

FOSTERING COMMUNITY: REIMAGINING NEIGHBOURHOOD DESIGN FOR SOCIAL CAPITAL IN DHA ISLAMABAD

Reema Shaukat Khan^{*1}, Uzma Kabir², Amna Naveed³

^{*1,2,3} Assistant Professor, Department of Architecture and Design, COMSATS University Islamabad, Islamabad, Pakistan.

^{*1}reema_abbassi87@comsats.edu.pk

DOI: <https://doi.org/10.5281/zenodo.23051895>

Keywords

Social Capital Resilient Communities Inclusivity Sustainable Neighbourhood Design Inclusive Cities SDG 11 DHA Islamabad Vibrant Spaces Community Gardens

Article History

Received: 01 June 2026

Accepted: 23 August 2026

Published: 30 September 2026

Copyright @Author

Corresponding Author: *

Reema Shaukat Khan

Abstract

The accelerated pace of urbanisation and the transformation of urban space structure have captured academic attention in enhancing the spatial structure of the urban community and overall living conditions. The neighbourhood design is critical as modern cities are developing and helps to strengthen social integration and enhance the quality of life of residents. It is critical in community identity development, inclusiveness, as well as resilience. This qualitative research paper examines the ways in which the neighbourhood design of Defence Housing Authority (DHA) Islamabad can be redesigned to promote social capital, promote resilience and inclusiveness, and align with the Sustainable Development Goal 11 (SDG 11) that creates inclusive, safe, resilient and sustainable cities. DHA Islamabad is reputed to have a well-developed infrastructure, planned design, and safe suburban living. However, despite these benefits, it frequently does not possess naturally attained communal bonds, dynamic street life, and available shared areas that conventionally contribute to community integration. This study is a critical analysis of the spatial, social and environmental dynamics of DHA Islamabad using field observations, semi-structured interviews, and planning document reviews. The study examines the existence of pedestrian walks, parks, gardens, and unofficial meeting places in relation to social conduct. It also considers possibilities of design intervention like urban agriculture, mixed-use street spaces and reuse of space to enhance the resilience of the neighbourhoods. The research results suggest that DHA provides a high-quality private lifestyle, but its urban form is auto-oriented and privatised, which restricts normal social life and fair access to common space. The key elements, including shared courtyards, walking streets and multi-purpose green spaces, are insignificant or inappropriate to children, the elderly and vulnerable groups. The paper suggests that the strategy be planned around the principles of inclusive mobility, ecological stewardship, and community-based design. It suggests a combination of a sustainable, socially cohesive neighbourhood concept to build more inclusive, resilient, and socially connected urban communities.

INTRODUCTION

The conventional idea of neighbourhoods is being radically redefined in the context of accelerated urbanisation and the new forms of work relationships. Cities across the world, and specifically in the Global South, are being rapidly transformed by urbanisation in both their physical and social aspects. Although urban growth has advantages of infrastructure development and economic growth, it can be a source of collective fragmentation and privatised space and social alienation. The rapid rate of urbanisation and the changing form of the city spaces in urban communities have spawned a growing scholarly concern about how to better organise the spatial arrangement of the communities and to better the quality of the living environment. With the ongoing development of urban areas as the modern city, the neighbourhood design becomes the key to social integration and improvement of the living conditions in the neighbourhoods. The neighbourhood design has a central role to play in influencing community identity, supporting inclusivity, and resiliency. The urban footprint is fast taking over the agricultural and ecologically desirable landscapes in Pakistan as the development of the private housing schemes rapidly eats up the ecological landscapes and alters the urban landscape considerably, causing the degradation of the environment. Islamabad and its surrounding areas have experienced increased urban growth in the past 20 years, with the invasion of massive areas of previously productive and relatively valuable environmentally friendly land by the urban development of private residential constructions. This stretch of development, stretching through Taxila in the northwest to Rawat in the southeast, has become a thick belt of privatised housing enclaves and represents a wider process of fragmented and discriminatory urban development. One of the most notable of these changes has been the Defence Housing Authority (DHA), which has led to redefining the urban landscape in Pakistan.

Specifically, DHA Islamabad has gone through several phases, where the proposed Phases 6 and 7 will cover an area of more than 20,000 acres that has been fertile and ecologically productive. The Capital Development Authority (CDA) estimates, and the Rawalpindi Development Authority (RDA) estimates that over 100 private housing societies have been formally approved in the Islamabad-Rawalpindi metropolitan area within the last 10 years. This has now been expanded to an area of more than 250,000 acres and is a major threat to the cultivable land of Pakistan, and is straining the local food systems (Khan, Imtiaz & Akram, 2022). The significance of such a land-use change is highlighted in such studies as those by Anwar and Qureshi (2020), which indicate that this transition has led to a decrease in food security, biodiversity, and an increase in climate vulnerability. The initial urban planning of Islamabad was an urban vision created by Greek architect-planner Constantinos A. Doxiadis in the 1960s, and it focused on sector-based city structure in which human settlements were evenly distributed between natural ecosystems. The plan had green buffers, accessible public areas and sector-level community facilities to encourage socialisation and ecological balance. This vision has, however, been mostly overshadowed by the present wave of market-based development. The current housing societies, which include DHA and Bahria Town as the leading ones, propagate a form of privatised, auto-dependent living, where land commodification is valued over the community and the environment.

The study specifically examines the DHA Islamabad since it has a symbolic and material eminence in the growth of cities in Pakistan. Though DHA projects, in contrast to thematic aesthetics and exclusive leisure facilities extensively used in Bahria Town, are directly associated with military planning facilities and are based on a state-approved model of elite sub-urbanism. The DHA model is an example of a low-density, tightly regulated, and exclusionary city

structure that poses significant concerns regarding the inclusiveness, ecological viability, and social capital.

The main idea in the study of social capital is that social capital, which can be defined as the networks of trust, shared norms and communal involvement to build cohesive and resilient societies. Social capital in urban design is not only an outcome but also a process of the spatial arrangement, availability, and design of the public realm. This study will use the works of Putnam (2000), Gehl (2010), and others in developing design interventions that could remodel the privatised suburban developments and transform them into social and inclusive neighbourhoods.

Recent empirical studies conducted by Guan and Wang (2023) confirm the fact that the layout and quality of the public space play a central role in the formation of community cohesion and social capital. Their cross-sectional analysis of 30 residential areas points to the direct impact of spatial accessibility, comfort of the facilities, and the perceived level of safety on the trust in the neighbourhood, civic activity, and the sense of belonging. This understanding offers an informative comparative perspective on evaluating the constraints of the urban structure of DHA Islamabad, which is, in most cases, narrow and irregular in public spaces, with its accommodation to the needs of residents.

Besides these indicators, the paper examines the topic of resilience and inclusiveness as planning priorities in accordance with Sustainable Development Goal 11 (SDG 11), which advocates inclusive, safe, resilient, and sustainable cities. In this context, resilience is the ability of neighbourhoods to adapt to both environmental and social shocks due to their design and the community structures. These are climatic responsiveness, multi-use enabling density, food and water autonomy, and place sense of place and

belonging. Inclusivity would include access to all areas of society, equal mobility and socioeconomic variety.

The strict zoning of DHA Islamabad, its low population density, and exclusive infrastructure prove to be significant holes in the implementation of such principles. Indicatively, green areas in newer stages are less than 10 per cent of the land area-very low compared to the 25-30 per cent suggested by the World Health Organisation. It is designed in such a way that vehicles are prioritised more than pedestrians, which has detached sidewalks, and there are no nodes of public transport. These materialistic qualities prevent socialisation and strengthen social separation.

Furthermore, the extension of DHA to ecologically sensitive areas, especially in Phases 6 and 7, endangers the local ecosystems and the natural drainage systems. The loss of native vegetation, transformation of agricultural lands, and the disappearance of natural water bodies not only reduce the biodiversity but also the resilience of the city to climatic disasters like heat waves and flash floods. A locational study of these phases shows that the ecological issue is not included in the planning systems, which conflicts with the environmental and social objectives of the national urban policy at large.

Thus, this study is a critique and proposal. It tries to comprehend the realities lived by people in DHA in terms of qualitative research using tools like field observation, interviews, and policy analysis and what can be practised to create community resilience and social capital. This scholarly endeavour eventually seeks to redefine such elite housing projects as DHA as possible areas of inclusive, sustainable, and rich urban futures.

Indicator Category	Specific Indicators	Description
Trust and Reciprocity	Informal interactions, mutual aid	Frequency of casual neighborly exchanges and willingness to help
Civic Engagement	Community events, resident groups	Participation in local governance or cultural activities
Sense of Belonging	Emotional attachment, shared identity	Residents' connection to place and cultural inclusion
Shared Spaces for Interaction	Parks, sidewalks, courtyards	Physical places enabling spontaneous or planned social encounters
Accessibility	Proximity to services, walkability	Ease of access to essential and leisure spaces
Inclusivity	Mixed-income housing, gender-safe design	Diversity and equality in public space use

Literature Review

Neighbourhood design as a predictor of social capital, resilience, and inclusivity has become one of the most popular subjects in the field of urban planning in the past 20 years. Social capital, especially, has been the focus of much scholarly research, including the work of Putnam (2000), who reiterates the importance of trust and civic engagement towards achieving cohesive communities. Putnam argued that the more people interact socially, whether via informal or formal means, the more trust and assistance they show towards others within the community and the strength of the society overall.

Built Environment and Social Capital

City planners (Gehl, 2010 and Jacobs, 1961) believe that physical space design has a tremendous impact on social activities. Gehl points out how the informal nature of interactions among people and their connection to the community were enhanced by human-scale spaces, in which spaces are visible and accessible to people, in his concept of life between buildings. In her masterpiece, *The Death and Life of Great*

American Cities, Jacobs condemned the superblock and zoning models, which separate residential life the urban life. They both reiterate the need to build social cohesion using common spaces such as courtyards, sidewalks, and plazas.

The frameworks of Guan and Wang (2023) suggest a highly sophisticated empirical model of the influence of the public space on various aspects of social capital. They recognise six dimensions, which are social cohesion, sense of belonging, social participation, social networks, social interaction, and neighbourhood relationships. They are affected by the spatial (enclosure, accessibility), facility (comfort, abundance), and social factors (security, cleanliness, traffic control).

Indicators and Frameworks

In the table given in the Introduction, the fundamental indicators of social capital that repeat in empirical studies have been outlined. These are informal communication, civic life, feelings of belonging and common spaces. Other researchers like Forrest and Kearns (2001) and Wood and Giles-Corti (2008) have also used the

same metrics in their research on correlating spatial design with community health and cohesion. More recent research (e.g., Lewicka, 2011) also includes place attachment and emotional attachment to the neighbourhood as important in long-term investment in the community.

Urban Density and Resilience

Compact development, ecological responsiveness and adaptive infrastructure are commonly associated with resilience in the urban environment. According to Norris et al. (2008), resilience in a community is the capacity to counter stress and preserve its fundamental operations. This is included in the urban planning through green infrastructure, pedestrianisation of the neighbourhood, and self-sufficiency with urban agriculture, water saving, and localised energy systems.

DHA and Bahria Town are residential communities in Pakistan that do not fit these requirements. Lower density sprawl at DHA compares with the modern-day planning literature where high density is the claimed way to decrease vehicular dependency, lower the per-capita emissions, and make the public transit viable (Calthorpe, 2011). Additionally, the schemes of new urbanism and eco-urbanism developed by such scholars as Beatley (2011) suggest the networks of green spaces and social spaces to be interconnected to encourage resilience.

Livable Neighbourhoods and Inclusivity

Neighbourhood planning inclusivity provides equitable distribution of the public space and other urban amenities among all population groups. According to Carmona et al. (2010), inclusive urban design considers spatial justice by reducing gender, age and income inequalities in using the public spaces. This is confirmed by the global report on urbanisation (UN-Habitat, 2016), which has clearly attributed spatial inclusion to social and economic opportunity.

DHA developments usually do not meet these goals. They restrict socioeconomic diversity

through their strict zoning, exclusivity and unavailability of affordable housing. In addition, their design often fails to consider the presence of pedestrian facilities, and this disproportionately impacts the vulnerable groups, such as children, the aged, and low-income employees. Litman (2011) regards inclusive mobility as more than transport planning but also incorporates walkable streetscapes and access to basic amenities.

According to studies conducted by Guan and Wang (2023), socially cohesive and participative results are achieved through spaces that are diversified in their use by people, enclosed in space, and accessible to everyone. Indicatively, closed and sterile social areas were observed to have a tremendous effect in promoting unplanned socialisation and enhancing the community feeling. This fact is going a long way in supporting the criticism of DHA Islamabad, where social integration is lost due to under-programmed green spaces and fenced community areas.

The research also suggests the strategy of optimisation of public space based on the principles of diversification, humanisation, inclusiveness, and appropriateness. These are in line with this paper promoting the idea of community gardens, walkable areas, and inclusive parks, which promote equity and community life resiliency in residential areas.

Comparative Critique: DHA vs. Bahria Town

Bahria Town and DHA are both market-oriented gated suburban developments and target the higher-income groups. The thematic approach taken by Bahria tends to create aestheticised, yet socially sterile, environments in which the social space is either turned into a commercialised space or closed to the population. DHA is an institution that is managed by the army, and it focuses on order and exclusion, rather than integration. Although the two developments have flaws, DHA has more land that is under its control, and it has the official legitimacy that qualifies it as a more important topic of reform-oriented discourse. The consequence of both models failing to integrate ecological and social systems in their planning

processes is not only on the livability but also on the sustainability of the urban setting in the long run.

Gaps in Planning Policy

The urban planning administrative system of Pakistan continues to assign the value of plot allocation and real estate value to the value of environmental stability and social capital. A lack of participatory design processes, inadequate green infrastructure, and exclusion of the informal community networks are some of the indicators of how municipal planning frameworks are not linked to the SDG 11 targets. An assessment of national and local urban policies reveals that there is no binding policy that requires inclusive, climate-responsive, or socially integrative planning policies.

The Case for DHA Reform

Since it is a site of such magnitude of administration and symbolism, DHA Islamabad is the perfect site to illustrate how giant pieces of suburban developments in the past can be reconfigured to contribute to community viability and social capital. Based on the literature above, the report contends that the design emphasises the use of walkability, green corridors, mixed-use density and inclusive public space. These are not

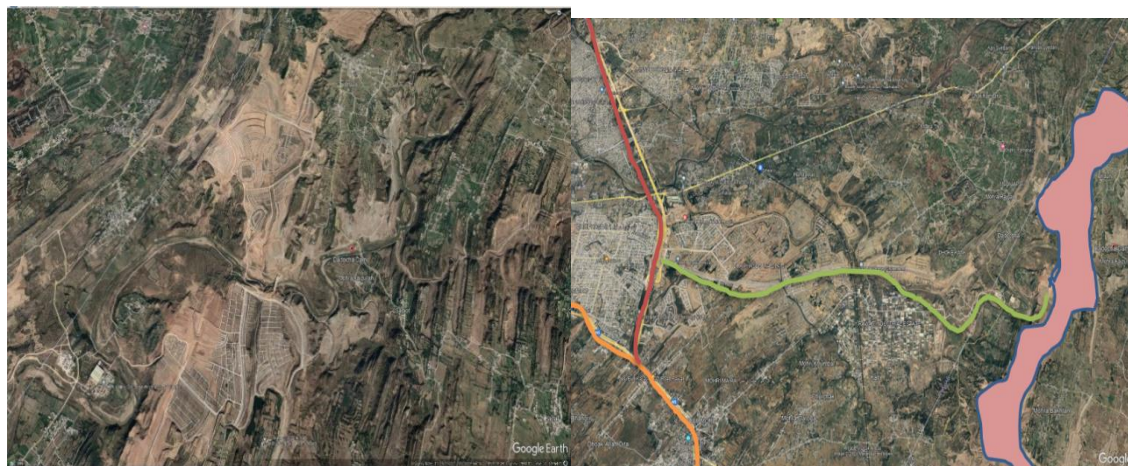
just the ideals of planning that are needed, but even the tools of survival in the city of climate uncertainty, social fragmentation, and resource scarcity.

Methodology

The study employs a qualitative, exploratory approach by using a case study to explore the built environment and social dynamics of DHA Islamabad. Data collection was conducted in a multi-method approach with the triangulation of the findings among the various categories of evidence. It concerned the study of the impact of neighbourhood design on social capital, resilience, and inclusivity based on lived experiences, spatial patterns, and planning models.

Study Area

The field of study was mainly comprised of DHA Islamabad Phases I, II and V because they were chosen based on their difference in age, density and urban morphology. These stages give an insight into the legacy planning as well as new growth within the structure of DHA. The phases of 6 and 7 were evaluated by planning documents and ground observation of nearby areas because they were recently developed or will soon be developed.



Data Collection Methods

Field Observations: The field observations took place in residential blocks, parks, markets, and roadways to measure the spatial accessibility, the quality of the shared space, and the green infrastructures and informal community practices.

Semi-structured Interviews - 20 residents interviewed based on a purposive sampling strategy to have diversity in age, gender, income, and social role (e.g., homemakers, youth, service workers). The interviews were conducted to understand how the residents perceive their sense of belonging, mobility, perception of safety and inclusiveness, and perception of neighbouring.

Policy and Document Analysis: Consulted DHA master plans, bylaws, zoning regulations, and Pakistan National Sustainable Development Strategy and SDG 11 indicators of the chapters.

Photographic and Behavioural Mapping - Records of the use patterns in parks, sidewalks, and streets to learn how space design affects the behaviour and community-relatedness.

Analytical Framework

Interview transcripts, field notes and policy documents were synthesised by using thematic analysis. Emergency themes were grouped into three major dimensions:

- **Social Capital** - Signs of contact, reciprocity, common values and participation.
- **Resilience Spatial** - Responsiveness, ecological responsiveness and service density.

The accessibility of services, walkability, and fair distribution of space.

A comparative lens has been used to evaluate the difference between perceived realities and international standards or best practices in the sustainable development of the neighbourhood.

Limitations

The study is constrained by the scope and its use of qualitative techniques, which do not apply to all situations of DHA and to other cities in Pakistan. The dynamic quality of developments in real estate and the unavailability of official

planning information, especially in Phases 6 and 7, were a challenge as well.

Nevertheless, despite these shortcomings, the research methodology helped to gain some profound understanding of the interplay between physical and regulatory structures and community experience in DHA Islamabad. The results shed light on the structural inefficiencies and unutilized reforms.

Results

Disconnection Regardless of Infrastructure

It was observed and interviewed in the field that even though the DHA Islamabad is well furnished with paved roads, gated security and green pockets, these structural gifts have not been translated into lively community living. Complicated compound walls, lack of street activity, and car dominance do not allow visual or physical interaction between the inhabitants. The neighbourhood was characterised as being quiet and isolating according to the interviewees, and the relationship between themselves and neighbours was little or non-existent, even though the neighbours were physically close.

Underutilised and Small Public Spaces

A high number of the targeted parks and green belts in Phases I and II were realised to be underutilised. Examples were inaccessibility, absence of shade, and the absence of facilities such as benches or restrooms, and social norms against use by residents with low income and service employees. Most of the small green spaces in neighbourhoods were abandoned or fenced, whereas there was moderate foot traffic in some of the larger parks closer to commercial areas. The lack of integration of these spaces into everyday life lowered their potential to be used as nodes for the formation of social capital.

Formation of Informal Social Nodes

Despite the official planning restrictions, several informal social centres have been built. During Phases, e.g. in Phase V, street-side tea stalls, mobile food carts, and eclectic sitting spots play a

prominent role, particularly among service workers and young people. These spaces are significant, though not official, socialising locations. Their unpredictable appearance highlights an unspoken necessity of communal space, which is not fulfilled properly by formal planning.

Low Pedestrian Infrastructure and Walkability

The rate of walkability in all the studied phases was rated as poor. The sidewalks are disconnected, there are few pedestrian crossings, there is no shade, and the absence of traffic calming features discourages walking. The car-centric structure is also a source of environmental degradation, as well as minimising the possibility of encounter and informalising socialisation. Women residents specifically mentioned the issue of safety and privacy as the primary discouraging factor about walking, especially at night.

Lack of Mixed-Income Integration

DHA is characterised by socioeconomic segregation. Policy reviews and interviews ensured that no proper structures were in place to incorporate low- and middle-income housing in any of the stages. The daily commuting of domestic staff and service workers to the city centres in the peripheral settlements is characterised by transportation challenges and physical isolation of these people in terms of space by the facilities provided by the community. This creates a layered city experience, which is the opposite of the SDG 11 inclusive goals.

Green Space Distribution and Ecological Management

According to the spatial analysis in land use planning documents in Phase VI planning documents, the proportion of land designated to public green space is less than 10 per cent of the total area. This is very low in comparison with the international standards, and it does not help to sustain urban biodiversity, as well as offer the necessary environmental buffers. High temperatures experienced during the summer

seasons have been exposed by residents as the coverage of tree canopy is less than the usual coverage, leading to the aggravation of the effects of climate change. It was found through interviews that quite a few residents, particularly homemakers and retirees, were interested in rooftop gardening and vertical farming, yet there was no institutional support or facilitation of the practice.

Feeling of Belongingness and Community Involvement

There was an ambivalent feeling of belonging among the surveyed residents. Phase I was more likely to be aware of their neighbours and participate in activities driven by the community. Recent residents in Phase V have reported their lives as contractual, more centred around the property value as opposed to social engagement. There are Resident Welfare Associations (RWAs) which were rather dormant or did not build the community but engaged in maintenance.

Discussion

The results above indicate that DHA Islamabad is doing well in its physical infrastructure and security, but is failing in establishing a socially integrated, ecologically aware, and inclusive neighbourhood. This paradox reveals a fundamental weakness of the mainstream suburban planning paradigm in Pakistan: the excessive dependence on privatised, plot-based approaches to urban planning without taking into consideration socio-spatial processes that can be key to sustainable urbanism.

Spatial alienation of the DHA phases manifested in individual walls, dominance of car traffic and lack of communal areas fit the arguments in the literature on modernist planning. There are no chances to build social capital in sterile environments without street life, as Jacobs (1961) and Gehl (2010) claim. The physical planning of DHA has put security and privacy first, and visibility, permeability and accessibility, which are the fundamental elements of vibrant public life, secondary.

Design has also not been in line with the real needs of the community, as reflected in the underutilization of the public parks and green belts. Poor access, absence of facilities and social exclusion are some of the factors that make these spaces unable to achieve their potential in providing a space of social interaction and environmental advantage. It is a wasted chance because green infrastructure is in more demand to counter the climate change impacts. Beatley (2011) states that the ecological design in the urban setup and DHA does not integrate biodiversity corridors and green connectivity, exposing it to the effects of climatic extremes.

The fact that informal social hubs came into being spontaneously in DHA is an indication that the need to interact with the community is high. These informal adjustments, such as roadside tea stalls and unofficial sitting places, are a tribute to the cultural entrenchment of socialisation in Pakistani society. These findings affirm Lydon and Garcia's (2015) explanations of the need to address space through tactical urbanism as a bottom-up approach to reclaim space in order to encourage civic engagement. Nevertheless, these efforts are less effective over time because of the lack of institutional structures that can support and even scale them to have a greater impact.

Another significant discovery was walkability, or its absence. The lack of pedestrian infrastructure and traffic calming minimises walking benefits physical well-being, as well as the probability of encountering, which are the building blocks of community life. It further instils the addiction to the automobile, which increases the obstacle to the vulnerable groups, mainly women, the elderly and low-income workers. Carmona et al. (2010) point out that inclusive urban spaces should provide various types of mobility.

The socioeconomic exclusiveness of DHA still goes against the SDG 11 objective of inclusive, resilient, and sustainable cities. The physical and social isolation of zoning regulations and market exclusion creates a two-tier city, in which service employees are physically and symbolically shut out of the neighbourhoods which they serve every day.

Such division resembles the criticism of Hasan (2015) of elite enclaves that promote fragmented urbanism in Pakistan.

In the interviews, there was also no attachment or community involvement among the newer residents. Although long-term residents of older stages shared stronger ties with their neighbourhoods, the more recent settlements like Phase V had a transactional orientation of real estate value over the common good. This implies that planned neighbourhoods, in the absence of a deliberate design and participation, cannot necessarily develop a sense of belonging.

Lastly, DHA has ecological inadequacies that are worrying. The lack of tree cover, the loss of indigenous plants and the poor environmental assimilation of planning documents an indicator that the natural landscape is being used as a secondary to the development of real estate. This lack of environmental planning compromises resilience and is contrary to the modern-day approaches of eco-urbanism, whereby the models focus on integrated water management, food systems (e.g. urban agriculture) and conservation of biodiversity.

Collectively, these results confirm the necessity of shifting neighbourhood planning in DHA to a more humanistic, inclusive, and ecologically focused approach based on privatisation and securitisation logic. Although the influence of DHA in terms of administration and planning is substantial, there is still no potential to use it as a model to create reforms. With the principles of social capital, inclusiveness, and resilience integrated into its development policy, DHA can reestablish the meaning of what it means to be a livable community in 21st-century Pakistan.

Conclusion

This paper highlights why there is an immediate necessity to change the paradigm of neighbourhood design in suburban areas such as DHA Islamabad. Although DHA boasts of good physical infrastructure, it does not match up with the equally important social, ecological, and inclusive aspects of sustainable urban

development. The existing planning model, which is market logic-based, exclusive and security-oriented oriented has resulted in spatially disconnected, socially isolated and ecologically unsustainable clones.

The results also indicate clearly that the built environment of DHA dissuades social capital formation due to its inability to provide walkable space, a poor public realm, and mixed-use development. Some of the community interactions that exist are informal and not characterised by institutional frameworks. This shows that there is a deep disconnection between the design and the actual functioning of neighbourhoods.

Moreover, ecological and environmental shortcomings, including a lack of green spaces, a lack of biodiversity corridors, and a lack of concern regarding climate resilience, also indicate that the planning of DHA is not in line with modern urban sustainability objectives. The lack of maximum adjustment of the inclusive design is also a factor that negatively affects the possibility of other demographic groups, and in particular women, children, the elderly, and low-income citizens, to engage and enjoy the neighbourhood life.

This study contends that social sustainability, like physical infrastructure, must be planned into the urban neighbourhoods. One cannot expect that community interaction or social solidarity will be the automatic by-products of the housing clusters, which lack the social space, the integration of the ecologies, and the participatory governance.

The DHA model, which is frequently considered a gold standard of security and order, needs to develop in terms of incorporating the values of equity, stewardship of the environment, and human-centred design. By so doing, it may become a transformative case study for other developments in other parts of Pakistan, showing how elite neighbourhoods can also be inclusive, strong, and socially lively.

Recommendations

In accordance with the findings and discussion of this paper, the following are the recommendations to redesign DHA Islamabad as a socially inclusive, resilient, and ecologically sustainable community:

Embed Social Capital in Design Policy

- Plug the measurements of social capital into the planning rules, such as those of community centres, community courtyards, and participatory space planning.
- Favour forming and strengthening active Resident Welfare Associations (RWAs) with a more expanded scope of community participation, other than maintenance.

Building Ecological Resilience

- Plan to expand the green area to at least 25 per cent of the total land area as recommended by WHO and UN-Habitat.
- Plans of neighbourhoods need to incorporate biodiversity corridors, rain gardens and tree canopy networks to improve climate resilience.
- Become a requirement to have rooftop gardens and incentivise and support vertical farming.

Support People with Disabilities in the Design of Public Space

- Make all parks accessible in the community, and provide seating, lighting, shade, and all-purpose play spaces to all age groups and abilities.
- Re-design foot pavements and provide pedestrian friendly areas with tactile pavements, shade trees, and benches.

Encouraging gender-sensitive urban design practice: Community involvement and safety audits.

Advance Mixed-Use and Mixed-Income Development

- Reform zoning laws to permit vertical, mixed-use development, which is a mixture of housing, commercial and civic uses.

• Implement low-cost housing quotas in new developments to promote socioeconomic diversity.

Plan on how to integrate the rental housing, student housing and co-living spaces to enlarge residential inclusion.

Strategic Urban Interventions in Policy

• Give out micro-grants to neighbourhoods to implement interventions to neighborhoods that are simple and cheap, like parklets, street murals, pop-up markets, and mobile libraries.

• Establish a regulatory room of experimentation and co-designing processes with the residents and planners.

• Pilot projects should be used to explore emerging concepts on a small scale, before their full implementation at all stages.

Monitor and Align with SDG 11

• Create a portfolio of locally customised urban indicators in accordance with SDG 11 to monitor inclusivity, accessibility, resilience, and livability regularly.

• These indicators should be covered during the annual planning reviews of DHA and be publicly available.

Through these suggestions, DHA Islamabad will be able to transform into a type of gated enclave model rather than a real integrated community, one which meets the commitment of the sustainable development of Pakistan and fits the concept of inclusive urbanism, resilient urbanism, and human-centred urbanism.

REFERENCES

Anwar, N., & Qureshi, S. (2020). Urban agriculture and land use transformation in Pakistan: A planning perspective. *International Journal of Urban Development*, 26(2), 151-166.

Bano, S., & Asad, M. (2022). Social exclusion in gated communities: A case of Islamabad. *Journal of Urban Studies and Public Affairs*, 9(1), 45-59.

Beatley, T. (2011). *Biophilic cities: Integrating nature into urban design and planning*. Island Press.

Calthorpe, P. (2011). *Urbanism in the age of climate change*. Island Press.

Carmona, M., Tiesdell, S., Heath, T., & Oc, T. (2010). *Public places, urban spaces: The dimensions of urban design* (2nd ed.). Routledge.

Gehl, J. (2010). *Cities for people*. Island Press.

Glover, T. D. (2004). Social capital in the lived experiences of community gardeners. *Leisure Sciences*, 26(2), 143-162. <https://doi.org/10.1080/01490400490432064>

Guan, S., & Wang, J. (2023). Research on the optimal design of community public space from the perspective of social capital. *Sustainability*, 15(12), 9767. <https://doi.org/10.3390/su15129767>

Hasan, A. (2015). *Understanding Karachi: Planning and reform for the future*. Oxford University Press.

Hou, J. (Ed.). (2010). *Insurgent public space: Guerrilla urbanism and the remaking of contemporary cities*. Routledge.

Jacobs, J. (1961). *The death and life of great American cities*. Random House.

Khan, Imtiaz & Akram, Ayesha & Fatima, Sehar & Ahmad, Bilal & Rehman, Zubair & Arshad, Nadeem & Sattar, Annum & Ahmad, Zubair & Quetta, Balochistan. (2022). PROBLEMS OF AGRICULTURE IN PAKISTAN: AN INSIGHT INTO THEIR SOLUTION Soil and Water Testing Laboratory Pakistan *Journal of Biotechnology* 19. 73-83. [10.34016/pjbt.2022.19.2.73](https://doi.org/10.34016/pjbt.2022.19.2.73)

Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years? *Journal of Environmental Psychology*, 31(3), 207-230.

Litman, T. (2011). *Evaluating accessibility for transportation planning*. Victoria Transport Policy Institute.

Lydon, M., & Garcia, A. (2015). Tactical urbanism: Short-term action for long-term change. Island Press.

Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41(1-2), 127 - 150.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon & Schuster.

UN-Habitat. (2016). *Urbanisation and development: Emerging futures (World Cities Report)*. United Nations Human Settlements Programme.

Wood, L., & Giles-Corti, B. (2008). Is there a place for social capital in the psychology of health and place? *Journal of Environmental Psychology*, 28(2), 154 - 163.

World Health Organisation. (2016). *Urban green space interventions and health: A review of impacts and effectiveness*. WHO Regional Office for Europe.