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Urban parks as catalysts for economic growth: discussing insights from South American metropolises

Parques urbanos como catalisadores do crescimento econômico:

discussão de insights a partir de metrópoles sul-americanas

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Abstract: Urban parks are increasingly recognised as pivotal assets in sustainable urban development, addressing the intertwined challenges of environmental degradation, social inequality, and economic stagnation. This study explores their multifaceted roles, focusing on their contributions to economic growth, recreation, cultural enrichment, and community engagement. Using insights from field observations in Lima, São Paulo, and Santiago de Chile, alongside international case studies, the analysis highlights how urban parks enhance property values, stimulate entrepreneurship, and foster tourism, while integrating circular economy principles and modern technologies. The research also examines challenges such as accessibility barriers, social inequality, and over-commercialisation, emphasising the need for balanced policies to preserve the intrinsic purpose of parks as inclusive, ecological, and cultural spaces. By demonstrating the transformative potential of urban parks, the discussion advocates for their strategic integration into urban planning as engines of sustainable development, community well-being, and long-term economic revitalisation.

Keywords: urban parks; economic growth; social inclusion; urban planning; SDG 11; sustainable cities and communities.

Resumo: Os parques urbanos são cada vez mais reconhecidos como ativos fundamentais para o desenvolvimento urbano sustentável, abordando os desafios interligados da degradação ambiental, desigualdade social e estagnação econômica. Este estudo explora seus papéis multifacetados, com foco em suas contribuições para o crescimento econômico, recreação, enriquecimento cultural e engajamento comunitário. A partir de observações realizadas em Lima, São Paulo e Santiago do Chile, além de estudos de caso internacionais, a análise destaca como os parques urbanos aumentam o valor das propriedades, estimulam o empreendedorismo e fomentam o turismo, ao mesmo tempo em que integram princípios da economia circular e tecnologias modernas. A pesquisa também examina desafios como barreiras de acessibilidade, desigualdade social e a supercomercialização, enfatizando a necessidade de políticas equilibradas para preservar o propósito intrínseco dos parques como espaços inclusivos, ecológicos e culturais. Ao demonstrar o potencial transformador dos parques urbanos, a discussão defende sua integração estratégica no planejamento urbano como motores de desenvolvimento sustentável, bem-estar comunitário e revitalização econômica de longo prazo.

Palavras-chave: parques urbanos; crescimento econômico; inclusão social; planejamento urbano; ODS 11; cidades e comunidades sustentáveis.

1. Introduction

Urban parks have long been framed as amenities of urban liveability, yet their contemporary significance increasingly exceeds the register of leisure and beautification. In many metropolitan regions, parks operate as multi-

functional infrastructures that mediate public health, social reproduction, ecological regulation, cultural life, and – crucially for this article – economic activity (Taylor et al., 2020; Shao & Kim, 2022). This manuscript advances a theory-oriented interpretation of how urban parks can function as catalysts of local economic growth in South American metropolises, not by assuming parks produce uniform “benefits”, but by conceptualising the mechanisms and conditions through which economic value is generated, circulated, and contested within and around park environments. Rather than offering a case-by-case evaluation or an impact study, the article develops an analytically transferable framework that specifies pathways of economic activation and the governance and infrastructural mediators that shape their distributional consequences.

This theoretical move is especially necessary in South America, where the relationship between public space and economic life is rarely separable from uneven urbanisation, informality, and persistent socio-spatial inequality (Dutra, 2023). In such contexts, parks may stimulate local economies through footfall, programming, adjacent service demand, and reputational signalling; simultaneously, they may intensify exclusions through commodification, securitisation, and displacement pressures (Nesticò et al., 2022). The same park intervention that attracts investment and municipal revenues can also contribute to the “greening” of inequality, particularly where the appreciation of surrounding land values is not matched by safeguards for affordability and inclusive access (Crompton, 2020; Galindo, 2023). This article therefore treats parks as economically productive spaces whose outputs are politically and territorially mediated, and whose growth effects must be interpreted alongside the ethical frictions they can generate.

A historical genealogy helps clarify why parks become sites where economic imaginaries and social ideals are negotiated. The late nineteenth-century garden-city tradition associated with Ebenezer Howard offers a foundational point of reference. Howard’s “garden city” proposal – most famously articulated in *To-morrow: A Peaceful Path to Real Reform* (1898) and later *Garden Cities of To-morrow* (1902) – envisioned an urban form that could reconcile the perceived antagonism between “town” and “country” through planned settlement, green belts, and a civic economy oriented to collective welfare. While Howard’s model was not a theory of parks per se, it embedded green space within a broader project of urban economic and moral reform, imagining environmental amenities as integral to healthier labour, more stable community life, and a rational spatial order capable of moderating speculative pressures. Read in this way, the garden-city tradition situates green infrastructures within the history of attempts to align urban growth with social wellbeing – a lineage that remains relevant, even if the institutional and political conditions of contemporary South American metropolises differ markedly from the reformist planning imaginaries of early twentieth-century Britain.

However, a direct translation of Howardian ideals would be analytically misleading. South American metropolitan realities are shaped by hybrid governance, heterogeneous capacities of maintenance, dense informal economies, and everyday uses of parks that blur the boundaries between recreation, subsistence, and entrepreneurship (Andrade & Massi, 2024; Núñez et al., 2024). Accordingly, this paper does not revive the garden city as a normative blueprint; rather, it mobilises Howard as a conceptual hinge that foregrounds a persistent question: how do green urban spaces become infrastructural devices through which cities attempt to organise the terms of growth, inclusion, and legitimacy? It is from this hinge that the article formulates its guiding research question: How do urban parks in South America operate as catalysts for local economic growth? Addressing this question requires moving beyond generic claims about “benefits” and instead specifying how distinct economic interfaces (property-value dynamics, micro-commerce and informal livelihoods, event economies, partnership models, fee regimes, payment infrastructures, and digital connectivity) operate across different urban conditions.

The article’s contribution is twofold. First, it consolidates dispersed discussions on parks and economic development into a coherent framework that distinguishes direct and indirect economic mechanisms and clarifies how they operate under different conditions. Second, it introduces a comparative, context-sensitive vocabulary for interpreting these mechanisms in South American settings, where fiscal constraints, partnership arrangements, and the infrastructural pragmatics of everyday exchange materially shape economic outcomes. Although the argument is theoretical, it is empirically informed by structured engagements with selected parks in Lima, São Paulo, and Santiago, complemented by expert consultation and documentary review; these inputs are used to refine categories, calibrate plausibility, and avoid abstract universalism.

The remainder of the paper develops the framework by examining the principal economic pathways through which parks may catalyse growth – beginning with property-value dynamics and micro-commercial livelihoods, and moving through governance arrangements that sustain (or commodify) park economies. It then extends the discussion to contemporary infrastructures of participation, including digital connectivity and technology-enabled uses. The discussion consolidates implications for policy design and future research. Across these sections, the guiding premise is consistent: parks can contribute to metropolitan economic vitality, but their effects are neither automatic nor evenly distributed; they depend on the institutional and territorial conditions under which “green value” is produced and made accessible.

2. Methodological procedures

This contribution is intentionally positioned as a theoretical (conceptual) article. Accordingly, the methodological design privileges theory-building and framework refinement over statistical generalisation, using empirically grounded insights as a heuristic basis to articulate mechanisms through which urban parks may catalyse economic growth in South American metropolitan contexts. The study is guided by a pragmatic orientation – in the sense of being problem-driven and policy-relevant – combined with a realist sensitivity to contextual conditions (e.g., governance arrangements, accessibility regimes, and socio-spatial inequalities) that may enable, mediate, or constrain parks’ economic effects.

The selection of the parks followed a purposeful, theory-oriented rationale. Parks in Lima, São Paulo, and Santiago de Chile were chosen because these metropolises offer:

- (i) contrasting governance and management ecologies (from strongly municipalised approaches to hybrid or concession-based arrangements),
- (ii) different intensities of socio-spatial inequality and informal economic presence, and
- (iii) heterogeneous relationships between parks, mobility infrastructures, and neighbourhood economic life.

Within each city, the parks were selected to maximise variation in typology and urban setting (e.g., central versus peripheral locations; leisure- and event-oriented parks versus ecologically oriented spaces; differing connectivity and perceived safety profiles), enabling the paper to theorise mechanisms and trade-offs across divergent configurations rather than extrapolate from a single “ideal-type” park.

In practical terms, park selection within each metropolis prioritised sites that (a) function as high-visibility public realms with sustained footfall and diversified uses (everyday leisure, cultural programming, sport, and informal sociability), (b) display contrasting management arrangements (municipal, state/national administration, municipal enterprises, and concession-linked operations), and (c) are territorially distributed across distinct socio-economic settings so that the framework can speak to both flagship and more ordinary configurations of urban greenery. This sampling logic is consistent with theoretical contributions that aim to produce an analytically transferable framework grounded in strategically diverse cases, rather than a representative sample for statistical inference.

The initial conceptual scaffolding emerged from systematic visits to the selected parks, conducted between July and November 2024 (see Table 1). This field engagement was structured to ensure comparability across sites: each park was visited three times, varying time-of-day, and day type (week-day/weekend), with a consistent duration of approximately 90 minutes per visit. These visits were designed as non-participant, exploratory observa-

Table 1 Overview of urban park visits conducted in Lima, São Paulo, and Santiago (July–November 2024). Each park was visited three times, for approximately 90 minutes per visit.

Park	Park typology	Visit month	Time of day	Day type
Brazil, São Paulo				
Ibirapuera Park	Metropolitan flagship park	Jul-24	Morning/ Afternoon/Evening	Weekday (2)/ Weekend (1)
Villa-Lobos Park	Metropolitan recreational park	Jul-24	Morning/ Afternoon/Evening	Weekday (2)/ Weekend (1)
Aclimação Park	District urban park	Jul-24	Morning/ Afternoon/Evening	Weekday (2)/ Weekend (1)
Augusta Park	Central urban pocket park	Aug-24	Morning/ Afternoon/Evening	Weekday (2)/ Weekend (1)
Carmo Park	Large urban park/green reserve	Aug-24	Morning/ Afternoon	Weekday (2)/ Weekend (1)
Chile, Santiago				
Parque Metropolitano (Cerro San Cristóbal)	Metropolitan hillside park	Sep-24	Morning/ Afternoon	Weekday (2)/ Weekend (1)
Forestal Park	Linear urban park	Sep-24	Morning/ Afternoon	Weekday (2)/ Weekend (1)
Bicentenario Park	Metropolitan landscaped park	Sep-24	Morning/ Afternoon	Weekday (2)/ Weekend (1)
Quinta Normal Park	Cultural-educational urban park	Sep-24	Morning/ Afternoon	Weekday (2)/ Weekend (1)
Peru, Lima				
Circuito Mágico del Agua	Thematic urban park	Oct-24	Morning/ Afternoon/Evening	Weekday (2)/ Weekend (1)
Parque de la Exposición	Cultural-historical urban park	Oct-24	Morning/ Afternoon	Weekday (2)/ Weekend (1)
Kennedy Park	Central district urban park	Nov-24	Morning/ Afternoon	Weekday (2)/ Weekend (1)

tions, aimed at identifying recurring patterns and tensions relevant to the paper’s conceptual aim (e.g., visible economic activity, programmed uses, transport connectivity, management arrangements, and potential frictions linked to commodification and uneven access).

To render the empirical input analytically tractable, each park was additionally profiled through a descriptive matrix capturing urban context, park typology, size category, transport access, and management model (see Table 2). Rather than operating as an exhaustive inventory, this profiling functions as a contextualising device that supports the paper’s comparative logic by making explicit how park characteristics and governance regimes differ within and across cities.

The framework was subsequently refined through a consultative expert panel comprising four specialists with professional experience spanning Brazil, Peru, and Chile, selected to provide complementary perspectives across urban development and planning, ecological sustainability and public space management, urban economics/territorial analysis, and

Table 2 Parks' characteristics.

Park	Urban context	Park typology	Size category	Transport access	Management model
Brazil, São Paulo					
Ibirapuera Park	Vila Mariana/Moema (central–southern area)	Metropolitan flagship park	≈158.4 ha (Large)	Car/Bus/Metro or train/Walking/ Cycling	Municipal government + concession (Urbia Parques) for operation and maintenance
Villa-Lobos Park	Alto de Pinheiros (western area; Pinheiros River corridor)	Metropolitan recreational park	≈72.37 ha (Large)	Car/Bus/Metro or train/Walking/ Cycling	State-owned (São Paulo); included in concession frameworks/programmes
Aclimação Park	Aclimação district (central area)	District urban park	≈11.2 ha (Medium)	Car/Bus/Metro or train/Walking/ Cycling	Municipal management (SVMA/City of São Paulo)
Augusta Park	Consolação/expanded city centre (Rua Augusta–Paulista axis)	Central urban pocket park	≈2.37 ha (Small)	Car/Bus/Metro or train/Walking/ Cycling	Municipal management (SVMA/City of São Paulo)
Carmo Park	Itaquera/East Zone (peripheral–eastern area)	Large urban park/ green reserve	≈150 ha (Large)	Car/Bus/Metro or train/Walking/ Cycling	Municipal management (SVMA/City of São Paulo)
Chile, Santiago					
Parque Metropolitano (Cerro San Cristóbal)	Cerro San Cristóbal (interface between Providencia and Recoleta)	Metropolitan hillside park	≈737 ha (Large)	Car/Bus/Metro or train/Walking/ Cycling	National-level public administration
Forestal Park	Historic centre/Mapocho riverbank (Lastarria–Bellas Artes area)	Linear urban park	≈17 ha (Medium)	Car/Bus/Metro or train/Walking/ Cycling	Municipality of Santiago
Bicentenario Park	Vitacura (eastern high-income commune; Mapocho corridor)	Metropolitan landscaped park	≈27 ha (Medium)	Car/Bus/Metro or train/Walking/ Cycling	Municipality of Vitacura
Quinta Normal Park	Quinta Normal/west-central Santiago; museum cluster	Cultural–educational urban park	≈40 ha (Medium)	Car/Bus/Metro or train/Walking/ Cycling	Public/municipal governance
Peru, Lima					
Circuito Mágico del Agua	Cercado de Lima/Parque de la Reserva (central area)	Themed urban park	≈8 ha (Small)	Car/Bus/Walking/ Cycling	Metropolitan Municipality of Lima
Parque de la Exposición	Cercado de Lima (central area; cultural/heritage corridor)	Cultural–historical urban park	≈11.28 ha (Medium)	Car/Bus/Walking/ Cycling	Municipal company EMILIMA
Kennedy Park	Miraflores (coastal commercial district; civic/tourist node)	Central district urban park	≈2.50 ha (Small)	Car/Bus/Walking/ Cycling	Municipality of Miraflores

community development/social inclusion (see Table 3). The panel's role was not to “validate findings” in an empirical sense, but to strengthen plausibility, regional adequacy, and internal coherence of the proposed conceptual model, including its attention to trade-offs and counter-effects that are especially salient in South American contexts (e.g., socio-spatial dualisation, exclusionary practices, and governance frictions).

Once the core structure of the argument was stabilised, a multimodal review was undertaken to situate the discussion within a South American panorama while also engaging international scholarship and policy debates, as suggested by Tudor et al. (2007), Crompton (2020), and Aranibar and Teles (2025). The review integrated scientific articles, books, journalistic reports, and governmental data on urban parks and related themes. Given

Table 3 Profile of the consultative expert panel.

Expert Code	Country of Professional Experience	Institution Type	Main Sector	Area(s) of expertise	Years of Experience	Mode of Participation
E1	Brazil	Public university	Public / Academic	Urban development; urban planning; sustainability	30+ years	In person
E2	Brazil	Public university	Public / Academic	Urban policy; ecological sustainability; public space management	30+ years	Online – synchronous
E3	Peru	Government agency	Public	Urban economics; territorial analysis; tourism and public space	10+ years	In person
E4	Chile	Non-governmental organisation (NGO)	Third Sector	Community development; urban ecology; social inclusion	4+ years	Online – synchronous

the comparatively limited volume of region-specific scholarship directly addressing parks as economic catalysts in South America, the review intentionally expanded to a global scope, using international evidence to clarify concepts, identify governance options, and sharpen the paper's analytical distinctions – without displacing the regional anchoring provided by the field-based insights and expert feedback.

Across these stages, the analytical procedure followed an iterative, abductive logic: field observations and descriptive profiling informed the first set of conceptual categories; these categories were then challenged and refined through expert consultation; and the resulting framework was consolidated through targeted literature engagement. Analytically, field-notes were first condensed into comparative memos for each park visit; these memos were then synthesised into a mechanism–condition–outcome matrix used to (i) identify recurrent pathways of economic activation, (ii) specify the contextual conditions under which such pathways plausibly intensify or weaken, and (iii) map trade-offs and counter-effects that inform the architecture of Figure 1. Expert feedback operated as a second-round stress test of this matrix – prompting the revision, merging, or re-labelling of mechanisms – before the final framework was aligned with the literature to ensure conceptual precision and terminological consistency. Rigor was pursued through procedural transparency (clearly specified visits and park profiling), conceptual traceability (explicit linkage between observations, expert critiques, and refined propositions), and triangulation across empirical impressions, expert judgement, and documentary sources. The paper therefore advances a framework intended to be transferable and testable in subsequent empirical research, while remaining faithful to its present status as a theory-oriented contribution grounded in structured, regionally situated inputs.

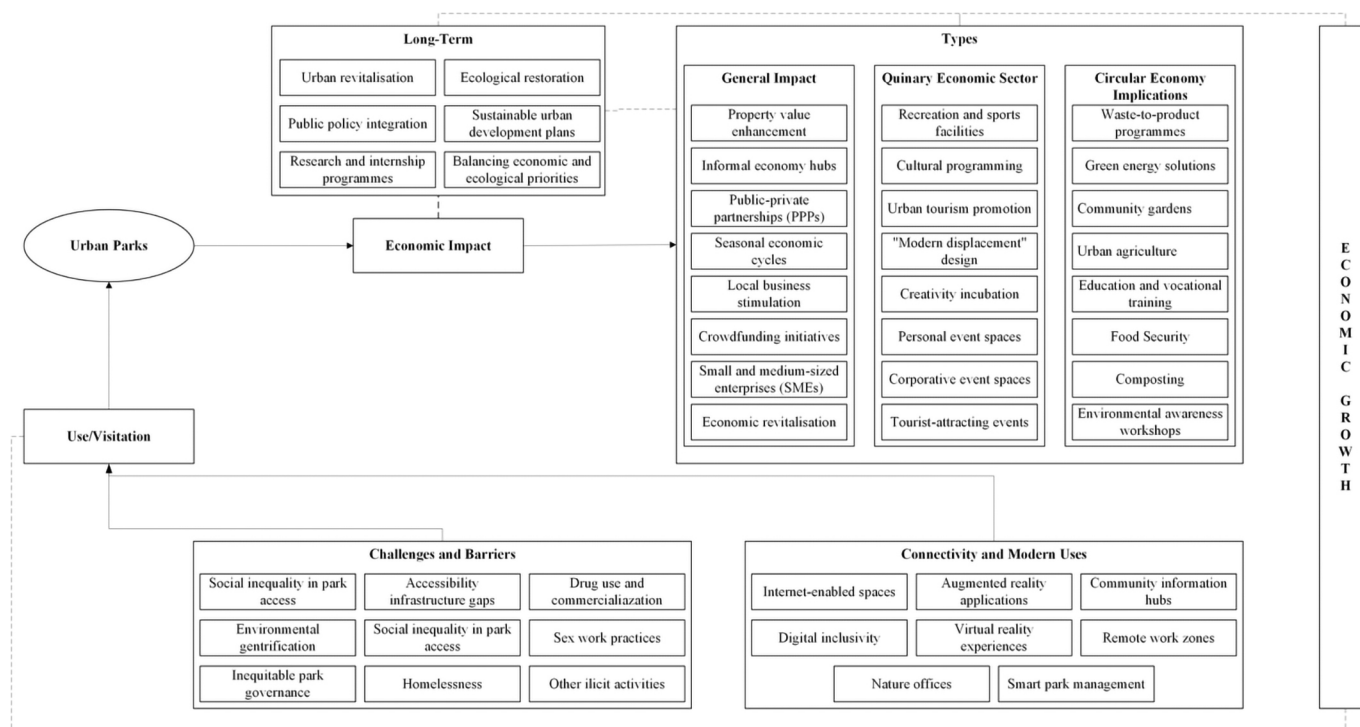


Figure 1

The multifaceted role of urban parks in economic growth.

3. Development

3.1. Unveiling urban parks and economic growth

Urban parks are critical infrastructures within cities, serving as multifunctional spaces that balance ecological, social, cultural, and economic objectives (Taylor et al., 2020). These green spaces contribute significantly to urban sustainability by offering ecosystem services such as air purification, climate regulation, and biodiversity conservation, which enhance the overall quality of life for urban residents (Santos et al., 2018). Parks also provide cultural and recreational opportunities, fostering social cohesion and cultural expression through communal interactions (Loughran, 2018). In South American metropolises like São Paulo, Santiago de Chile, and Lima, urban parks exemplify the integration of ecological infrastructure into dense cityscapes, enhancing urban vitality by attracting tourism, reducing healthcare costs, and fostering local engagement while addressing regional socio-economic challenges.

The size of urban parks directly influences their functionality and benefits. Larger parks, such as Ibirapuera Park in São Paulo, provide expansive ecological services, including urban cooling and habitat preservation for diverse species. Conversely, smaller pocket parks in dense urban neighbourhoods, like those found in Lima's historical centre, serve as vital green spaces for underserved populations. These smaller parks proved particularly important during the COVID-19 pandemic, offering residents outlets for physical activity and mental health relief in areas with limited access to green spaces, as expressed by Liu and Wang (2021). By strategically diversifying

ifying park sizes, urban planners can address the varying needs of different urban landscapes, ensuring equitable access to green infrastructure in both sprawling and densely populated areas.

Urban landscapes significantly shape the roles that parks can play, particularly in Latin America, where socio-economic and environmental contrasts are pronounced. In highly impervious urban centres, such as downtown Santiago de Chile, parks act as cooling islands, mitigating the urban heat island effect, and improving thermal comfort for nearby residents (Peng et al., 2021). These cooling effects not only enhance urban liveability but also reduce energy consumption for cooling buildings, indirectly contributing to economic savings. Similarly, parks integrated into suburban areas often become hubs for community interaction and local commerce, further supporting social and economic resilience. In cities like Lima, where informal economies thrive, urban parks often provide a setting for micro-entrepreneurs, enhancing their economic role beyond traditional recreational uses.

Additionally, urban parks contribute to public health, which is intrinsically linked to economic growth. Access to parks encourages physical activity, reducing healthcare costs associated with sedentary lifestyles and chronic diseases. In São Paulo, for instance, the integration of fitness zones within parks has promoted physical well-being across diverse socio-economic groups. Additionally, exposure to green spaces has been related to improved mental health, increasing productivity and reducing absenteeism in workplaces (Kong et al., 2022). Parks designed with diverse amenities, such as walking trails, sports facilities, and quiet zones, cater to various demographics, enhancing their utility as public health resources. Healthier populations, in turn, contribute more effectively to the workforce, reflecting the indirect economic benefits of urban parks.

The economic impact of urban parks extends beyond direct financial benefits, as they stimulate local economies through employment creation, commercial activities, and infrastructure development. The establishment and maintenance of parks often generate jobs, while encouraging entrepreneurship through park-related activities and services. For instance, the management of Parque Metropolitano in Santiago de Chile demonstrates how well-maintained urban parks can create employment opportunities and attract international visitors. Furthermore, parks in metropolitan areas like São Paulo and Lima illustrate how their age, size, and design influence their ecological and social benefits, reflecting their long-term contributions to urban resilience (Andrade & Massi, 2024). These outcomes underscore the essential role of urban parks in sustainable development, highlighting their capacity to integrate ecological imperatives with economic and social priorities effectively.

3.2. Economic contributions of urban parks

Urban parks foster economic development through diverse mechanisms, most notably their influence on property values. Proximity to parks significantly enhances real estate value due to the aesthetic and recreational benefits they provide. This phenomenon, termed the “proximate principle”, underscores how properties near parks often command premiums, as seen in areas surrounding New York City’s Central Park, where adjacent property values significantly escalated, leading to increased municipal tax revenues (Crompton, 2020). Similarly, studies in São Paulo reveal a consistent positive correlation between green spaces and property values, underlining their role in urban economic revitalisation (Andrade & Massi, 2024). This economic benefit creates a virtuous cycle where increased tax revenues from elevated property values are reinvested into urban infrastructure, including park maintenance and expansion, perpetuating growth.

Beyond property value impacts, urban parks act as vital incubators for micro-commercial activities. These spaces often become hubs for informal economies, accommodating street vendors, self-employed individuals, and small-scale entrepreneurs who rely on the influx of park visitors, as observed in cities like Santiago de Chile, São Paulo, and Lima. The establishment of food stalls, craft shops, and recreational services reflects the ability of parks to attract foot traffic, creating economic dynamism that sustains local livelihoods while fostering entrepreneurship (Ferreira et al., 2022). In the Gyeongui Line Forest Park in Seoul, the revitalisation of underutilised urban land into green spaces significantly boosted local sales volumes, a pattern echoed in South American examples where vibrant park economies support nearby communities (Park & Kim, 2019).

To facilitate cross-case comparability and avoid treating “urban parks” as a homogeneous category, Table 4 summarises the indicative presence and relative salience of the main economic interfaces discussed in this section across the selected parks in Lima, São Paulo, and Santiago.

Table 4 should be read as a theory-building device: cells provide qualitative, relative codings (High/Medium/Low) within the study’s park set, rather than inferential measurements. “Fees” refers to user-facing charges (paid entry, ticketed attractions, paid activities, or paid amenities) that shape participation, while the Evidence Tag indicates the primary basis for each coding (C = contextual inference; O = structured observation; L = literature/documentary support; E = expert validation).

Against this comparative backdrop, public-private partnerships (PPPs) emerge not merely as a financing tool but as a governance mechanism that can reconfigure how parks generate – and distribute – economic value. These collaborative models combine public resources and private investment to develop and maintain park infrastructure, ensuring long-term financial and operational viability. In São Paulo, partnerships between the municipal government and private entities have financed maintenance

Table 4 Indicative profile of economic interfaces across the selected parks (Lima, São Paulo, and Santiago).

Park (City)	Property value uplift potential	Formal Micro-commerce	Informal livelihoods	Fees	Payment systems diversity	Programming & Events	Evidence Tag
Ibirapuera (São Paulo)	High	High	Medium	Medium	High	High	C+O+L+E
Villa-Lobos (São Paulo)	Medium	Medium	Medium	Medium	High	Medium	C+O+L+E
Aclimação (São Paulo)	Medium	Low–Medium	Medium	Low	Medium	Low–Medium	C+O
Augusta (São Paulo)	High	Low	Low	Low	Medium	Low–Medium	C+O+E
Carmo (São Paulo)	Low–Medium	Low	Medium	Low	Medium	Low	C+O+E
Metropolitano / San Cristóbal (Santiago)	Medium–High	High	Medium	Medium	Medium	Medium	C+O
Forestal (Santiago)	High	Medium	High	Low	Medium	Medium–High	C+O
Bicentenario (Santiago)	High	Medium	Low	Low	Medium–High	Medium	C+O+E
Quinta Normal (Santiago)	Medium	Medium	Medium	Medium	Medium	Medium	C+O
Circuito Mágico del Agua (Lima)	Medium	High	Low	Low–Medium	High	High	C+O+L+E
Parque de la Exposición (Lima)	Medium	Medium	High	Low–Medium	High	High	C+O+E
Kennedy (Lima)	High	Medium	Medium	Low	Medium–High	Medium	C+O+E

and new projects in Ibirapuera Park, demonstrating the potential of PPPs to reduce the financial burden on public budgets while enhancing service quality (Gałkowski & Antosz, 2022). However, such arrangements require careful oversight to prevent the commodification of public spaces, which could exclude lower-income groups and undermine social equity, as it could also be happening in Vila-lobos Park also in São Paulo. In contrast, in Lima and Santiago, limited private-sector involvement has necessitated greater reliance on public funding, which often constrains park development and maintenance due to budgetary limitations. Furthermore, Mullenbach (2022) explains an emerging trend where most activities within urban parks, such as cultural performances, recreational classes, and even basic amenities, are increasingly subject to fees. While such charges can help offset operational costs and improve facilities, they risk creating economic barriers that undermine the inclusive nature of these spaces, particularly affecting low-income populations. Introducing entrance fees, as seen in some cases, further exacerbates this concern, prompting calls for balanced policies that uphold accessibility while ensuring financial sustainability.

Urban parks also are key in accommodating diverse payment systems that facilitate economic activity within their spaces. In São Paulo, for instance, parks and informal economies within them offer a wide variety of payment options, including electronic wallets, credit and debit cards, and cash, which enhance accessibility and encourage spending. This contrasts

with urban parks in Lima and Santiago, where payment systems are more limited, often restricted to cash and electronic wallets, potentially hindering broader participation in park-related commercial activities. Modernising payment methods in these cities could enhance inclusivity and attract a wider audience such as international tourists, contributing to increased economic activity within park environments.

In addition, Gatti et al. (2022) explain that seasonal economic cycles further influence the economic contributions of urban parks. Visitor numbers and park-related activities often peak during favourable weather conditions, festivals, and public holidays, generating significant revenue during these periods. Conversely, off seasons present challenges, such as reduced foot traffic and lower income for vendors and businesses dependent on park visitors. For example, in temperate zones of South America, parks in cities like Santiago and São Paulo experience high visitor demand during spring and summer months, which sustains temporary employment and boosts local businesses. Along these line, Geng et al. (2021) mention that addressing these seasonal fluctuations through innovative programming, such as winter festivals or off-season activities, can mitigate revenue gaps and create year-round economic stability.

Urban parks also foster broader economic uplift by creating environments conducive to the growth of small and medium-sized enterprises (SMEs). Events, markets, and cultural activities hosted in parks attract large crowds, driving demand for nearby services such as food outlets, retail stores, and transportation (Shi et al., 2023). For example, Santiago's Parque Forestal and Lima's Circuito Mágico del Agua have become hubs of economic activity, where businesses thrive due to consistent foot traffic and event-driven opportunities. Additionally, parks often attract larger investments in surrounding neighbourhoods, enhancing their appeal, and boosting the local economy. These spaces also support crowdfunding initiatives, as seen in the revitalisation of Nova Iguaçu's Municipal Natural Park in Brazil, where public-private collaboration yielded substantial economic returns alongside enhanced ecological and social outcomes (Afonso et al., 2023).

3.3. Quinary economic sector – recreation, culture, and tourism

Urban parks are integral to the quinary economic sector, offering diverse recreational opportunities that promote health, happiness, and economic activity. Activities such as sports, exercise classes, and leisure pursuits attract a wide demographic, fostering individual well-being and social cohesion. For example, research highlights how green spaces with adequate facilities enhance physical activity and mental health, as seen in parks like Donghu National Park in Wuhan, which attracts millions annually for cycling, walking, and other pursuits (Nor Akmar et al., 2018; Ye et al., 2024). Parks also host private or public classes as well as organised events,

such as sports tournaments, which stimulate local economies by generating spending on equipment, refreshments, and related services.

Cultural programming further amplifies the economic contributions of urban parks. These spaces serve as dynamic venues for performances, exhibitions, and festivals that attract local and international tourists. Iconic examples include Central Park in New York, known for its concerts and exhibitions (Crompton, 2020), and Villa-Lobos Park in São Paulo, which hosts similar revenue-generating events. In Lima's Parque de la Exposición, cultural adaptability is highlighted through pop-up museums, temporary art installations, and outdoor festivals, which foster tourism and stimulate local businesses. Surrounding cafes, restaurants, and retail outlets thrive from increased park visitation, underscoring the constructive collaboration between cultural programming and urban tourism (Xia & Zhou, 2024; Ye et al., 2024).

Modern design innovations have expanded the appeal of urban parks by creating spaces that transport visitors to imagined environments. This concept of "modern displacement" is evident in features like beach volleyball courts, sandy play areas, and landscaping that mimics other national and foreign settings. São Paulo's Ibirapuera Park and Parque do Carmo incorporate such thematic designs to evoke global influences, offering visitors an immersive escape. These elements attract diverse user groups, encourage longer stays, and boost tourism (Liu et al., 2021), as seen in Santiago's Parque Bicentenario, where aesthetic and recreational features draw high visitor numbers and bolster local economies.

Urban parks also function as incubators of creativity and cultural expression. Spaces dedicated to writers, artists, and performers foster a vibrant cultural ecosystem, attracting visitors seeking authentic creative experiences. In Lima's Parque de la Exposición, outdoor art exhibitions and poetry readings have enriched the cultural landscape while contributing to local economies. These parks provide platforms for creative industries to thrive, highlighting the transformative role of urban parks in shaping cultural and economic growth (Mullenbach et al., 2022).

Additionally, urban parks have become versatile spaces for hosting personal and community events, solidifying their economic role. From weddings to corporate gatherings, parks like São Paulo's Parque Villa-Lobos and Santiago's Parque Bicentenario provide cost-effective venues that contribute to operational budgets through event fees. These spaces attract local and international patrons, further boosting tourism and commerce in their vicinity. Liu et al. (2021) add that innovative technologies like GPS tracking have enhanced the economic contributions of parks by enabling efficient visitor flow management, optimising space utilisation, and tailoring activities to user preferences. This integration of technology, creativity, and cultural programming underscores the multifaceted contributions of urban parks to sustainable urban development.

3.4. Circular economy implications: sustainability and community engagement

These spaces often serve as hubs for innovative initiatives such as waste-to-product programmes, where organic park waste is transformed into valuable materials like compost or fillers for biocomposites, enhancing resource efficiency while reducing waste (Viretto et al., 2021). In São Paulo's Aclimação Park, for instance, visitors can exchange food waste for sustainable cleaning products, an initiative that fosters public participation in environmental stewardship while reducing landfill contributions. Additionally, the implementation of green energy solutions, such as solar lighting and rainwater harvesting systems, highlights the role of urban parks in sustainable urban development while simultaneously lowering operational costs (Mwanzu et al., 2023). These practices highlight the transformative potential of urban parks, embedding circularity into their operations and advancing both environmental and economic sustainability (Pearlmutter et al., 2020).

Community engagement is integral to the success of these sustainability initiatives, creating a participatory culture that strengthens the societal relevance of parks. By offering workshops on topics such as meditation, sports, and language classes, urban parks effectively utilise their spaces to foster individual skills and mental well-being while delivering broader social and economic benefits (Wang et al., 2022). Parks also frequently host health-related services, including fitness sessions and nutritional education programmes, which are particularly critical in densely populated cities such as Lima. These activities not only promote public well-being but also build a sense of community ownership, ensuring that park programmes align with local needs and priorities. By fostering active engagement, urban parks reinforce their position as inclusive assets that address both individual and community needs (Binka et al., 2022).

Urban parks increasingly function as centres for education and knowledge dissemination, further enhancing their contribution to community development. Many parks incorporate libraries and learning centres that provide free access to resources and host workshops on environmental conservation, sustainable practices, and vocational training. Santiago's Parque Quinta Normal, for example, integrates a public library that has become a focal point for educational programming, attracting families, students, and tourists alike. These educational hubs not only enrich cultural and intellectual life but also contribute to economic growth by fostering an informed and skilled workforce, driving local innovation, and promoting tourism centred around learning and cultural exchange. This integration of education within urban parks exemplifies how these spaces extend their benefits far beyond recreation.

The incorporation of urban agriculture into park design further reinforces their role in fostering circular economies and environmental aware-

ness. Parks like Parque Villa-Lobos in São Paulo host community gardens and agricultural zones where residents grow fruits, vegetables, and medicinal plants. These initiatives not only address food security challenges but also encourage sustainable practices like composting and organic farming. By reducing the environmental impact of food transportation and providing informal education on agriculture, urban parks enable communities to adopt sustainable lifestyles. For instance, research from Mashhad, Iran, reveals that integrating agricultural zones into park design increases economic returns and enhances social cohesion, a model that Latin American cities can adopt to further amplify the socio-economic impact of their urban parks (Hosseinpour et al., 2022).

3.5. Connectivity and modern uses

Urban parks are increasingly being integrated with modern technologies, making them central to the connectivity and digital inclusivity of urban areas. Many parks and green areas now serve as internet-enabled spaces, allowing visitors to engage in remote work, online education, and social interactions within a natural setting (Teles et al., 2025). The incorporation of high-speed or normal-speed internet and dedicated zones for remote activities transforms parks into multifunctional hubs that cater to modern work-life balances (Zhao et al., 2024). This shift is not purely market-driven: it is also being enabled through public policy and municipal digital-inclusion infrastructures. In São Paulo, for instance, the municipal government – through the Secretariat for Innovation and Technology (2025) – has implemented the WiFi Livre SP programme, which provides free public internet access across a wide network of locations in the city, including parks and squares, with the first hotspot installed in 2014 and the service subsequently expanding to over a thousand access points in 2025.

Nevertheless, often parks struggle to develop these zones. Additionally, parks function as central nodes for community information dissemination, hosting events, providing support services, and fostering educational initiatives, which make them critical spaces for urban resilience and civic engagement (Ren et al., 2023). Beyond digital connectivity, parks are increasingly designed as “nature offices” or informal discussion spaces, combining the benefits of natural environments with the functional requirements of collaborative and creative work. This dual functionality not only enhances the usability of parks but also aligns with sustainable urban development goals by reducing the need for traditional infrastructure while promoting outdoor activities (Ramezani et al., 2022).

Virtual and augmented reality technologies are being progressively integrated into urban park settings, offering immersive experiences that redefine visitor engagement and accessibility. Through augmented reality (AR), visitors can explore interactive maps, learn about flora and fauna, or engage with historical recreations of the park’s landscape. For example,

AR-enabled applications in Santiago's Parque Bicentenario allow users to identify plant species and learn their ecological significance in real time. Similarly, virtual reality (VR) applications are being used in pilot projects in Costa Rica's national parks to simulate eco-friendly tourism and educate visitors about environmental conservation, demonstrating the potential for VR to foster sustainable tourism and deepen environmental awareness (Sánchez et al., 2021).

3.6. Challenges and barriers for long-term growth

Urban parks often face significant challenges in ensuring equitable access, as disparities in socioeconomic and spatial factors frequently undermine their intended benefits. While parks are theoretically free and accessible, practical barriers such as distance, lack of transportation options, and urban gentrification often limit access for low-income communities (Deng & Ning, 2024). It also must be thought that environmental gentrification can exacerbate inequalities by displacing lower-income residents. In this context, emblematic and centrally located parks – such as Ibirapuera, Villa-Lobos, Augusta (São Paulo), and Kennedy (Lima) – have increasingly become symbols of selective urban attractiveness, where improvements in infrastructure, safety, and programming indirectly favour middle- and upper-income users. Similarly, Kim et al. (2025) explains that proximity to parks does not always equate to higher usage, as cultural preferences and perceptions of safety also play a role. This selective appropriation contributes to subtle forms of elitisation, in which certain social groups feel implicitly excluded despite the formal openness of these spaces. These patterns highlight how physical accessibility alone is insufficient; addressing social and psychological barriers is equally vital to achieving equitable use of urban green spaces.

Furthermore, urban parks are often affected by safety concerns and illicit activities within or nearby their perimeter, which can deter their use. Issues such as drug use and commerce, homelessness, and sex work practices are prevalent in many urban parks, creating environments perceived as unsafe by potential visitors. Paradoxically, in highly valorised parks such as Ibirapuera and Villa-Lobos, increased surveillance, private security, and event-oriented management have reduced some of these activities while simultaneously reinforcing exclusionary dynamics, particularly toward informal workers and marginalised populations. These challenges are further complicated by inadequate maintenance and lack of policing in less central or peripheral parks, which can turn them into neglected spaces rather than vibrant community assets. For instance, research on Brazilian urban parks identifies a lack of public policies aimed at revitalising and securing these spaces, which diminishes their potential for fostering social cohesion and environmental quality (Benini & Godoy, 2022). This uneven governance landscape produces a dual urban park system: one that is polished, curated,

and economically activated, and another that remains under-resourced, stigmatised, and socially fragmented.

While urban parks are increasingly recognised as catalysts for economic growth, care must be taken to ensure that their intrinsic purpose as spaces for environmental preservation and social well-being remains central. Overemphasising their economic utility risks distorting their nature and shifting priorities away from their core functions of ecological and recreational value. This risk becomes particularly salient when park management models privilege revenue generation, flagship events, or selective attractiveness over everyday public use and ecological integrity. Instead, urban parks should balance their roles as hubs for innovation, education, and community engagement while retaining their identity as spaces that connect people with nature. Achieving this balance is not merely a normative aspiration, but a prerequisite for ensuring that economic benefits translate into long-term urban resilience rather than short-lived gains. Programmes such as those in Ilha do Cardoso State Park in Brazil demonstrate how parks can serve as platforms for scientific research, ecological restoration, and public education, ensuring their long-term sustainability as essential urban assets (Spironello et al., 2020). By harmonising ecological, social, and economic objectives, parks can continue to drive urban transformation without compromising their foundational values.

Urban parks embody a multifaceted role in fostering economic growth, environmental sustainability, and social inclusivity, as evidenced by the analysis throughout this paper. Rather than operating through isolated mechanisms, their impacts emerge from the interaction between economic activation, governance arrangements, social accessibility, and ecological functions. Their contributions span a variety of domains, from enhancing property values to acting as hubs for cultural, recreational, and educational activities. However, as discussed in the previous sections, these contributions are neither evenly distributed nor automatically inclusive, and may generate new forms of exclusion if not carefully governed. These interconnected roles underscore the diverse impacts of urban parks on modern cities. In this sense, economic growth should be understood not as an end, but as a contingent outcome of balanced, inclusive, and ecologically grounded park systems.

Figure 1 serves as a synthesis of these key themes, providing a visual representation of the complex interactions and functions that urban parks perform. By situating economic impacts alongside challenges, governance constraints, and modern uses, the figure reinforces the argument that long-term growth depends on managing trade-offs rather than maximising single dimensions. It highlights their economic impacts, long-term contributions to urban revitalisation, and their potential for driving sustainable development. Importantly, it also foregrounds the tensions identified throughout this research – between accessibility and elitisation, innovation

and commodification, and growth and preservation – thereby offering an integrated framework for interpreting urban parks as dynamic, contested, and strategically significant urban spaces.

4. Final considerations

Urban parks are essential elements of modern urban landscapes, uniquely positioned to address the intertwined challenges of environmental degradation, social inequity, and economic stagnation. This paper has highlighted their multifaceted roles, demonstrating how these spaces integrate ecological preservation, cultural enrichment, and economic vitality into a cohesive framework for urban sustainability. Parks not only provide necessary ecosystem services but also act as dynamic hubs for education, recreation, and innovation, ensuring their relevance in the rapidly evolving context of urbanisation.

The argument developed here underscores the significant economic contributions of urban parks, extending beyond direct revenue generation to fostering local economies, entrepreneurship, and tourism. Rather than claiming uniform or automatic “impacts”, the paper specifies pathways of economic activation (e.g., property-value dynamics, micro-commerce and informal livelihoods, event economies, and operational sustainability) and emphasises the governance and infrastructural mediators that shape their distributional consequences (e.g., partnership models, user-facing fee exposure, payment infrastructures, and public connectivity). Through initiatives such as public-private partnerships, circular economy practices, and the integration of cutting-edge technologies, parks have emerged as critical platforms for sustainable economic growth. Their ability to adapt to evolving urban needs, from supporting informal economies to hosting creative and cultural events, highlights their importance in fostering inclusive and resilient urban environments.

At the same time, urban parks face critical challenges that threaten their accessibility and inclusivity. Issues such as social inequality, environmental gentrification, and the commodification of park activities risk alienating lower-income communities and undermining the intrinsic purpose of these spaces. The framework therefore insists on analysing growth alongside its frictions: economic activation can coexist with threshold effects that exclude (through pricing, securitisation, or selective “flagship” programming), and with displacement pressures linked to green-led valorisation. Safety concerns and inadequate maintenance further exacerbate these barriers, highlighting the need for comprehensive urban policies and participatory approaches to park governance. Addressing these challenges will require sustained investment and a commitment to equitable and inclusive urban development.

The paper also emphasises the importance of balancing the economic

utility of urban parks with their foundational roles in ecological and social well-being. Over-commercialisation risks distorting their purpose, shifting priorities away from their intrinsic values as spaces for nature and community connection. Here, the paper's brief dialogue with Ebenezer Howard's garden-city tradition is instructive: while Howard's model cannot be transplanted into South American metropolitan realities, it foregrounds a durable normative tension between urban growth and collective welfare that remains central to contemporary park governance. Ensuring that parks remain accessible to all while fostering innovation and sustainable practices will require a harmonious integration of ecological, social, and economic objectives.

In conclusion, urban parks are far more than recreational spaces; they are engines of sustainable urban transformation. Answering the guiding research question – how urban parks in South America operate as catalysts for local economic growth – requires treating parks as economically productive yet politically mediated infrastructures, whose growth effects depend on contextual conditions and governance choices rather than on “green space” per se. By preserving their core values while embracing innovative practices and addressing contemporary challenges, parks can continue to serve as vital assets for cities, fostering vibrant, equitable, and resilient communities for generations to come. As a theory-building contribution, this paper also points to a research agenda: future studies can test the proposed mechanisms through mixed-method and comparative designs (e.g., hedonic pricing and land-value analyses, structured observations of park economies, governance/process tracing of partnership models, and equity-focused assessments of fee and payment infrastructures), thereby strengthening causal inference while retaining sensitivity to informality and socio-spatial inequality. Through strategic planning and inclusive governance, urban parks can fulfil their potential as catalysts for growth and sustainability, proving indispensable in shaping the future of urban living.

4.1. Limitations

As a theory-oriented contribution, this paper advances an analytically transferable framework rather than an evaluative account of park “impacts”. Its comparative insights are therefore conditioned by the nature of the inputs used for conceptual refinement. First, the structured park engagements in Lima, São Paulo, and Santiago were designed to identify mechanisms and trade-offs rather than to provide representative coverage of each metropolis; accordingly, the analysis should not be read as a comprehensive mapping of city-wide park systems. Second, Table 4 relies on qualitative, relative codings (High/Medium/Low) that are intentionally indicative and internally comparative within the study's park set; while the Evidence Tag distinguishes contextual inference, observation, literature, and expert validation, these codings do not constitute inferential

measurement. Third, several mechanisms discussed – such as property-value dynamics, partnership effects, and fee-related threshold impacts – are mediated by legal regimes, fiscal capacity, and neighbourhood trajectories that vary across cities and may not be fully captured without longitudinal data. Finally, the paper’s emphasis on South American metropolitan contexts foregrounds informality and socio-spatial inequality; although the framework is designed to be transferable, its propositions require careful recalibration when applied to contexts with different welfare, governance, and land-market configurations.

4.2. Recommendations and implications

The framework suggests that treating parks as economic catalysts requires policy designs that hold together economic activation and distributive fairness. A first recommendation is to adopt explicit “public value” safeguards in partnership and concession models, including transparent contracting, affordability clauses, limits on user-facing charges for basic amenities, and periodic equity audits to monitor exclusionary effects. Second, where fee regimes are used to offset operational costs, municipalities should prioritise progressive design – e.g., free core access, fee waivers or targeted subsidies, and clear boundaries between optional paid services and essential public functions – so that financial sustainability does not translate into economic barriers. Third, because informal livelihoods often constitute a key economic interface in South American parks, governance should avoid blanket “formalisation” that displaces subsistence activity; instead, cities can pursue regulated accommodation (designated vending zones, basic services, hygiene, and safety standards) that protect livelihoods while improving visitor experience. Fourth, investments in “enabling infrastructures” – public connectivity, safe mobility access, lighting, and inclusive programming – should be treated as integral to economic performance, not as ancillary amenities, because they shape who can participate in park-based economies and when. Finally, to strengthen evidence for decision-making, future research should operationalise the framework through mixed-method comparative designs that combine hedonic pricing or land-value analysis, structured observation of micro-economies, process tracing of partnership arrangements, and equity-focused assessments of fee and payment infrastructures, ideally with longitudinal components to capture seasonal cycles and neighbourhood change.

References

- Afonso, H. C. A. da G., Menezes, A. S., Santos, A. M. S., Castilho, A. P. M., & Mello, A. J. R. (2023). Propuesta de modelación en project finance de explotación económica de parques en perímetro urbano: Parque Natural Municipal Nova Iguaçu, PNMNI (Brasil). *Ciudad y Territorios Estudios Territoriales*, 55(218), 1195–1214. <https://doi.org/10.37230/CyTET.2023.218.11>

- Andrade, I. L. F., & Massi, K. G. (2024). Richness of native and exotic plants in parks in São Paulo is determined by urban park size and age. *Brazilian Archives of Biology and Technology*, 67(3), e24220696. <https://doi.org/10.1590/1678-4324-2024220696>
- Aranibar, E., & Teles, R. (2025). Versando o turismo sustentável: Teorias, práticas e desafios na busca por um desenvolvimento equilibrado. *Fronteiras*, 14(3). <https://doi.org/10.21664/2238-8869.2025v14i3.7651>
- Aziz, N. A., van den Bosch, K., & Nilsson, K. (2018). Recreational use of urban green space in Malaysian cities. *International Journal of Business and Society*, 19(1), 1–16. <https://www.ijbs.unimas.my/images/repository/pdf/Vol19-S1-paper1.pdf>
- Benini, S. M., & Godoy, J. A. R. (2022). Management of urbanized public green spaces: Case study of the east zone of the city of Cuiabá-MT. *Journal of Environmental Management & Sustainability*, 11(1), 21185. <https://doi.org/10.5585/geas.v11i1.21185>
- Binka, B., Čech, M., & Činčera, J. (2022). The oasis of peace? Social perception of urban parks from the city-dwellers' perspectives. *Sustainability*, 14(18), 11460. <https://doi.org/10.3390/su141811460>
- Crompton, J. L. (2020). A review of the economic data emanating from the development of Central Park and its influence on the construction of early urban parks in the United States. *Journal of Planning History*, 1–23. <https://doi.org/10.1177/1538513220971005>
- Deng, Z., & Ning, L. (2024). Inequity in accessibility to urban parks in environmental gentrification areas based on Multi-G3SFCA: A case study of Wuhan's main urban districts. *Ecological Indicators*, 169, 112899. <https://doi.org/10.1016/j.ecolind.2024.112899>
- Dutra, R. (2023). Sociedad mundial, diferenciación funcional, centro/periferia y dependencia. *Revista MAD*, 48, 124–149. <https://doi.org/10.5354/0719-0527.2023.72143>
- Ferreira, F., Vasconcelos, L., & Ferreira, J. C. (2022). Socio-ecological and economic evaluation of urban parks: A methodology integrating and articulating diverse components. *Journal of Outdoor Recreation and Tourism*, 40, 100512. <https://doi.org/10.1016/j.jort.2022.100512>
- Galindo, J. (2023). Diferenciación y desigualdad. *Revista MAD*, 48, 103–123. <https://doi.org/10.5354/0719-0527.2023.72141>
- Gałkowski, M., & Antosz, P. (2022). The hidden boundaries of public space: Awareness of civil rights restrictions in privatized urban squares in Poland. *Cities*, 127, 103722. <https://doi.org/10.1016/j.cities.2022.103722>
- Gatti, E. T. J., Brownlee, M. T. J., & Bricker, K. S. (2022). Winter recreationists' perspectives on seasonal differences in the outdoor recreation setting. *Journal of Outdoor Recreation and Tourism*, 37, 100366. <https://doi.org/10.1016/j.jort.2021.100366>
- Geng, D. C., Innes, J. L., Wu, W., Wang, W., & Wang, G. (2021). Seasonal variation in visitor satisfaction and its management implications in Banff National Park. *Sustainability*, 13(4), 1681. <https://doi.org/10.3390/su13041681>
- Gong, Q., & Yang, H. (2022). Expert panels with selective investigation. *B.E. Journal of Theoretical Economics*, 22(2), 369–404. <https://doi.org/10.1515/bejte-2021-0010>
- Hosseinpour, N., Kazemi, F., & Mahdizadeh, H. (2022). A cost-benefit analysis of applying urban agriculture in sustainable park design. *Land Use Policy*, 112, 105834. <https://doi.org/10.1016/j.landusepol.2021.105834>
- Howard, E. (1898). *To-morrow: A peaceful path to real reform*. Swan Sonnenschein & Co. <https://www.gutenberg.org/files/46134/46134-h/46134-h.htm>
- Howard, E. (1902). *Garden cities of to-morrow*. Swan Sonnenschein & Co. <https://dn790002.ca.archive.org/0/items/gardencitiesofto00howa/gardencitiesofto00howa.pdf>

- Kim, J., Won, Y., Kim, Y., & Corley, E. (2025). Preferring local over non-local parks? Green space visit patterns by urban residents in desert cities, Arizona. *Landscape and Urban Planning*, 256, 105292. <https://doi.org/10.1016/j.landurbplan.2024.105292>
- Kong, L., Wu, J., Liu, Z., Pan, X., Wang, Y., Guo, X., Liu, H., Wang, Y., & Li, W. (2022). How do different types and landscape attributes of urban parks affect visitors' positive emotions? *Landscape and Urban Planning*, 226, 104482. <https://doi.org/10.1016/j.landurbplan.2022.104482>
- Liu, S., & Wang, X. (2021). Reexamine the value of urban pocket parks under the impact of COVID-19. *Urban Forestry & Urban Greening*, 64, 127294. <https://doi.org/10.1016/j.ufug.2021.127294>
- Liu, W., Chen, Q., Li, Y., & Wu, Z. (2021). Application of GPS tracking for understanding recreational flows within urban park. *Urban Forestry & Urban Greening*, 63, 127211. <https://doi.org/10.1016/j.ufug.2021.127211>
- Long, F., & Shi, L. (2021). Growth in surrounding consumer amenities: The economic externality of urban parks. *Growth and Change*, 52(1), 1062–1079. <https://doi.org/10.1111/grow.12474>
- Loughran, K. (2018). Urban parks and urban problems: An historical perspective on green space development as a cultural fix. *Urban Studies*, 1–18. <https://doi.org/10.1177/0042098018763555>
- Mullenbach, L. E. (2022). Critical discourse analysis of urban park and public space development. *Cities*, 120, 103458. <https://doi.org/10.1016/j.cities.2021.103458>
- Mullenbach, L. E., Mowen, A. J., Baker, B. L., & Wilhelm Stanis, S. A. (2022). Can urban parks bridge deep divides? Assessing the effects of inter-racial social interaction in parks and public spaces on trust. *Journal of Leisure Research*, 53(3), 450–472. <https://doi.org/10.1080/00222216.2021.1982660>
- Mwanzu, A., Nguyu, W., Nato, J., & Mwangi, J. (2023). Promoting sustainable environments through urban green spaces: Insights from Kenya. *Sustainability*, 15(15), 11873. <https://doi.org/10.3390/su151511873>
- Nesticò, A., Passaro, R., Maselli, G., & Somma, P. (2022). Multi-criteria methods for the optimal localization of urban green areas. *Journal of Cleaner Production*, 374, 133690. <https://doi.org/10.1016/j.jclepro.2022.133690>
- Nor Akmar, A., Van den Bosch, K., Nillson, K. (2018). Recreational Use of Urban Green Space in Malaysian Cities. *International Journal of Business & Society*, 19(S1), 1-16. <https://www.ijbs.unimas.my/images/repository/pdf/Vol19-S1-paper1.pdf>
- Núñez, J., Morales, A., & Ramirez, S. (2024). Aproximación a la construcción social del principio agroecológico en América Latina. *Desenvolvimento e Meio Ambiente*, 64, 92–116. <http://dx.doi.org/10.5380/dma.v64i0.91288>
- Park, J., & Kim, J. (2019). Economic impacts of a linear urban park on local businesses: The case of Gyeongui Line Forest Park in Seoul. *Landscape and Urban Planning*, 181, 139–147. <https://doi.org/10.1016/j.landurbplan.2018.10.001>
- Pearlmutter, D., Theochari, D., Nehls, T., Pinho, P., Piroe, P., Korolova, A., Papaefthimiou, S., Garcia Mateo, M. C., Calheiro, C., Zluwaj, I., Pithaj, U., Schosselerk, P., Florentin, Y., Ouannoun, S., Galm, E., Aichern, A., Arnoldo, K., Igondov, E., & Pucher, B. (2020). Enhancing the circular economy with nature-based solutions in the built urban environment: Green building materials, systems and sites. *Blue-Green Systems*, 2(1), 46. <https://doi.org/10.2166/bgs.2019.928>
- Peng, J., Dan, Y., Qiao, R., Liu, Y., Dong, J., & Wu, J. (2021). How to quantify the cooling effect of urban parks? Linking maximum and accumulation perspectives. *Remote Sensing of Environment*, 252, 112135. <https://doi.org/10.1016/j.rse.2020.112135>

- Ramezani, M., Manouchehri, A., Abedini, A., & Aram, F. (2022). The impact of inefficient urban growth on spatial inequality of urban green resources (case study: Urmia city). *Resources*, 11(7), 62. <https://doi.org/10.3390/resources11070062>
- Ren, K., Sun, X., Cenci, J., & Zhang, J. (2023). Assessment of public open space research hotspots, vitalities, and outlook using CiteSpace. *Journal of Asian Architecture and Building Engineering*, 22(6), 3799–3817. <https://doi.org/10.1080/13467581.2023.2208200>
- Sánchez, M., Palos-Sánchez, P. R., & Velicia-Martin, F. (2021). Eco-friendly performance as a determining factor of the adoption of virtual reality applications in national parks. *Science of the Total Environment*, 798, 148990. <https://doi.org/10.1016/j.scitotenv.2021.148990>
- Santos, G. N., Barros, S. R. S., & Santos, R. F. (2018). Uma avaliação dos conflitos socioambientais no Núcleo Massambaba do Parque Estadual da Costa do Sol. *Desenvolvimento e Meio Ambiente*, 44, 307–324. <https://doi.org/10.5380/dma.v44i0.54922>
- Secretariat for Innovation and Technology of São Paulo Municipality. (2025). *Programa WiFi Livre SP*. https://prefeitura.sp.gov.br/web/inovacao/w/inclusao_digital/152219
- Shao, H., & Kim, G. (2022). A comprehensive review of different types of green infrastructure to mitigate urban heat islands: Progress, functions, and benefits. *Land*, 11(10), 1792. <https://doi.org/10.3390/land11101792>
- Shi, M., Wang, Y., Lv, H., & Jia, W. (2023). Climate gentrification along with parks' cooling performance in one of China's tropical industrial cities. *Science of the Total Environment*, 892, 164603. <https://doi.org/10.1016/j.scitotenv.2023.164603>
- Spironello, E., Coelho, J. C., Campolim, M. B., & Candido, L. C. (2020). A gestão da pesquisa científica no Parque Estadual da Ilha do Cardoso. *Desenvolvimento e Meio Ambiente*, 54, 484–499. <https://doi.org/10.5380/dma.v54i0.67748>
- Taylor, L., Leckey, E. H., Lead, P. J., & Hochuli, D. F. (2020). What visitors want from urban parks: Diversity, utility, serendipity. *Frontiers in Environmental Science*, 8, 595620. <https://doi.org/10.3389/fenvs.2020.595620>
- Teles, R., Aranibar, E., & Olarte, M. (2025). Sustainable tourism on Instagram: Insights from Hispanic centennials. *Sustainability in Debate*, 16(2), 275–309. <https://doi.org/10.18472/SustDeb.v16n2.2025.56791>
- Tudor, T., Adam, E., & Bates, M. (2007). Drivers and limitations for the successful development and functioning of EIPs (eco-industrial parks): A literature review. *Ecological Economics*, 61(2–3), 199–207. <https://doi.org/10.1016/j.ecolecon.2006.10.010>
- Viretto, A., Gontard, N., & Angellier-Coussy, H. (2021). Urban parks and gardens green waste: A valuable resource for the production of fillers for biocomposites applications. *Waste Management*, 120, 538–548. <https://doi.org/10.1016/j.wasman.2020.10.018>
- Wang, J., Dai, J., Dewancker, B. J., Gao, W., Liu, Z., & Zhou, Y. (2022). Impact of situational environmental education on tourist behavior: A case study of Water Culture Ecological Park in China. *International Journal of Environmental Research and Public Health*, 19(18), 11388. <https://doi.org/10.3390/ijerph191811388>
- Xia, X., & Zhou, J. (2024). Urban design and Chinese culture spirit: The symbolic significance of mountain factors in shaping cultural park. *Trans/Form/Ação: Revista de Filosofia da Unesp*, 47(5). <https://doi.org/10.1590/0101-3173.2024.v47.n5.e02400179>
- Ye, Y., Qiu, H., & Jia, Y. (2024). Understanding factors affecting tourist distribution in urban national parks based on big data and machine learning. *Journal of Urban Planning and Development*, 150(4), 04024072. <https://doi.org/10.1061/JUPDDM.UPENG-4772>
- Zhao, Y., Yang, Z., Guo, Y., Song, H., & Sun, H. (2024). An optimal dispatch strategy of off-grid park integrated energy system considering source volatility. *Energy Reports*, 12, 1597–1607. <https://doi.org/10.1016/j.egy.2024.07.037>