

# International Journal of Urban Management and Energy Sustainability (JUMES)

Homepage: <http://www.ijumes.com>



## CASE STUDY RESEARCH PAPER

### Explaining urban regeneration model in approach to social resilience improvement in infill projects

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#### ARTICLE INFO

*Article History:*

Received 2024-04-12

Revised 2024-10-22

Accepted 2024-12-23

*Keywords:*

Urban regeneration, social resilience, interstitial project, quality of life, inefficient fabric

#### ABSTRACT

Urban regeneration in the structure of optimizing the social life of a city's residents is considered as the re-creation of living space, which can be specifically predicted to have positive effects in inefficient urban contexts by utilizing its organized model. In this study, relying on theoretical approaches and qualitative analyses, a comprehensive and practical model for urban regeneration has been developed with the aim of promoting social resilience in mezzanine projects. The method of the present research is analytical and the method of collecting information is based on documentary and library studies. The aim of this research is to explain the components of urban regeneration with a social resilience approach in mezzanine projects. First, the key components of social resilience, including social needs, public spaces, participatory processes, trust networks, and communication technologies, were identified, and then, using in-depth interviews with experts and examining successful domestic and foreign examples, an operational framework was designed based on these components. The conceptual table and graphic design of this model were then presented as a guide for developing resilient and sustainable urban projects. The results show that implementing this model based on active participation of residents, development of public spaces, and utilization of new technologies can improve the quality of life and strengthen the city's resilience to crises. Based on the findings of the study, continuous development and evaluation of this model in different regions is the main key to realizing resilient and resilient cities.

DOI: [10.22034/IJUMES.2024.711844](https://doi.org/10.22034/IJUMES.2024.711844)

*Running Title: urban regeneration model in approach to social resilience improvement*



NUMBER OF REFERENCES

39



NUMBER OF FIGURES

03



NUMBER OF TABLES

03

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## INTRODUCTION

In recent decades, urban development processes and regeneration projects have required new and more comprehensive approaches, given the rapid economic, social and environmental changes (Jin & Shao, 2024). One of the main challenges in this area is to increase the resilience of cities to crises and risks, especially in dealing with the effects of climate change, economic crises and public health crises (Ujaque et al., 2021). In the meantime, the social resilience approach has been proposed as one of the priorities of urban policy-making and design, which aims to empower communities and improve their level of resilience in the face of crises (Khaldi, 2018). Urban regeneration, as a strategic process, is of great importance not only for improving the physical and architectural condition of neighborhoods, but also for strengthening social trust, increasing social interactions and improving the quality of life of residents (LopezdeAsiain & Díaz-García, 2020). In recent decades, the concept of sustainable development and its importance in urban policy-making have received more and more attention (Heath, Rabinovich, & Barreto, 2017). Development that simultaneously responds to economic, social and environmental needs should be seen in the form of innovative strategies such as urban renewal and the revitalization of neglected neighborhoods (Khayami & Fakhri, 2019). Such an approach not only contributes to the revitalization of urban spaces but also to increasing social resilience and sustainability. Urban regeneration, which is mostly presented in the form of internal projects, or infill projects, is of particular importance (Yao et al., 2021). By focusing on filling the gaps within urban layers, these types of projects can help maintain social cohesion and improve the well-being of residents (Figueiredo, Prim, & Dandolini, 2021). In this process, one of the key challenges is to maintain and strengthen social and institutional capacities to better respond to urban developments (Chen, Liu, & Zhuang, 2023). In this regard, infill projects, which are a combination of architectural, spatial and social

components, play an effective role in shaping resilient and resilient cities (Mykhnenko, 2023). By combining investment in public spaces, creating economic opportunities, and strengthening social networks, these projects can contribute significantly to the city's dynamism and sustainability (Said & Dindar, 2024). In this context, a key concept that is always linked to urban renewal and development is the concept of social sustainability (Boussaa et al., 2023). Social sustainability means the ability of communities to face challenges and changes, maintain internal cohesion, and improve the quality of life (Kim et al., 2023). Therefore, the main goal of renewal projects is to create strong social capacities along with improving infrastructure and physical spaces (Coletta et al., 2024).

One of the new approaches is urban renewal models based on social resilience. These models believe that sustainable development depends on strengthening the capabilities of communities to deal with crises, strengthening social relations, and creating a sense of belonging (Swensen, Hagen, & Mehmood, 2024). In this context, a deeper understanding of how ENFEL projects affect social resilience is crucial. Current research highlights the importance of active community and stakeholder participation in the renewal process (Mazzoli, Papadaki, & Ferrante, 2023). Participation in the design, decision-making, and implementation of projects fosters a sense of ownership and belonging, thereby enhancing sustainability and social resilience (Kim, Park, & Lee, 2021). This approach not only helps improve the technical outcomes of the project, but also increases its acceptability and effectiveness (Cysek-Pawlak, Krzysztofik, & Makowski, 2022). In addition, multidisciplinary and integrated approaches to urban development and renewal allow for the development of strategies that are aligned with the specific needs of each community (Kim & Jung, 2021). These approaches emphasize the integration of different skills, knowledge, and perspectives to provide the best operational and strategic solutions for promoting social sustainability (Kosunen & At-

kova, 2022). In summary, urban renewal models based on the concept of social sustainability and resilience demonstrate that urban development is not only about repairing and renovating physical spaces, but also about building and strengthening social infrastructure (Hwang, Schuetze, & Amoroso, 2020). This approach is key to achieving resilient and sustainable metropolises. This article then examines in more detail what urban regeneration is, how to promote social resilience in interdisciplinary projects, and their role in improving social resilience in urban spaces (Natividade-Jesus et al., 2019). The aim is to provide practical and strategic solutions for developing more resilient and stable cities that can withstand crises and change.

## **MATERIALS AND METHODS**

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### *What is urban regeneration?*

Urban regeneration is the process of modifying, renovating, and restructuring spaces with the aim of improving the quality of life and promoting the efficiency and sustainability of urban areas (Ciesiółka & Maćkiewicz, 2022). This concept includes a set of activities that are used to restore old spaces, create new infrastructure, strengthen the economy and society, and correct infrastructure problems (De Paula, Marques, & Gonçalves, 2023). Regeneration mainly focuses on changes in dead, unstable, and damaged spaces and aims to create better, healthier, and more resilient urban environments (Fard & Doratli, 2022). In this process, special attention to community needs, preserving local identity, and adapting to sustainable developments are of fundamental importance (Nakajima & Murayama, 2024). In the regeneration process, the role of urban design, participatory planning, and multi-stakeholder project management becomes important (Capolongo et al., 2019). This process includes redesigning public spaces, restoring historic buildings, improving traffic networks, and developing cultural and social facilities (Hosseini et al., 2024). The ultimate goal is to create a space that meets economic, social, and environmental needs and increases

the quality of life of residents (Li et al., 2025). Also, new technologies such as the Internet of Things and GIS play a role in improving the decision-making process and monitoring of regeneration projects (Kara & Iranmanesh, 2022). As a result, urban regeneration is a multidimensional process that requires interdisciplinary, cultural, and economic collaboration (Masood & Russo, 2023). In addition to aesthetic and technical aspects, attention to social and economic aspects is of particular importance in the development of regeneration projects (Wang et al., 2022). Its goal is to reduce inequalities, strengthen equal opportunities, and stabilize local communities. Therefore, comprehensive and participatory approaches play a key role in the success of these projects (Van Den Hurk & Taşan-Kok, 2020). Ultimately, urban regeneration should be a flexible process, aligned with the needs of the community and the capacities of the city.

### *Urban Regeneration History*

The history of urban regeneration dates back to the Middle Ages, when early developments were made to repair and renovate damaged cities (Zhang & Gu, 2025). In the 19th century, with the onset of industrialization, environmental and demographic crises, the need to renovate and rehabilitate vulnerable areas became more felt (H.Pasha & Eyup, 2024). During this period, short-term projects focused on visual changes gave way to longer-term and more comprehensive approaches (Li, 2020). In the following decades, concepts such as renovation, reconstruction and sustainable development developed and gained an important role in urban policy-making. In the 1960s and 1970s, with the development of new urbanism theories, discussions of renovation and demolition were linked to approaches based on social participation (Liu et al., 2023). During this period, large-scale regeneration projects were implemented to address rural migration and economic problems (Chondrogianni & Stephanedes, 2022). These models gradually changed in response to the problems of urban development theories, with greater attention

being paid to sustainable development and political and social sustainability (Park, Kang, & Shin, 2025). In the 1980s and 1990s, the rise of education and a greater recognition of the role of community and culture transformed regeneration methods (Ujaque et al., 2021). During the 21st century, with the development of new technologies, concepts such as smart, resilient and flexible cities entered the regeneration arena (LopezdeAsiain & Díaz-Garcia, 2020). Multiple scenarios of crisis management, green economy and resilient cities became major topics in global policymaking (Khayami & Fakhri, 2019). At the same time, attention to social justice and the active participation of local communities were raised as key elements in regeneration projects. Currently, new approaches are moving towards integrating technology, sustainable development and social justice to provide more comprehensive and sensible solutions (Figueiredo, Prim, & Dandolini, 2021). Finally, the historical trajectory of urban regeneration shows that this field has always been transformed and continues to develop in direct relation to technological developments, scientific theories and societal needs (Mykhnenko, 2023). Having a critical and flexible perspective is the key to success in the future paths of this field. Historical approaches provide a deeper understanding of old challenges and effective solutions for the continuation of sustainable development in the future (Boussaa et al., 2023). In the last decade, the concept of urban resilience has grown significantly as one of the most widely used concepts in urban planning and development (Coletta et al., 2024). A resilient city is a city that is able to remain flexible in the face of natural, technological, social, and economic hazards and quickly return to normal after a crisis (Mazzoli, Papadaki, & Ferrante, 2023). Sustainable development, social solidarity, and infrastructure improvement are among the key elements in strengthening resilience. At the same time, the increase in natural hazards such as floods, earthquakes, and climate change has doubled the need for planning with a resilience approach (Kim & Jung, 2021).

Globally, urban policies have moved towards combining resilience and resilience criteria. Cities such as New York, Singapore, and Sydney are prominent examples of resilience by adopting resilience policies, long-term plans, and technology development (Kosunen & Atkova, 2022). In addition, these strategies include discussions on reforming urban structures, designing public spaces, and creating resilient communication networks. At the same time, new technologies such as the Internet of Things, big data analytics, and smart cities have helped shape data-driven strategies (De Paula, Marques, & Gonçalves, 2023). These technologies have made it possible to predict crises, improve incident management, and assess the level of city resilience. At the national level, countries are developing and implementing policies to promote resilience. Examples such as disaster management planning, water resource management plans and sustainable transport development are an important part of these policies (Capolongo et al., 2019). The reality is that resilience cycles should be applied at all stages of urban development, not only in the face of major crises, but also in everyday operations. Also, developing a culture of awareness and educating citizens about protection and coping with crises plays a key role in realizing resilient cities (Li et al., 2025). In general, strengthening social participation, improving infrastructure and utilizing technology are all important infrastructures in today's urban resilience policies. In addition, the issue of social justice and equal access is of great importance in the development of resilient cities (Masood & Russo, 2023). Studies show that economic, cultural and social inequalities can reduce a city's resilience to. Therefore, new approaches emphasize focusing on vulnerable and hard-working communities to ensure equity and sustainability (Van Den Hurk & Taan-Kok, 2020). Finally, interdisciplinary cooperation, overcoming political, economic and cultural challenges, is the key to achieving resilient and resilient cities in the future (H.Pasha & Eyup,

2024). A deeper understanding of current trends helps policymakers and citizens to better cope with future events and ensure sustainable development (Chondrogianni & Stephanedes, 2022).

#### *Urban Regeneration Approaches*

The engineering and technical approach is one of the oldest and most common regeneration approaches that focuses on modifying and renovating existing infrastructure and buildings (Park, Kang, & Shin, 2025). This approach is mainly aimed at improving the efficiency, safety, and aesthetics of structures, redesigning traffic networks, and improving urban service systems (Jin & Shao, 2024). In this direction, the emphasis is on modern engineering technologies, construction supervision, and compliance with international standards (Khaldi, 2018). Meanwhile, this approach focuses more on the appearance and technical aspects and may be less concerned with social and economic aspects. The economic approach focuses on developing economic activities and attracting investment (Yao et al., 2021). This approach focuses on improving and stimulating the regional economy, creating jobs, and making better use of the economic opportunities of neighborhoods. For example, the development of commercial centers, workshops, and local markets fits into this approach, which helps to improve the economic situation of residents (Chen, Liu, & Zhuang, 2023). Also, fiscal policies and government incentives play a key role in attracting capital and facilitating the regeneration process. In this approach, it should be noted that economic development must be aligned with other dimensions of development to prevent the creation of new inequalities (Said & Dindar, 2024). The cultural and identity approach emphasizes the preservation and promotion of the unique cultural characteristics, history, and identity of regions (Boussaa et al., 2023). This approach believes that regeneration should be consistent with the values, traditional architecture, and cultural characteristics of the region to strengthen the sense of belonging and

local identity (Coletta et al., 2024). In this regard, preserving historical monuments, promoting local arts, and creating cultural and recreational spaces are the main elements of this approach (Kim, Park, & Lee, 2021). On the other hand, this approach plays an important role in promoting a sense of belonging and social trust (Kosunen & Atkova, 2022). As a result, preserving cultural heritage plays a key role in the success of regeneration and can positively affect the identity of the region (Natividade-Jesus et al., 2019). The environmental approach emphasizes the development of green cities, reducing resource consumption, and improving energy efficiency. This approach seeks to create green spaces, improve waste management systems, and design sustainable buildings (Ciesiółka & Maćkiewicz, 2022). Technologies such as low-energy buildings, new irrigation methods, and the development of clean transportation systems are used in this approach (Fard & Doratli, 2022). The aim of these measures is to reduce negative impacts on the environment, reduce operating costs and improve the quality of life in growing cities (Kara & Iranmanesh, 2022). Therefore, the environmental approach plays an important role in sustainable and resilient urban development and should be integrated with other approaches to improve not only the space but also the quality of life (Wang et al., 2022). Finally, the social approach, which will be examined below, emphasizes active citizen participation, social justice, and strengthening local institutions (Zhang & Gu, 2025).

This approach believes that regeneration can only achieve effective and sustainable results with the cooperation and participation of the people (Li, 2020). The social approach in the urban regeneration process emphasizes active community participation and strengthening local institutions (Liu et al., 2023). This approach believes that the success of regeneration projects is achieved when residents actively participate in the decision-making and implementation process of projects (Ujaque et al., 2021). In this case, they gain a greater sense of ownership and

belonging to new spaces, which leads to better sustainability and acceptance of projects (Khamyami & Fakhri, 2019). In addition, social justice and fair distribution of benefits is another important goal observed in this approach, so that disadvantaged and vulnerable communities can benefit from the benefits of regeneration (Mykhnenko, 2023). One of the main models in the social approach is the participatory model, which emphasizes the cooperation and direct participation of citizens in the process of project design and implementation (Coletta et al., 2024). This model changes the decision-making process from a centralized and controlling mode to a participatory one, where the role of government institutions and experts is facilitating and guiding (Kosunen & Atkova, 2022). In this model, holding public meetings, interactive workshops, and forming local councils are the main tools that facilitate community participation in regeneration processes (Capolongo et al., 2019). Another model used in the community approach is the social justice model. This model emphasizes the focus on the equitable distribution of resources, opportunities, and services at the local level (H.Pasha & Eyup, 2024). Its goal is to reduce economic and social inequalities, and ensure equal access to facilities. For example, in this model, the allocation of financial and infrastructure resources among residents of vulnerable areas ensures justice and equality and creates a balance in the distribution of benefits and opportunities (Jin & Shao, 2024).

The third model is the experiential-promotional model that emphasizes collective learning. In this approach, holding discussion-based meetings and collective activities provide opportunities for the exchange of local experiences and knowledge among residents, managers, and experts (Khaldi, 2018). In this process, it is important that the experiences and opinions of the community are documented and taken into account in future planning (Said & Dindar, 2024). In addition to creating mutual understanding, this model aims to build trust and strengthen social solidarity, which ultimately

leads to more sustainable and effective development (Coletta et al., 2024). The fourth model is the social capacity-building model, which focuses on strengthening the skills, resources, and social relationships among residents. This approach attempts to empower local individuals and institutions to actively participate in the management and maintenance of urban spaces (Natividade-Jesus et al., 2019). For example, citizenship education programs, the creation of local hubs, and management skills training are key tools of this model (Fard & Doratli, 2022). This approach plays a key role in the maintenance and sustainability of projects, as local forces are actively and continuously involved (Kara & Iranmanesh, 2022). Ultimately, the most important goal of the social approach is to achieve sustainable development that, in addition to technical and economic aspects, also gives importance to human and social. This approach provides opportunities for participation, strengthens citizen trust, and creates a sense of place, and serves as a common axis between other regeneration approaches (Li, 2020). (Figure 1)

#### *Research Methodology*

In this study, focusing on a new approach to urban regeneration, we try to explain the model of promoting social resilience through incremental projects. The main goal of this study is to provide an operational framework that strengthens social capabilities during the regeneration process and its implementation solutions are based on scientific and empirical evidence. Based on current theoretical and operational theories and reliable data, this model tries to identify the key role of organizations, social groups and policy-makers in the urban development process. The challenges in this area require careful examination and comprehensive analysis in order to provide appropriate operational solutions for improving social resilience in incremental projects. In the following, a review of the theoretical foundations and research methods is presented that will help to better understand the related concepts and approaches.



Figure 1: Right image: Rio Madrid Urban Regeneration Project, 2010 Left image: Cheonggyecheon Project, SeoAhn South Korea, 2005

Table 1: Urban regeneration theories with the approach of promoting social resilience

Theorist	Year	Book /Article	Explanation of Theory	Main Concepts
Jane Jacobs	1961	The Death and Life of Great American Cities	The importance of community, diversity, and social sustainability in urban renewal	Diversity, local community, durability
Michel Foucault	1975	Discipline and Punish	Theory of power and urban/ social space	Power, institutions, urban space
Pierre Bourdieu	1979	Distinction	Social fields and social capital	Social capital, fields, sustainability
Peter Hall	1996	Cities in Civilization	Sustainable development and city design	Sustainable development, urban design, resilience
Paul Hogget	1996	Urban Regeneration and Social Resilience	Social development and regeneration	Renewal, social development, resilience
William O'Neill	2004	Community Resilience	The role of local communities in resistance against crises	Resistance, local community, crises
Susan Fainstein	2000	The Just City	Justice and equality in renewal	Justice, renewal, equality
Saskia Sassen	2001	The Global City	Globalization and resistance in world cities	Globalization, resistance, city
Elizabeth Plater-Zyberk	2002	Suburban Nation	Green development and resilient architecture	Green development, architecture, resilience
Michael Jackson	2003	Resilient Communities	Models for resilient communities	Resistance, community, sustainability
Richard Sennett	2004	The Conscience of the Eye	Urban space and social identity	Identity, space, social cohesion
Michael Mehaffy	2012	Cities Alive	The role of landscape and urban design in resilience	Landscape, sustainability, resilience
Cynthia Rosenzweig	2015	Climate-Resilient Cities	Impacts of climate change and adaptation strategies	Climate change, adaptation, sustainability
Jonas Bylund	2014	Urban Resilience	Innovative approaches to resilient renewal	Innovation, resilience, renewal
David Satterthwaite	2007	The Environmental Poverty Trap	The relationship between poverty, instability, and resistance	Poverty, instability, social justice
Keith Barrett	2006	Urban Regeneration and Social Resilience	Strategies for resilient renewal	Strategy, resilience, renewal
Arturo Escobar	2011	Encountering Development	Sustainable development and cultural roles in resilience	Development, culture, resilience
Saskia Sassen	2001	The Global City	Globalization and resistance in world cities	Globalization, resistance, city
Michael Jackson	2003	Resilient Communities	Models for resilient communities	Resistance, community, sustainability

**Table 2:** Dimensions, components, criteria, sub-criteria, and related explanations for studying the approach to promoting social resilience in urban regeneration

Dimensions	Components	Criteria	Sub-criteria	Explanation of each sub-criterion
Social	Partnership and Solidarity	Community participation	Number of volunteer groups, public meetings, satisfaction rate	Amount of voluntary activities and residents' satisfaction with participation in urban processes
		Social trust	Trust index, level of cooperation	Level of trust among residents and level of cooperation in carrying out collective activities
	Local Institutions	Civil institution capacity building	Number of active local institutions, trainings held	Number and activities of local institutions and their level of empowerment
	Social Networks	Number and quality of communication networks	Number of local relationships, level of communication between groups	Diversity and quality of relationships and interactions among residents
		Neighborhood relations	Indicators of neighborhood support and mutual care	Amount of mutual support and care among residents in critical situations
Economic	Job Opportunities and Income	Employment level	Unemployment rate, level of job opportunities	Percentage of unemployment and employment opportunities for vulnerable groups
		Economic ability of families	Average income, access to financial services	Income level, and access to local banks and credit
	Local Investment	Amount of investment in social projects	Number of local projects, level of budget attracted	Local investment activities in resistance and development projects
Physical	Capacity of Facilities	Educational and health facilities	Number of educational centers, hospitals	Amount of development and access to educational and health facilities
		Public spaces	Parks, squares	Quality and level of access to public spaces providing social interactions
	Critical Infrastructure	Transportation systems	Communication routes, public transportation	Fast and safe communication between key points in the region
Cultural	Identity and Heritage	Preservation of cultural heritage	Number of historical monuments, cultural activities	Level of preservation and exploitation of the region's cultural heritage
	Cultural Values	Cultural and traditional activities	Festivals, exhibitions	Amount of presence and importance of cultural activities in the community
	Education and Training	Cultural education programs	Cultural workshops, training courses	Level of participation in educational and cultural awareness programs
Health and Well-being	Health Services	Access and quality of services	Number of health centers, satisfaction	Amount of residents' access to and satisfaction with health services
	Housing and Renovation	Housing conditions	Percentage of dilapidated structures, level of renovation carried out	Level of improvement and renovation of dilapidated housing and reduction of fragility and instability
	Quality of Life	Mental health and well-being indicators	Satisfaction rate, mental health indicators	Level of satisfaction with life and mental health in the region

## **FINDINGS AND DISCUSSION**

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### *Projects discussed in urban regeneration*

*Projects discussed in urban regeneration often include a set of measures aimed at improving the quality and efficiency of urban spaces and improving the standard of living of residents. These projects may include the renovation of dilapidated buildings, the restoration of historic structures, the development of transport infrastructure and the improvement of service networks. The renovation of dilapidated buildings is carried out to increase safety, reduce energy consumption and improve the appearance of the city and plays an important role in improving the health and well-being of the community. The restoration of historic structures, while preserving the cultural identity of the region, creates new tourism and economic opportunities and helps to strengthen cultural belonging and local identity. The development of infrastructure such as transport networks and public services allows for easy access and equity in the distribution of facilities and therefore plays a significant role in the sustainability and durability of the city. In addition, projects implemented in the field of public spaces and parks are of great importance for creating places for social gathering and interaction. Green spaces and parks are powerful tools for increasing the quality of life, reducing the effects of climate change, and increasing social resilience. These projects, especially in high-density neighborhoods, play a vital role in improving mental health and promoting a sense of community. Also, the renovation and improvement of streets and passages not only increases the efficiency of traffic and transportation, but also improves the safety and beauty of urban spaces. All these projects must be designed and implemented based on the real needs of the community to be effective and sustainable. In the area of economic development, projects to create small and medium-sized business centers, service centers, and local markets are important drivers for creating employment and stimulating local turnover. These projects provide the necessary platform for developing internal capacities and economic empowerment of residents. In addition, technology and digital infrastructure development projects are essential tools for smartening and improving the flow of information in the city, which increases the efficiency of urban management and improves the*

*quality of services. Focusing on projects related to the revitalization of old neighborhoods and textures, in addition to preserving cultural heritage, creates new investment and economic development opportunities that are in line with urban sustainability policies. Finally, infill projects are of particular importance in the urban regeneration process and act as transition and connection centers between residential spaces and critical infrastructure. These projects include the development of new neighborhoods, sites tailored to local needs, and multipurpose spaces that help balance development, identity preservation, and social justice. Infill projects are usually implemented in small and medium-sized plots, which allow for high flexibility and responsiveness to the changing needs of society. These projects can play an important role in creating sustainability and resilience in urban environments and serve as a bridge between large development projects and the daily needs of residents.*

The approach to promoting social resilience in urban regeneration in in-fill projects focuses on strengthening interactions and social trust so that local communities can be more resilient to crises and changes. This approach emphasizes the importance of the active participation of citizens, local institutions and civil society activists in the design and implementation of projects to strengthen the sense of ownership and belonging to new spaces. In in-fill projects, specific strategies for social resilience are designed, taking into account popular capacities and local facilities, so that different populations can actively participate in decision-making processes. This approach plays a vital role, especially in areas with cultural and economic diversity, as it helps to strengthen internal solidarity and reduce social inequalities. The implementation of cultural programs, education and collective activities in open and public spaces increases mutual trust and paves the way for more sustainable and resilient development.

Urban regeneration models with the approach of promoting social resilience in inter-urban projects have not yet been comprehensively and independently documented, but it is possible to design effective theoretical models and strategies for developing this approach

based on existing principles and concepts. In the following, examples of conceptual models and approaches based on different theories for this area are presented, which can be the basis for future explanations. One of the proposed models is the “participatory-transformational model”, which is based on the theories of citizen participation and community empowerment. In this model, decision-making and implementation processes are strongly based on the active participation of residents, civil society organizations and local stakeholders. Its goal is to create a sense of ownership and trust in the community, which is strengthened through the formation of local networks, educational workshops and cultural activities. This model emphasizes the role of multi-purpose public spaces and digital spaces in facilitating participation and believes that pooling resources and empowering different groups will increase the region’s resilience to crises. Another model that can be effective in this area is the “Networks of Solidarity and Trust Model,” which is based on social theories and the concept of collective identity. Here, the focus is on developing local networks, strengthening social trust, and reducing cultural and economic gaps. Activities such as holding cultural events, local dialogue spaces, and joint economic projects make communities more empathetic and resilient to crises. This model emphasizes the role of public spaces and technological infrastructures in facilitating interaction and facilitating the transfer of information.

A preliminary theoretical model can be drawn based on the following concepts and principles:

- Analyzing the social and cultural needs of the neighborhood: Identifying the social and cultural risks, strengths, and weaknesses of the area.
- Designing public spaces and multipurpose communication infrastructures: Developing user-centered and flexible spaces that can be used in times of crisis and for everyday activities.

- Strengthening participatory processes and social education: Holding workshops, dialogue sessions, and social skills training.
- Creating and expanding local networks and communication technologies: To facilitate interaction and information sharing.
- Continuous evaluation and feedback: To refine and improve implementation processes based on practical experiences.

Consequently, it should be noted that the development of comprehensive models requires field and empirical studies and should be designed and implemented based on the specific needs of each region and with the active participation of residents. These approaches not only promote social resilience, but also help increase the stability and adaptability of urban areas in the face of crises. In the discussion and conclusion section, we can emphasize the importance of developing and promoting these types of models and suggest that developing and evaluating practical examples of these approaches can be an effective guide for urban managers in the future. The following is a conceptual framework table for an urban regeneration model with an approach to promoting social resilience in incremental projects. This table identifies the key elements, connections, and processes required to design and implement the model:

## **RESULTS AND CONCLUSION**

In this study, a comprehensive and operational model for urban regeneration with an approach to promoting social resilience in inter-agency projects was presented. The results indicate that the development and implementation of such a model can play an effective role in strengthening the sustainability and resistance of urban areas in the face of multiple crises and challenges. This model is designed based on the active participation of residents, strengthening social trust and solidarity, and utilizing new technologies, in a way that can meet the specific needs of each region and pave the way for resilient and sustainable urban development. One of the main achievements of this study is the identification

*Table 3: the key elements, connections, and processes required to design and implement the model*

Key components	Subcomponents	Description	Role in the model
Social needs and strengths	Social analysis of the region	Identifying social problems and opportunities in the region	Based on initial knowledge and planning
	Human and cultural resource assessment	Investigating local capacities in the field of human and cultural resources	Utilizing local assets
	Hazard and vulnerability analysis	Identifying potential weaknesses and risks	Designing coping and resilience strategies
Multipurpose public spaces	Development of parks and green spaces	Active and responsive spaces for crowdsourcing and cultural activities	Improving quality of life and social interaction
	Design of local markets and small business spaces	Strengthening the local economy and creating opportunities for small businesses	Facilitating local employment and investment
	Cultural and social spaces	Venues for cultural and social events	Creating a sense of belonging and local identity
Participatory processes and education	Educational and capacity-building programs	Training in life skills, leadership, and crisis management	Empowering communities to cope with crises
	Conducting dialogue workshops and local engagements	Strengthening communication and conflict resolution skills	Reducing conflicts and strengthening social solidarity
	Participatory decision-making processes	Active participation of residents in design and implementation	Sense of ownership and project sustainability
Solidity and trust networks	Developing local relations and social solidarity	Holding collective events and joint activities	Increasing trust and solidarity in the region
	Collective memory and cultural identity	Strengthening a sense of shared identity and cultural values in the region	Resilience to cultural and social crises
	Building an atmosphere of trust and confidence	Creating areas of trust between different groups	Strengthening social security and regional resilience
Information and communication technologies	Digital communication and messaging systems	Using technologies for rapid information dissemination and dissemination	Facilitating information transfer and coordination in crises
	Crisis management and local warning systems	Developing early warning and crisis management systems	Reducing the effects of sudden crises
	Virtual platforms for participation and dialogue	Online space for collective discussion and decision-making	Increasing access and broader participation
Continuous evaluation and feedback	Social resilience and sustainability indicators	Criteria for measuring the region's ability to deal with crises	Continuous improvement and policy reform
	Project impact assessment processes	Continuous monitoring and evaluation of activities carried out	Ensuring project sustainability and efficiency
	Collecting local feedback and refining the model	Receiving residents' opinions and experiences	Updating and improving programs

Figure 2: an urban regeneration model with an approach to promoting social resilience in incremental projects

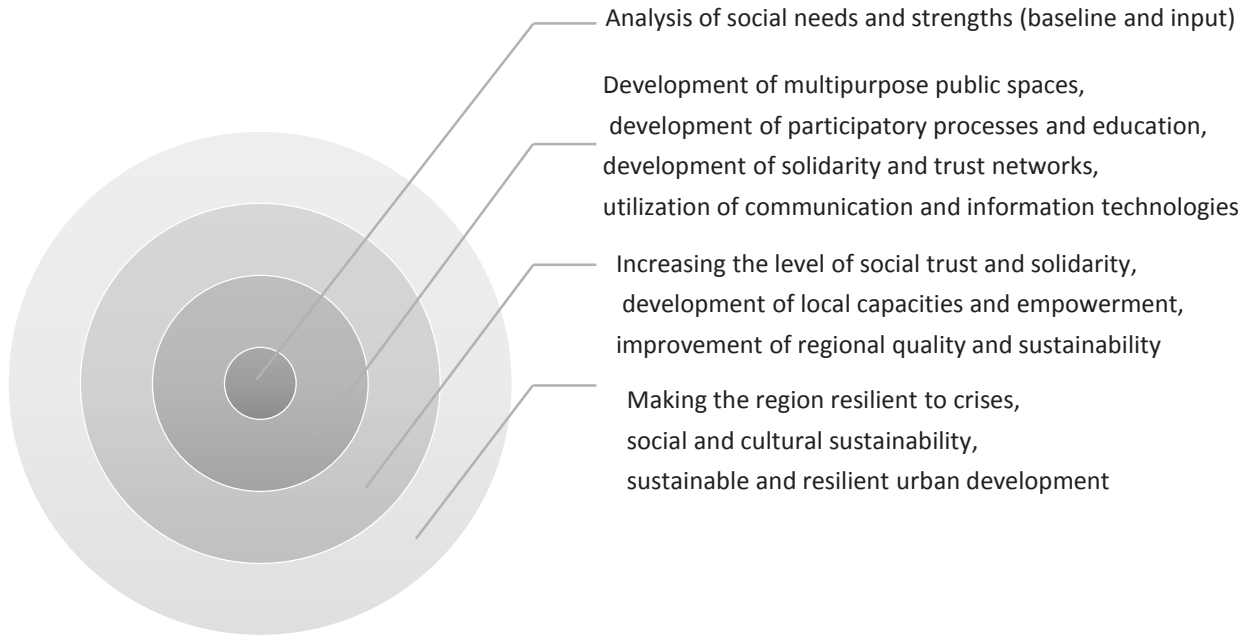
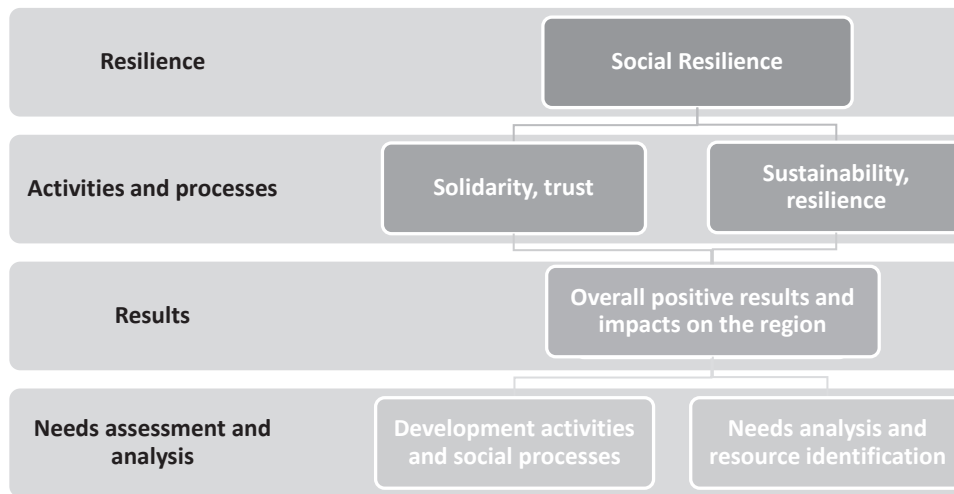


Figure 3: Graphical model of urban regeneration with the approach of promoting social resilience in incremental projects



of key components that can be used as main elements in urban regeneration processes. These components include social and cultural needs, multipurpose public spaces, participatory processes, trust networks, and communication technologies. In fact, integrating these elements

and designing related solutions can pave the way for improving the quality of life, increasing social security, and strengthening cultural identity in neighborhoods and urban areas. In addition, research has shown that active collaboration between government agencies, the private sector,

and local residents plays a crucial role in the successful implementation of this model. At a practical level, the results of this study show that the use of multipurpose public spaces, planning for the development of cultural and social activities, and the use of communication technologies can play an important role in enhancing the level of interaction and solidarity among citizens. These factors increase the sense of belonging and belonging among residents and, as a result, strengthen the region's resilience to natural, economic, or social crises. In addition, the design of early warning systems, crisis management, and effective communication systems can increase the effectiveness of measures and facilitate the response and recovery process after crises.

Continuous evaluations and feedback from residents and stakeholders are the basis for continuous modification and improvement of the model. This ensures the sustainability and adaptation of urban areas to the changing needs of the population and environmental conditions. The development of resilience and social resilience indicators are valuable tools for assessing the effectiveness of actions and providing incentives for continuous improvement of processes in the future. Applying this approach at the national and local levels can contribute to smart policymaking, effective planning, and better resource management. Finally, this study emphasizes the importance of designing and implementing urban regeneration programs with a comprehensive and participatory approach. Developing scalable, flexible, and field-based models requires collaboration between different institutions and active community participation. In the future, the next steps should focus on testing and implementing this model in different regions to assess its effectiveness and efficiency at different scales. Given the importance and necessity of resilient cities, strengthening and promoting such approaches can facilitate the path of sustainable development and resilience in developing and developed countries, and based on this, a resilient and sustainable future can be drawn for cities around the world.

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