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COMMUNITY PERSPECTIVE ON URBAN GREENING DEVELOPMENT: A THEMATIC LITERATURE REVIEW

Cherrelyn P. Campaña, PhD
Professor, College of Development Management,
University of Southeastern Philippines, Philippines

Joemaris D. Buguis
Graduate Student, MSDA-UEP, College of Development Management,
University of Southeastern Philippines, Mintal Campus, Davao City, Philippines

ABSTRACT
This study is a thematical literature review that aims to identify and address the gaps between the planners and policy makers to design a more acceptable, equitable, and sustainable urban greening initiatives. The study has selected five (5) research studies that have focused on the community perspectives, participations, and social acceptance of urban greening or green infrastructures, both internation and national, published between the year 2020 to 2025. Conceptual method was employed, generating major themes, that investigates the community's perceived value and benefits of the urban greening, the motivation and constraints of community's participation towards the greening initiatives, and the governance and the issues emerging from the recent research findings. The study suggests, urban greening initiatives can better serve and align to what the community needs and contribute meaningfully to more sustainable and inclusive urban development.

Keywords:
Urban Greening, Greening Development, Green Infrastructure, Community Perspective, Greening Participation

INTRODUCTION

The fast-paced urbanization of the cities nowadays is giving pressure on land areas worldwide. Due to the demand of civilization and development, negative impact like biodiversity loss, air and water pollution, high heat environment temperature, and limited access to natural spaces have become an issue in the society. All of this pushes many local governments and communities toward urban greening efforts, seeing this as a hope to improve negative environmental conditions.

Urban greening such as parks, community gardens, street or road greenbelts, green infrastructure initiatives, and etc., goes beyond just the engineering approach, but in ecological and social measure as well. Urban green spaces have long been recognized to be important for the environment by improving the surrounding environment; they contribute to environmental sustainability, as they are well known for absorbing carbon, helping to moderate the climate, etc. (Mengbing & Zhang, 2020). In this light, cities worldwide are leading the way in responding to the global ecological crisis, especially in addressing such threats stemming from rapid urban growth as climate change and energy by "going green".

This whole development of going to green path are mostly possible of how the community viewed and perceived, what they like and how would the community get involved in the whole idea. How the greening development plan was accepted, changes perspective, and encourage community engagement.

STATEMENT OF THE PROBLEM

While many cities promote urban greening projects, there is limited data on the synthesis and consolidation of study that centers the community perspectives on the urban greening development. This review study aims to consolidate the community perspectives especially on their level of knowledge, motivates or constrains participation, and equity and governance that shape future outcomes, based on the recent studies from year 2020 – 2025. Addressing the gaps will help the planners and policy makers to design urban greening that is accepted, equitable and sustainable.

This thematic literature review will address the following questions:

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1. What are the main themes related to community perspectives on urban greening studies from year 2020 to 2025?
2. What are the perceived value and benefits of the community when it comes to urban greening development?
3. What are factors that motivates or constrains community participation to urban greening development projects?
4. What governance and equity issues emerge from recent studies and reviews?

Scope and limitation of the study

The scope of this review study will focus on the existing literatures targeting the community perspectives, perceptions, attitudes, participation or social acceptance of urban greening/green infrastructure, in the different areas from international, national, and local studies published between the year 2020 to 2025. The review does not cover studies focused only on ecological or biophysical modeling that do not include community perception or participation components.

REVIEW OF LITERATURE AND THEORETICAL FRAMEWORK

This chapter covers the related literatures and studies from various articles, journals, and blogs in relation to community perspective on the urban greening development initiatives. It explores theoretical foundation, conceptual framework, and research assumptions that will deepen the understanding of the study.

Related Literature and Studies

As urbanization expands, as it is one of indicators of development, recent studies show the relevance of urban greening initiatives in addressing different ecological, environmental, and societal issues. Researchers, who focused their studies on urban greening, stresses different points on how urban greening is beneficial in many ways.

Urban Greening for Climate Resiliency

Urban greening initiatives play a critical role in combating urban heat islands, managing stormwater, and improving air quality. Green infrastructures such as tree canopies and vegetated corridors can significantly reduce surface and air temperatures, enhance biodiversity, and contribute to carbon sequestration (Li et al., 2022). In the context of increasing climate risks, these projects provide adaptive and nature-based solutions that enhance cities' resilience to flooding and heatwaves (Lanza et al., 2023).

For instance, in the local setting like the city of Manila, according to Alcantara & Mendoza, 2021, it has experienced a lot of environmental problems related to urbanization such as flooding, solid waste problems, a proliferation of informal settler families, deterioration of water quality, deterioration of air quality and increasing greenhouse gas emissions but due to urban greening, it has been found to reduce localized flooding and improve air quality.

Urban Greening for Well-being

Beyond ecological benefits, urban greening fosters community cohesion and mental well-being. It was said that, access to green spaces has been linked to reduced stress levels, improved mood, and enhanced social interaction (Zhang & Tan, 2020). Existing evidence has indicated the general benefits of urban green spaces on mental health. This is by encouraging residents to engage in physical or social activities, that have the potential to reduce stress and enhance emotional restoration (Xu et al., 2025).

Community gardens, for example, promote social inclusion and empower residents to participate in local governance and environmental stewardship (Tzoulas et al., 2021). In developing countries, urban greening can also serve as a means of livelihood and food security, as seen in several community-based greening programs in Metro Manila and Davao City (Luna & Cruz, 2022). This promotes healthy living despite of combustions in urban areas.

Urban Greening for Sustainability

Urban greening projects have become integral to sustainable urban development, providing solutions to environmental degradation, social inequities, and economic instability caused by rapid urbanization. By integrating vegetation and nature-based infrastructure into cities, urban greening promotes a balance among the three interrelated dimensions of environmental, social, and economic sustainability (Kabisch et al., 2021).

Urban greening directly contributes to environmental sustainability by improving air and water quality, reducing heat island effects, and enhancing biodiversity. According to Li et al. (2022), the urban green spaces act as carbon sinks and cooling systems, helping cities adapt to the impacts of climate change. This is through planting trees, establishing parks, and green roofs, cities can regulate temperature, absorb pollutants, and manage stormwater, that are significantly the keys for ecological services necessary for environmental balance.

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In the Philippine context, Davao City's Urban Tree Planting and Greening Program has demonstrated significant environmental benefits, including temperature reduction and flood mitigation (Garcia & Lumanta, 2023). Similarly, Quezon City's Greening and Biodiversity Program integrates native plant species to support urban wildlife and restore ecological corridors (EPWMD, 2022). These initiatives align with Sustainable Development Goal 13 (Climate Action) and SDG 15 (Life on Land) by promoting nature-based resilience and ecosystem restoration.

Moreover, urban greening mitigates the environmental costs of infrastructure development. Lanza et al. (2023) emphasize that green infrastructure—such as rain gardens and green walls—provides multifunctional ecosystem services that enhance a city's ecological resilience. This reflects a shift from traditional "grey" infrastructure to sustainable "green" solutions, ensuring that the environmental protection is embedded within urban planning frameworks.

Theoretical Framework

Urban greening has increasingly been framed as both an ecological intervention and a social process. It integrates environmental sustainability, community participation, and urban resilience objectives (Kabisch et al., 2022).

This study will dig into Participatory Governance Theory (Fung, 2015), which highlighted the role of citizens as co-producers of policy and service delivery rather than passive beneficiaries through open collaboration, partnership and consultation, which enhances legitimacy, effectiveness and sustainability of the projects.

The study will also look into Social Exchange Theory, introduced by Homans (1958) and further developed by Blau (1964). Which suggests that human interactions are based on the perceived balance between costs and benefits. Recent applications in sustainability studies show that perceptions of reciprocity and trust significantly influence willingness to participate in community greening (Aminzadeh & Khansefid, 2021; Othman et al., 2023).

Furthermore, the study will also include Environmental Stewardship Theory which explains how individuals and communities develop responsibilities toward managing and caring for local environments. Bennett et al. (2018) define stewardship as the active participation in the sustainable use, conservation, and restoration of ecosystems.

METHODOLOGY

This study employed a thematic literature review design, a qualitative research approach that systematically identifies, evaluates, and synthesizes previous studies to generate new insights and thematic understanding of a specific phenomenon. According to Snyder (2019), a thematic literature review that allows the researchers to organize complex bodies of knowledge by identifying repeated themes and conceptual relationships across different sources.

In this study, the thematic review focused on community perspectives on urban greening development, emphasizing perceptions, attitudes, motivations, and barriers toward urban greening participation. This approach aligns with the purpose of generating a synthesized understanding of how communities in different urban contexts conceptualizes and engages with greening initiatives.

The design was guided by the principles of systematic review methodology as outlined by Grant and Booth (2020) and qualitative thematic synthesis proposed by Thomas and Harden (2008).

Sources of Data

As a thematic review study, this study will extract a secondary data that will be taken in the existing studies from year 2020 to 2025, pertaining to urban greening development and the perspective of the community to it. As this is a literature-based study, the study will be conceptual and digital rather than physical. Data were drawn from a wide range of online academic databases and institutional repositories, including, Scopus, ScienceDirect, Google Scholar, SpringerLink, SAGE Journals, Taylor & Francis Online, Philippine E-Journals (PEJ), University of Southeastern Philippines Institutional Repository and other legit online research platforms.

These databases were chosen for their reliability, extent of coverage, and access to peer-reviewed academic sources relevant to urban studies, environmental management, and community development.

RESULTS AND DISCUSSION

This chapter presents, analyzes, and interprets the thematic results of the literature review based on the five selected studies investigating community perspectives towards urban greening, participation in urban development, and related environmental engagement. The review goal allows to synthesize key insights into themes and its supporting statements that illustrate community values, motivations, constraints, and experiences.

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The five (5) studies that were selected and analyzed are:

1. Kim & Arik (2025) – Greening Streets, Gaining Insights: Unpacking Resident Perceptions of Urban Greening.
2. Tripathi et al. (2025) – Community Participation in Urban Development Projects: Case Studies from India.
3. Palliwoda et al. (2022) – Visions for Development and Management of Urban Greening and Blue Infrastructure: A Citizen's Perspective.
4. Zhang et al. (2021) – Residents' Preferences and Perceptions toward Green Open Spaces in an Urban Area.
5. Ejercito et al. (2025) – Community Perception of the Cooling Effects of Urban Green Spaces in Laoang, Northern Samar, Philippines.

The analysis of these studies was started in familiarization of the stated statement, particularly in the study results, through carefully reading identifying recurring phrases, thoughts, and ideas. There were then codes generated and was synthesized, leading into three themes and its supporting statements, which will be presented in Table 1. The emerging themes that were generated from across the five (5) selected studies are: (1) Perceived Benefits and Values of Urban Greening; (2) Community Engagement Motivation and Participation Barriers and Constraints; and (3) Emerging Issues and Governance.

Table 1: Summary of the themes and supporting statements from the thematic review of across the five (5) selected studies.

Themes	Supporting Statements
1. Perceived Benefits and Values of Urban Greening	"Green infrastructure offers co-benefits including improved air quality, reduce heat, and enhanced neighborhood aesthetics" *Kim & Arik (2025)* "Benefits derived from green-blue infrastructure range from microclimate regulation and pollution reduction to recreational services and noise reduction, from which urban citizens directly benefits" *Palliwoda et al. (2022)* "Respondents generally agreed that vegetation and shade contribute to thermal comfort, relaxation, and improved air quality, with highest agreement that tree planting makes Laoang cooler" *Ejercito et al. (2025)*
2. Community Engagement Motivation and Participation Barriers and Constraints	"Governance and planning strategies that include active participation of citizens and public consultation can increase acceptance of decision-making and resilience of green-blue infrastructure" *Palliwoda et al. (2022)* "Respondents showed strong agreement that tree planting contributes to cooling, indicating positive attitudes toward tree planting and support for greening initiatives" *Ejercito et al. (2025)* "Understanding the purpose of green infrastructure can increase awareness of benefits but also raise doubts; effective communication is necessary to foster public support" *Kim & Arik (2025)* "Lack of awareness or misunderstanding of green infrastructure can create additional barriers and hinder implementation progress, requiring better engagement strategies" *Kim & Arik (2025)*

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3. Emerging Issues and Governance	"Current green-blue infrastructure problems relate to quality, usability, other users and activities, and safety, as raised by respondents; improving maintenance and facilities is frequently requested" *Palliwoda et al. (2022)* "Diverging expectations among different user groups makes it challenging for planners to meet demands equitably, reflecting conflicts between recreational uses and biodiversity protection" *Palliwoda et al. (2022)* "Community participation enhances social inclusion, accountability, and relevance of urban development projects, but require enabling policy and institutional support" *Tripathi et al. (2025)*

Theme 1: Perceived Benefits and Values of Urban Greening

Across the different urban setting, environmental and human-centered benefits are primary factors of how and what community shapes their perspectives. The study of Kim & Arik (2025) emphasizes that the residents have recognize the green infrastructure initiatives as a strategy that brings benefits such as, improves the air quality, reduces the urban heat, and provides an aesthetic appeal in an urban area.

Similarly, the study of Ejercito et al. (2025) illustrated that residents, in widely agree that urban vegetation, especially tree canopies, introduces shading and cooling effects. This benefit became tied to the resident's lived experiences in the area, especially in a tropical country like the Philippines, as shaded area bring daily comfort, relaxation, and improved walkability in the urban spaces. These perceptions also highlighted the view of greening initiatives as a practical step for climate adaptation measure, which heightened the relevance of urban greening in helping the community provide climate-related benefits, especially those are vulnerable to heat stress.

Additionally, the study of Palliwoda et al. (2022) reveals the growing awareness of communities to ecosystem services such as, noise reduction, pollution control, and introduce recreational services, as perceived benefits from green-blue infrastructure. This multidimensional valuation indicates that communities increasingly understand green spaces as contributors to both ecological sustainability and social quality of life.

These findings collectively affirm that, communities perceived greening initiatives as not just merely an aesthetic enhancement but as a multifunctional intervention to directly improve daily urban living conditions. Moreover, as this intervention improves the community living conditions, this leads to a better community social well-being.

Theme 2: Community Engagement Motivation and Participation Barriers and Constraints

As community engagement and participation is the center and the key goal of all government project implementations, it is very vital to acknowledge the participation constraint and motivation of the community. The study of Palliwoda et al. (2022) presents that, the effective governance involves active citizen participation and consultation. This indicates that, involving the community in planning formulation can leads to greater acceptance of the project implementation and promote resilience of urban greening projects.

The study of Ejercito et al. (2025) emphasizes that the strong positive attitudes of communities in the tree planting are not just merely passive expressions of environmental awareness but a reflection of a deeper readiness for engagement in urban greening initiatives. This willingness to engage demonstrates that attitude to support can serve as a start towards a more pro-environmental behavior, particularly in urban context where green infrastructure directly affects everyday living conditions.

The study of Kim & Arik (2025) notes that, the community support for urban greening initiatives strongly mediated by the level of understanding and trust of residents toward greening goal, processes, and outcomes. This highlights that, while awareness of environmental and social benefits of greening projects can primarily promote favorable attitudes, insufficient clarity regarding the purpose, implementation processes, and long-term implications of greening projects may generate doubt among the community members. This doubts, if not addressed, can gradually lead to trust issues, especially on the planning authorities, and weaken the public support, even when the initiatives are clearly an environmentally sound.

Theme 3: Emerging Issues and Governance

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Even where greening projects are most likely accepted because of their positive benefits and are acknowledged valuable, issued and concerns of the community still emerges, leading to influences the community perspectives. The study of Palliwoda et al. (2022) reveal that, respondents concern regarding the usability, safety, and maintenance of green-blue infrastructure represent critical emerging issues that shape community perceptions and engagement. This suggests that implementation quality and post development management are as important as planning and design, as it also affects and shapes the community perspective and support. In addressing these challenges, it requires governance approaches that go beyond project-based implementation toward a more adoptive, participatory, and accountable management system.

Furthermore, the study of Tripathi et al. (2025) emphasizes that, community participation plays a vital role in enhancing social inclusion, accountability, and contextual relevance of urban greening development projects. The study suggests that, when communities are more meaningfully involved in planning and decision-making processes, implementing these projects are more likely to reflect local needs, reduce social exclusion, and generate public ownership. It was also highlighted that, the effectiveness of the community participation is not inherent, but it is more highly dependent on the presence and promotion of policy frameworks and strong institutional support.

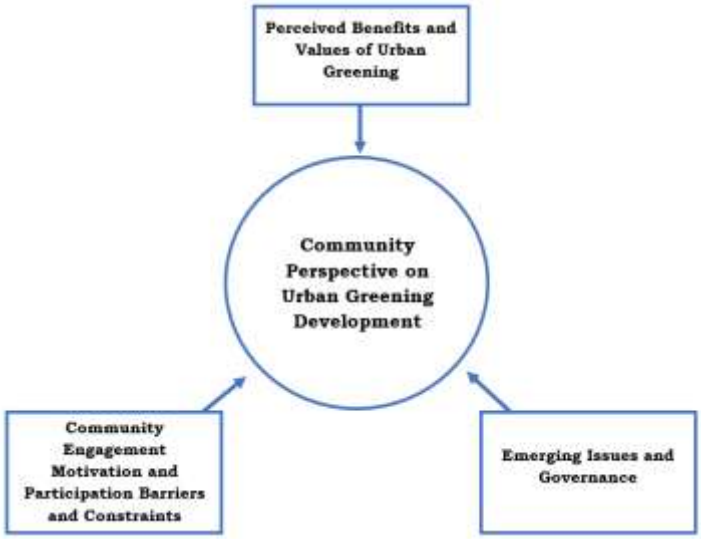

Figure 2. Framework of Community Perspective on Urban Greening Development

CONCLUSION

The study concluded that, across the five (5) selected studies from year 2020 to 2025, the community perceptions in urban greening are primarily driven by direct live experiences of the environmental and social benefits this can give, rather than just the concept. The community tend to value urban greening initiatives that provide tangible outcomes such as, reduce heat stress, improved thermal comfort, enhanced aesthetics, and opportunities for recreation and social interaction. This condition is more appreciated in those tropical setting and in rapidly urbanizing areas, as the cooling function of green spaces emerged as a leading factor that shapes positive attitudes and acceptance of the community.

While the community sees the opportunity as beneficial to them, it is still very vital to establish and maintain a good relationship between the involved parties, as community trust and understanding are decisive determinants of engagement and support, especially on the greening initiatives. The transparency in communication, sharing of understanding in the project goals, and opportunities for two-way connection between the parties are significantly influences the communities perceive urban greening initiatives are whether inclusive and worth supporting for. This emphasizes that urban greening is not only a spatial or environmental intervention but also a social process that requires continuous relationship-building between the communities and the implementing institutions.

Furthermore, the urban greening development initiatives succeeds, not merely through the provision of green infrastructure project implementations, but through governance system that recognizes the communities as

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active partners. By addressing the community's social perceptions, participation barriers, and governance constraints, is therefore necessary in realizing the full environmental, social, and economic potential of urban greening initiatives.

RECOMMENDATION

Based on the findings, the following recommendations are proposed to help better understand the perceptions of the community in terms of urban greening development initiatives:

- **Strengthen the information dissemination of the greening project to better establish a flowing knowledge and understanding, and eliminate misconceptions between the involved partners.**

  Project implementing agencies can invest in community capacity building programs such as, educational workshops, awareness campaigns, and other participatory learning activities, that will help the community to better understand the project goals rather than just the whole context. It is to primarily increase the community's understanding of the urban greening, its ecosystem services, and its climate resilience, that will empower them to engage in more meaningfully and contribute more to the project.

- **Enhancing transparency and two-way communication is very vital.**

  This is to build trust between the communities and implementing bodies to more establish confidence in all project implementation aspects. It is also to align the community expectations with the greening project goals towards a more inclusive project ideas and purposes. Especially in designing, through transparent communication, communities where able to express their lived experiences which emphasizes the need to consider such as, what should be the most beneficial and can be the most valued by the communities, when it comes to project planning.

- **Institutionalize community participation in formulating urban greening policies.**

  The government and planning institutions should formally integrate community participation into urban greening policies, plans, and regulatory frameworks. The community participation should not only be in consultation approaches but should move beyond to more clear definition of roles throughout the project implementation. This emphasizes on the roles of the communities from planning and design to implementation, monitoring, evaluation, and maintenance of greening project. By doing so, policies, ordinances, or guidelines should be established in order to ensure that there is a participatory protocol, and that the continuity of community engagement is consistent across all greening projects.

This collectively emphasizes that, the urban greening development must be approached as a socially embedded and a governance-driven process. Strengthening the information dissemination, enhancing transparency and communication, and institutionalizing community participation on policy formulation, urban greening initiatives can better serve and align to what the community needs and contribute meaningfully to more sustainable and inclusive urban development.

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