS IN MALAYSIA AND TURKIYE.

- 1. Policy Frameworks:** To direct efforts towards urban revitalization, policy frameworks have been developed in Malaysia and Istanbul. They place a high priority on community engagement, economic growth, and sustainable development. However, there may be differences in the two regions' specific policy instruments, strategies, and degrees of execution.
- 2. Community Participation:** In both Malaysia and Istanbul, community involvement is seen as a crucial component of urban revitalization. Every time, efforts are taken to ensure that residents of the area take an active part in decision-making. However, there might be wide variations in the extent of community empowerment, participation possibilities, and involvement.
- 3. Mixed-Use Development:** Both regions are aware of how important mixed-use building is to the creation of thriving, sustainable urban environments. Within urban redevelopment projects, they seek to meld residential, commercial, and recreational activity. However, depending on the regional climate and market demands, the scale, design ethos, and execution tactics for mixed-use developments may vary.
- 4. Heritage Preservation:** Heritage preservation is a top priority for Istanbul and Malaysia's urban redevelopment plans. To promote cultural identity and draw tourists, they give a lot of thought to conserving and revitalising old homes and areas. However, there may be differences in the methods used to preserve cultural heritage, the degree of protection, and the management of historic sites.
- 5. Socio-Economic Considerations:** Both locations engage in urban regeneration while taking socioeconomic issues into account. They seek to address housing issues, enhance quality of life, and encourage economic development. However, there may be differences in how different policies, including schemes for affordable housing, social housing projects, or financial incentives for private investment, are carried out and their scope.
- 6. Environmental Sustainability:** Both Malaysia and Istanbul recognise the value of environmental sustainability in urban regeneration. They encourage energy conservation, provide green spaces, and apply sustainable and environmentally friendly design principles. However, there might be variations in the precise strategies, level of commitment, and application of sustainability practices.
- 7. Public-Private Partnerships:** Initiatives to rejuvenate urban areas in both regions mainly rely on public-private partnerships. They draw upon investments, assets, and expertise from both the public and private sectors. However, the type of partnerships, the roles of players, and the level of collaboration may alter based on the local governance structure and legislation.
- 8. Scale and Complexity:** Istanbul, a megacity, constantly faces challenging challenges in the form of large-scale urban reconstruction projects. Malaysia, with its multiple cities, may have varying dimensions and complexities depending on the situation. The scope and complexity of the projects may have an impact on the tactics, policies, and implementation techniques used in urban regeneration.

## EFFECTS OF URBAN REGENERATION INITIATIVES IN MALAYSIA AND TURKIYE, INCLUDING HOW THEY AFFECTED ENVIRONMENTAL SUSTAINABILITY, SOCIAL COHESION, AND ECONOMIC GROWTH.



### Environmental Sustainability

**Malaysia:** Urban regeneration schemes in Malaysia have aimed to increase environmental sustainability through the integration of green design concepts, encouraging energy efficiency, and establishing green areas. This could lead to a decrease in carbon emissions, improved air quality, and increased biodiversity in urban areas.



**Turkiye:** Urban reconstruction projects in Istanbul have also placed a high emphasis on environmental sustainability by adding environmentally friendly design components and green spaces. This might result in urban areas that are more livable, more resilient to climate change, and with better urban ecosystems.



### Social Cohesiveness

**Malaysia:** There, affordable housing alternatives are offered, community facilities are improved, and local inhabitants are included in decision-making as part of urban regeneration efforts. This could lead to increased social interaction, an improvement in quality of life, and closer community relationships.



**Turkiye:** Initiatives for urban redevelopment in Istanbul place a strong emphasis on community empowerment and involvement. These initiatives can strengthen neighbourhood social ties and foster inclusivity and social cohesion.



### Economic Growth

**Malaysia:** There are many schemes that aim to regenerate urban areas in order to attract investors, revitalise commercial districts, and create jobs. Successful redevelopment projects can increase local economies, produce jobs, and increase economic activity.



**Turkiye:** The city's economic development has also benefited from urban regeneration projects in Istanbul by attracting private investment, revitalising underutilised neighbourhoods, and creating new business and commercial opportunities. This could lead to an increase in economic activity, more employment openings, and economic growth in neighbourhoods that have been given new life.

## PROPOSED PROJECTS

Based on the literature reviews and the results of the analysis, there are several good practices that can be implemented in Malaysia and Turkiye to further improve their urban regeneration projects and thus, elevate the quality of place making in both countries.

### Project 1: Old Factory Complex Redevelopment

Converting an old industrial structure into a mixed-use project with loft residences, offices for creatives, art galleries, cafes, and shops. The historical integrity of the existing industrial facilities is preserved through adaptive reuse, and a vibrant and diverse urban environment is supported.



Figure 6: Examples of old factory complex redevelopment  
Source: Walter Herz, 2019

The goal of the Old Factory Complex Redevelopment project as per illustrated in Figure 6 is to convert an existing factory complex into a thriving mixed-use neighbourhood while maintaining its historical and aesthetic relevance. The goal of this rehabilitation plan is to revitalise the district by finding new uses for the old industry buildings. This could entail converting a portion of the complex's rooms into loft-style homes, creative offices, art galleries, exhibition halls, cafes, restaurants, and retail spaces. While providing new uses that boost the neighborhood's vitality, the adaptive reuse of the manufacturing structures preserves the preservation of its distinctive architectural elements and character.

To establish gathering places for interpersonal interaction and neighbourhood events, the project can also contain regional areas like courtyards or public squares. The Old Factory Complex Redevelopment project exemplifies how adding a diversity of uses, encouraging creativity, and improving the urban environment may revitalise underutilised industrial regions. The overall goal of the Old Factory Complex Redevelopment project is to transform the area into a thriving mixed-use neighbourhood with a range of residential, artistic, cultural, and commercial facilities. The factory complex's adaptive reuse preserves its historic character while reviving the neighbourhood, reviving the neighbourhood, and making a substantial and sustainable contribution to the urban fabric.

### Project 2: Neighborhood Revitalisation Project

To rejuvenate a run-down district, vacant buildings are converted into a mix of affordable housing, community centre, small enterprises, and green spaces. This tactic promotes neighbourhood cohesion, addresses housing needs, and gives local business owners and citizens the chance to succeed.



Figure 7: Examples of neighbourhood revitalization project  
(Source: Community Design Center, University of Arkansas, 2023)

The objective of a comprehensive project known as a "neighbourhood revitalisation project" as per illustrated in Figure 7 is to revive and improve the general standard of a specific neighbourhood or community. The needs of the neighbourhood will be served in this transformative project in a variety of ways. The initiative first focuses on repairing roads and pavements and improving the physical infrastructure, such as remodelling buildings and public areas. These improvements improve the area's livability, usability, and aesthetic appeal.

Affordable housing initiatives also receive a lot of attention from a neighbourhood revitalization project. As part of this, it is necessary to construct new inexpensive housing units, remodel existing houses to make them more accessible, and launch programmes to aid residents in finding affordable accommodation. The initiative addresses housing affordability to ensure that residents of all income levels may continue to live in the regenerated neighbourhood, promoting inclusivity and defending the social fabric of the neighbourhood.

Additionally, the initiative gives a lot of importance to community engagement and empowerment. This includes setting up places where locals may participate in decision-making processes, like town hall meetings, neighbourhood associations, and community workshops. Residents are given a voice in the reconstruction process, fostering a sense of pride and ownership among the locals. It also enables neighbours to communicate, make recommendations, and collaborate to enhance the neighbourhood.

A Neighbourhood Revitalization Project often aims to enhance the neighbourhood's physical infrastructure, solve the need for affordable housing, and promote neighbourhood involvement. The project's objective is to transform the neighbourhood into a vibrant and friendly neighbourhood where locals may benefit from improved quality of life, employment opportunities, and a sense of community.

### Project 3: Transit-Oriented Development

Constructing a mixed-use neighbourhood with a transit centre that combines residences, places of business, retail, and public facilities. This design encourages environmentally friendly transit, reduces dependency on cars, and fosters a convivial, walkable urban environment.



Figure 8: Examples of transit-oriented development  
(Source: Arch Daily, 2020)

Through the integration of transportation, land use, and urban design, transit-oriented development (TOD), a planning strategy, aims to create livable, sustainable communities. Figure 8 illustrates the fundamental idea behind TOD, is the development of compact, mixed-use neighbourhoods anchored around transportation hubs. The first key element of TOD is the proximity to public transportation, with a focus on placing residential, commercial, and recreational projects within easy walking distance of transit stations or corridors.

The second TOD pillar is the promotion of diverse land uses. This means integrating retail, housing, and recreational amenities into a single neighbourhood. By providing a variety of goods and services, TOD encourages residents to meet their daily needs close by, reducing the need for private automobiles and promoting a more sustainable way of life.

The third element of TOD is the development of pedestrian-friendly environments. A crucial element of TOD is the creation of pedestrian-friendly streets, wide sidewalks, and attractive public spaces. The majority of buildings contain ground-floor retail or commercial spaces that animate the city and encourage social contact. These spaces are often oriented towards the street. This architectural design encourages physical activity, fosters a sense of community, and enhances the neighborhood's overall livability.

Simply described, transit-oriented development combines urban planning, transportation, and land use to create dense, mixed-use communities that are centred around public transportation. To create vibrant, sustainable communities where people can live, work, and play comfortably, TOD aims to increase accessibility and reduce reliance on personal automobiles. This is accomplished by emphasising the importance of being accessible to public transportation, supporting mixed-use construction, and creating pedestrian-friendly environments.

### Project 4: Waterfront Regeneration

Converting former industrial areas into a mixed-use zone with recreational spaces, waterfront cafes, parks, and residential buildings in order to rejuvenate a waterfront neighbourhood. While preserving the environment, this architectural concept raises the standard of living, promotes leisure activities, and provides beautiful views.



Figure 9: Examples of Waterfront Regeneration  
(Source: ARUP, 2023)

A key element of waterfront revitalization is the construction of mixed-use developments that combine residential, commercial, and recreational elements. Figure 9 epitomize the idea of waterfront regeneration, due to the blending of different land uses, the waterfront is lively and dynamic, attracting residents, businesses, and tourists.

Public access and recreational possibilities are crucial components of shoreline rehabilitation. By developing pedestrian-friendly promenades, parks, and open spaces close to the ocean, people may take in the surrounding beauty and engage in recreational activities. The neighbourhood congregates near the water, encouraging interpersonal relationships, excellent health, and general happiness. The revitalised waterfront is made more vibrant and attractive for both locals and visitors by design elements including waterfront cafes, marinas, walks along the water, and recreational amenities.

When revitalising the waterfront, environmental and biological elements are taken into consideration. Sustainable practices are employed to protect and enhance the ecosystems and natural habitats around the beach. This involves employing eco-friendly design principles, creating green infrastructure, and restoring wetlands. By preserving and enhancing the natural integrity of the waterfront, regeneration programmes enable sustainable water management, retain wildlife, and create resilient urban environments that can withstand the effects of climate change. Waterfront regeneration projects incorporate mixed-use development, prioritise public access and recreation, and take ecological and environmental factors into account to create attractive destinations that enhance the quality of life for residents, stimulate economic activity, and offer opportunities for leisure and enjoyment for all.

## Project 5: Cultural Heritage Site Adaptation

Transforming a former castle or monastery into a mixed-use development including a gallery, a workshop for culture, a boutique hotel, and a restaurant. This approach maintains the historical significance of the location while fostering economic development and cultural tourism.



**Figure 10:** Examples of cultural heritage site adaptation  
(Source: Cambodia Build Environment, 2023)

Giving old buildings or sites of historical relevance a new purpose while maintaining their historical and architectural value is known as cultural heritage site adaptation. The strategy focuses on the preservation and restoration of the site's distinguishing features, such as its architectural details, materials, and cultural components. By doing this, the site's historical significance is protected and honoured, providing a tangible link to the past.

The next stage of cultural heritage site adaptation is the site's repurposing for contemporary uses. Figure 10 depicts the example of cultural heritage site adaptation. This may involve transforming an outdated building into a museum, gallery, hub for culture, or educational facility. By becoming a centre for cultural events, the property can be transformed into a place where people can gather, learn about, and appreciate the rich history of the site and the community. This method of reusing cultural historical assets encourages neighbourhood redevelopment, attracts tourists, and stimulates the economy.

Community involvement is essential to adapting cultural heritage sites. When making decisions, local communities are given a voice, which guarantees that their needs and goals are satisfied and that the adaptation represents their ideas. The relationship between the facility and the residents who live nearby and frequently utilise it is strengthened when the neighbourhood is involved. Additionally, it promotes a sense of pride and ownership in one's cultural history. This participative approach helps to preserve the site's distinct identity and customs by fostering a greater appreciation of the cultural past both inside and outside of the community.

By involving the local community, repurposing the property for cultural activities, and preserving the site's unique traits, cultural heritage site adaptation programmes create vibrant, sustainable spaces that celebrate and highlight a location's rich cultural legacy.

## Project 6: Urban Farming and Market Integration

Including urban agricultural initiatives in mixed-use buildings, including rooftop gardens or vertical farming. Incorporating sustainable food production into urban or suburban regions will promote local food systems, civic engagement, and environmental sustainability.



**Figure 11:** Examples of urban farming and market integration  
(Source: Carlo Epifanio 2019)

Market integration significantly contributes to urban farming by establishing neighbourhood food markets in urban settings. At these marketplaces, urban farmers can sell their produce directly to clients, cutting away the middleman and ensuring fair prices for all parties. Farmers' markets, CSA programmes, and pop-up markets offer fresh, in-season produce to city residents, allowing farmers a chance to advertise their products and forge connections with the neighbourhood. As illustrated in Figure 11, the market integration contributes to local economic development by fostering entrepreneurship, generating employment opportunities, and keeping money in the community.

Beyond food production and economic impact, market integration and urban farming have many benefits. Through the introduction of agriculture into urban areas, the utilisation of underutilised areas, the reduction of food waste, and the application of sustainable agricultural techniques, these activities promote environmental sustainability. They also foster social cohesion and community engagement by creating spaces for dialogue, education, and cultural exchange. Additionally, through improving urban lifestyles, increasing food security, and enabling individuals and communities to actively participate in developing their own food systems.

Finally, urban farming and market integration offer an all-encompassing approach to addressing concerns about food security, sustainability, and social well-being. By merging urban farming techniques and fostering direct interactions between farmers and consumers through local food markets, this notion promotes access to fresh, locally grown goods, environmental responsibility, and community engagement. It transforms urban landscapes into thriving, self-sufficient food-producing centres in addition to creating a sense of connection to food sources and a healthier, more sustainable urban environment.

## Project 7: Educational Campus and Innovation Hub

Establishing a campus for higher education with a mix of housing, parks, and leisure areas alongside academic institutions, research centres, and innovation hubs. This design promotes entrepreneurship, innovation, and a dynamic learning environment.



Figure 12: Examples of educational campus and innovation hub  
(Source: Frameweb, 2023)

The Educational Campus component includes a variety of educational establishments, such as schools, colleges, universities, and centres for vocational training. To satisfy the needs of various academic subjects and interests, these facilities provide a wide variety of academic courses and activities. Figure 12 shows the example of educational campus and innovation hub where the campus promotes a holistic educational approach and offers a welcoming environment for learning, critical thinking, and skill development.

The Innovation Hub part of the concept concentrates on creating spaces that support entrepreneurship, cooperation, and innovation. Co-working spaces, incubators, innovation hubs, and research labs are some of these spaces. The goal is to team up students, researchers, entrepreneurs, and industry professionals to work on projects, develop cutting-edge improvements, and transform concepts into products. Cross-disciplinary collaboration and the exploration of fresh concepts are encouraged by the innovation centres' access to cutting-edge technologies, mentorship programmes, and networking opportunities. An educational campus and an innovation hub also place a strong emphasis on community impact and involvement. The campus serves as the hub for community events, workshops, and initiatives that involve locals, businesses, and organisations. The campus encourages communication, entrepreneurship, and job creation by including the community, serving as a catalyst for both social and economic development. Partnerships with for-profit, public, and private institutions enable the practical application of research and innovation to address societal issues and improve the well-being of the community.

By merging academic institutions, innovation hubs, and community involvement, this concept promotes transdisciplinary learning, sparks creativity, and drives social and economic prosperity. It provides students with access to a top-notch education, encourages research and entrepreneurship, and aids in the development of partnerships between academia, business, and the community. The cultivation of talent, the encouragement of creativity, and invention, powered by an academic campus and innovation hub, are what will ultimately determine the future.

## Project 8: Urban Acupuncture

Creating an urban acupuncture park in the middle of a densely populated district on an underutilised vacant lot. The park has open spaces, seating spots, art displays, and community gardens. This modest investment aims to improve people's quality of life, provide a place for social interaction, and serve as a catalyst for larger area revitalization projects.



Figure 13: Examples of Urban Acupuncture  
(Source: Archdaily, 2020)

These interventions can be made in a variety of ways, including the creation of small public spaces like pocket parks and community gardens, the creation of pedestrian-friendly streets, the repair of abandoned buildings, the installation of public art, and the creation of public meeting spaces. It's crucial to identify certain metropolitan areas that could benefit from these interventions and implement them carefully if you want to bring about positive changes in the urban fabric.

Urban acupuncture as illustrated in Figure 13, is dependent on community participation and engagement. The proposal recognises the importance of include residents, community organisations, and stakeholders in the formulation and execution of decisions. By actively involving the community, urban acupuncture programmes become more attentive to the needs and aspirations of the local population. This participatory approach not only promotes a sense of pride and ownership but also social cohesion and equips communities with the resources they need to actively take part in transforming their urban environment. Despite their possibly constrained scope, urban acupuncture treatments have the power to make a significant and long-lasting impact. These actions can address certain urban problems like blight, a lack of green space, or social isolation, which can subsequently have a good domino impact on the neighbourhood. They can promote greater neighbourhood participation, attract more finance and development, and aid in the general rebirth and regeneration of urban regions.

These interventions, which include the community, serve as catalysts for transformative effects, fostering interpersonal connections, revitalising areas, and raising the quality of life in the city as a whole. By carefully integrating small-scale projects, urban acupuncture is a bottom-up method to urban rejuvenation that promotes inclusive and sustainable urban development.



## Project 9: Eco-District Development

creating an eco-district with a focus on self-sufficiency and sustainability. This concept incorporates eco-friendly infrastructure, renewable energy sources, water conservation practices, and sustainable transportation solutions. The project aims to lessen its negative effects on the environment and provide a model for eco-friendly urban living.



**Figure 14:** Examples of Eco-District Development  
(Source: OCB, 2016)

Building communities or districts that give high priority to resource efficiency, environmental sustainability, and community well-being is the aim of eco-district development. It comprises incorporating environmentally friendly practices, technology, and infrastructure to decrease the environmental impact of urban areas while promoting social justice and economic vitality. Infrastructure is necessary to reduce resource utilisation and greenhouse gas emissions.

The development of eco-districts as illustrated in Figure 14, gives social justice and neighbourhood participation first attention. The strategy recognises that social inclusion, improvements in everyone's quality of life, and sustainable growth are all necessary for each other. Community members actively participate in planning and decision-making processes to ensure that their needs and goals are taken into account. Work is being done on mixed-use developments that offer a range of housing options, amenities, and public spaces that promote social interaction and enhance community well-being. Eco-districts usually give importance to affordable housing, accessibility to public transportation, and the equal distribution of resources and services to promote social justice. The development of eco-districts depends heavily on the integration of many systems and stakeholder interaction. Collaborations between local businesses, academic institutions, and organisations from the public sector are included in this. Utilising integrated techniques, such as smart grid technologies, district-scale energy systems, and shared water infrastructure, resource management is optimised. By collaborating with diverse facets of the community and sharing resources, eco-districts can boost productivity and promote creativity. The plan also facilitates the exchange of best practices and expertise, allowing for continuous improvement and responsiveness to shifting sustainability concerns.

To sum up, eco-district development is a technique for developing sustainable urban planning and design that involves teamwork, sustainable practises, and community involvement to create environmentally sound, socially just, and economically vibrant neighbourhoods. By putting sustainable design concepts into practice, including the community, and promoting cooperation, eco-districts aim to lessen environmental impacts, enhance community well-being, and assist in the transition to a more resilient and sustainable urban future.

## Project 10: Transit Plaza and Pedestrianization

converting a busy intersection into a transit plaza that can handle a variety of modes of transportation, including buses, bicycles, and pedestrian walkways. The design strongly emphasises safety, accessibility, and a people-centric approach by giving pedestrians top priority, creating gathering spaces, and supporting environmentally friendly transit alternatives.



**Figure 15** Examples of Transit Plaza and Pedestrianization  
(Source: Joshua Rosalio, 2022)

Initiatives for transit plazas and pedestrianisation are urban development strategies meant to improve city streets for pedestrians and promote transportation efficiency. Figure 15 shows the examples of transit plaza and idea of pedestrianization.

Transit plazas serve as important hubs where a variety of public transportation choices congregate and provide convenient transfer locations for passengers. To make it simple to move around these plazas, amenities including real-time information displays, welcoming waiting places, and bicycle parking areas have been included. By bringing together several forms of transportation in one location, transit plazas encourage sustainable mobility, encourage the use of public transportation, and reduce traffic congestion.

Making pedestrian-only zones out of streets, public areas, or entire neighbourhoods allows for "pedestrianisation". These places put a priority on the safety and comfort of pedestrians in order to establish walkable environments that promote walking, bicycling, and social interactions. In pedestrianised zones, you can typically find wider sidewalks, designated bike lanes, and amenities like seating places, street furniture, and green spaces. Less motor traffic, improved air quality, higher pedestrian safety, and vibrant public areas where people may gather, shop, and enjoy themselves are all benefits of initiatives to increase pedestrian traffic.

Cities become more efficient, accessible, and friendly through initiatives for pedestrianisation and transit plazas. These initiatives encourage sustainable mobility, lessen congestion, and improve the general quality of urban life by integrating public transportation and giving pedestrian demands top priority.

## CONCLUSION

In conclusion, the comparison of the strategies, policies, and practices used in urban regeneration development in Istanbul and Malaysia has shown the similarities and differences between the two methods. The analysis of several urban regeneration projects and their results has provided important insights into the implications on environmental sustainability, social cohesion, and economic growth. Urban regeneration initiatives are in action in Istanbul and Malaysia to renovate and enhance their cities. Their joint goals are to build out the infrastructure, improve urban living conditions, and attract investment. However, the study has also highlighted the various approaches and challenges that each region faces. Istanbul's urban regeneration programmes have placed a heavy emphasis on conserving the city's historical and cultural past, whereas Malaysia has prioritised sustainable development and inclusive growth.

The outcomes and impacts of these programmes have been evaluated, and different levels of success have been found. The adoption of measures like energy efficiency, waste management techniques, and green infrastructure are a few examples of how to attain environmental sustainability. Social cohesion has been aided by neighbourhood involvement, cultural preservation, and the creation of vibrant public spaces. Economic growth has been aided by rising tourism, investment opportunities, and job creation.

The comparative study has, in general, provided significant insight into the urban regeneration development methodologies employed in Malaysia and Istanbul. It underlines the importance of context-specific strategies that consider local needs, cultural heritage, and sustainability tenets. By learning from the successes and best practices of these two regions, policymakers, urban planners, and stakeholders can implement effective urban regeneration efforts in their cities. In the end, this will contribute to the development of flourishing, inclusive, and sustainable urban settings.

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