



Economic Valuation of the Urban Parks in Kathmandu Valley, Nepal

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Abstract

Urban parks are essential for connecting people with nature and providing social, psychological, and ecological benefits, along with other vital ecosystem services. This study focuses on the economic valuation of the four urban parks in Kathmandu Valley, viz. Shankha Park, Ratna Park, Balaju Park, and Tribhuvan Park. One hundred and sixty respondents, with 40 respondents from each park, were surveyed to assess visitation pattern, satisfaction level, and willingness to pay (WTP) for park maintenance. Approximately 66% of respondents expressed WTP for maintenance of the parks, indicating the recognized value of the urban parks, regardless of their income levels. The individual travel cost method analysis revealed that Ratna Park had the highest average travel cost per person per visit (NPR 81.25) and the largest annual visitor count (360,030), while Tribhuvan Park recorded the lowest annual visitor numbers (80,000). This study highlights the importance of accessibility, proximity, and park quality in influencing visitation pattern. Key informant interviews emphasized the cultural and ecological value of the urban parks while identifying challenges such as poor waste management, inadequate fencing, and limited infrastructure. The findings underscore the need for integrating economic valuation into park management to enhance visitor satisfaction, ecological benefits, and sustainability. Policymakers should prioritize investments in green infrastructure development, waste management, and increasing accessibility to optimize the social and environmental values of the urban parks.

Keywords: Economic valuation, ecosystem services, public perception, travel cost method, urban parks

Introduction

Urban green spaces (UGS) are facing a significant decline because of rapid urbanization and escalating environmental challenges. UGS including parks, gardens, green roofs, wetlands, and street trees have emerged as a critical element in urban planning and sustainability efforts (Demuzere et al., 2014). They help to mitigate the adverse impacts of urbanization, such as air pollution, the urban heat island effect, and ecosystem degradation. Moreover, they contribute to environmental sustainability and public health by offering areas for relaxation and physical activities (Luttik, 2000; Pfeiffer & Cloutier, 2016). UGS also deliver critical services like improving air quality, providing cooling effects, and serving as habitats for diverse wildlife species (Yao et al., 2015).

Rapid urbanization in developing countries is often driven by rural-to-urban migration, leading to challenges such as inadequate public services, traffic congestion, urban sprawl, and informal settlements (Agrawal, 2016). In Nepal, urbanization has accelerated significantly, with the urban population rising from 17% in 2011 to 66.08% in 2017 (CBS, 2021). However, this rapid growth has not been accompanied by sufficient industrial development to support the increasing urban population. As infrastructure expands, such as through road widening projects, it has resulted in the loss of homes and trees, transforming the valley into a concrete jungle (Pun & Maharjan, 2013). This unplanned urbanization, coupled with rapid population growth, has hindered the expansion and maintenance of urban spaces (Robertson

& Shrestha, 2021). Urban parks, which hold historical significance, play a crucial role in mitigating pollution and providing disaster relief, as demonstrated during the 2015 Gorkha Earthquake (RECPHEC, 2016). While the environmental and social benefits of urban parks are widely acknowledged, there remains a significant gap in understanding their economic and ecological values, especially in developing countries like Nepal.

The Travel Cost Method (TCM) is an indirect approach used to estimate the benefits people get from visiting recreational places (Liston-Heyes & Heyes, 1999). This method calculates the value of recreational sites by analyzing expenses like travel costs and entry fees, making it practical, cost-effective, and easy to interpret (Limaei et al., 2014). However, the lack of research on residents' Willingness to Pay (WTP) for park maintenance and improvements hampers a comprehensive understanding of socio-economic factors that influence public support for such green spaces. This gap limits the development of effective policies and resource allocation for the urban parks (Gurung et al., 2012; Paudel, 2019). Thus, this study aims to assess the economic value of the urban parks and provide insights that can guide better management of the parks both in terms of strengthening practices and policies. By examining the relationship between economic valuation and public attitudes, this research addresses existing gap, and supports in the development of sustainable urban park management strategies for Nepal.

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Materials and Methods

Study area

Kathmandu District is located in central Nepal within the Kathmandu Valley. It is bordered by Bhaktapur to the east, Lalitpur to the south and west, and the Mahabharat mountain range to the north. It spans 413.60 sq. km. at an elevation of about 1350 m. Kathmandu serves as the political, cultural, and economic hub of Nepal with a dense urban population and a rich historical backdrop (Fig. 1). The responsibility of maintaining the majority of parks of Kathmandu falls

under the supervision of Kathmandu Metropolitan City, while some parks are managed by local communities (Pun & Maharjan, 2013). We selected four urban parks in Kathmandu Valley, viz. Shankha Park, Ratna Park, Balaju Park, and Tribhuvan Park. These parks were selected for our study due to their historical significance, diverse visitor demographics, and varying management practices, therefore, provides a comprehensive understanding of the major urban park valuation of the Kathmandu District (Table 1).

Table 1. Description of the studied urban parks in Kathmandu Valley

SN	Name of parks	Date of establishment (BS)	Major uses	Area (sq. m)
1.	Shankha Park	2036	Morning walk, exercise, entertainment, play-ground, rest, yoga etc.	13735.9
2.	Ratna Park	2019	Rest, entertainment, playing ground, morning walk etc.	16279.59
3.	Balaju Park	2018	Morning walk, rest, exercise, picnic etc.	80889.19
4.	Tribhuvan Park	2029	Picnic, morning walk, physical exercise, yoga, rest etc.	96660.04

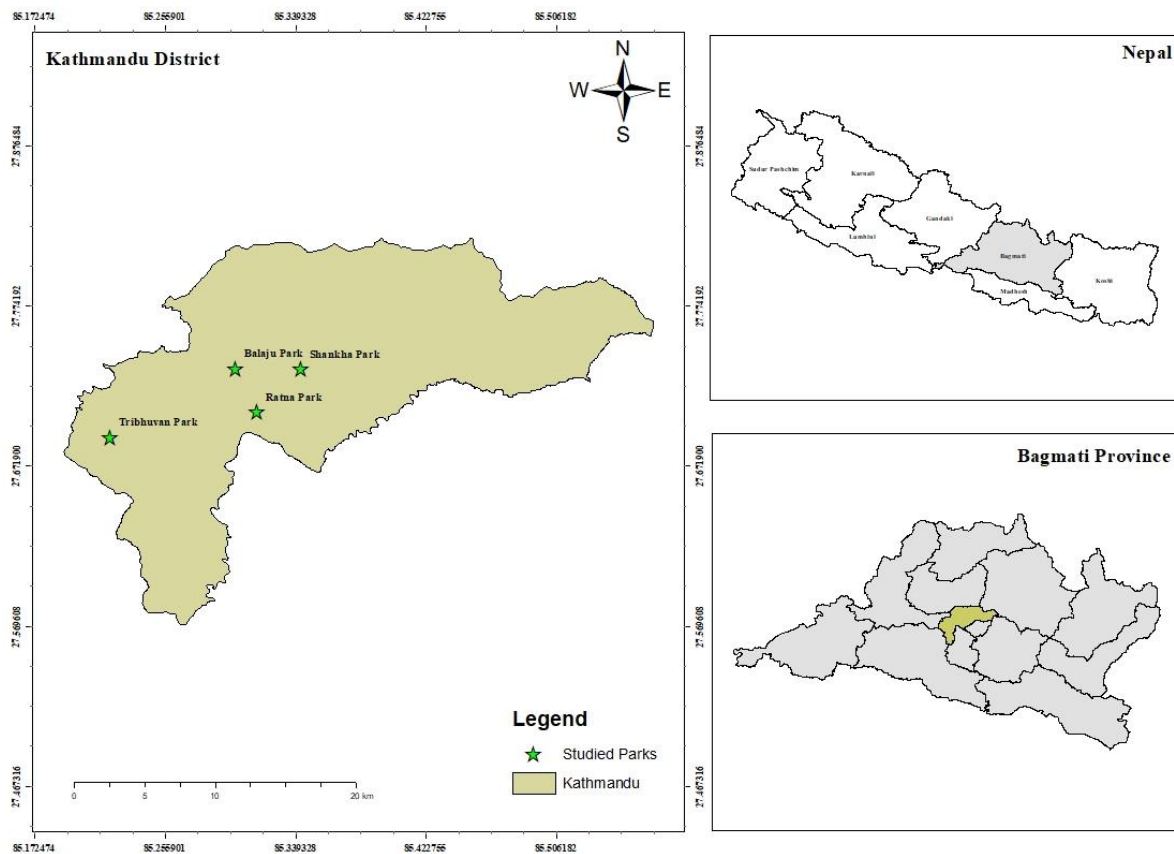


Figure 1. Location of the studied urban parks in Kathmandu Valley

Preliminary survey

A preliminary survey was conducted at Ratna Park with 10 participants over 2 days in the first week of January 2023 to test the suitability of the developed

questionnaire. A preliminary survey also provided a guide for the time to be considered for the detail survey and maintain the flow of the discussion with the respondents.

Data collection and analysis

Primary data was collected from the parks through surveys and interviews with visitors during January to April 2023. Face-to-face interviews were conducted with 160 individuals, including 40 from each park. Each park's sample had an equal representation of 20 males and 20 females across various age groups. To ensure ethical consideration, informed consent was obtained from all participants before the interview. They were fully informed about the study's purpose and assured that their responses would remain confidential and used solely for research purposes. Privacy and confidentiality were maintained throughout the data collection process. During the survey, foreign tourists and individuals travelling from far distance for short term visit were excluded from the study. The questionnaire contained 37 questions, divided into four categories: demographic information, perceptions of urban parks, WTP, and travel cost information. The questionnaire included open-ended, close-ended, and multiple-choice questions. Key informants, such as park experts, ranked ecosystem services on a rating scale from 0 to 5, where: 0 = no relevant capacity, 1 = low relevant capacity, 2 = relevant capacity, 3 = medium relevant capacity, 4 = high relevant

capacity, and 5 = very high relevant capacity. This evaluation with input from park experts and the park office head, who possess extensive knowledge of the parks' ecosystems. Valuation of the urban parks was performed using individual travel cost method (ITCM) to estimate the economic value of a public park since the park value varies based on individual characteristics (e.g., age, income, education, and past park experience) and park characteristics (e.g., attractiveness and accessibility) (Iamtrakul et al., 2005). Secondary data was gathered from published articles, reports, and databases to supplement and describe the primary data collected from the parks.

Results and Discussion

Demography of the visitors in the urban parks

The demographic characteristics of all respondents was analyzed. Respondents from different age groups were found in the survey, with maximum respondents (41.25%) from the 18-25 age group, followed by 26-35 of age group having 36.25% of respondents (Table 2; Fig. 2).

Table 2. Demographic characteristics of the respondents (n = 160) in the studied urban parks

Age group	Number of respondents	Relative frequency (%)
18-25	66	41.25
26-35	58	36.25
36-45	14	8.75
>55	22	13.75
Education	Number of respondents	Relative frequency (%)
No formal education	11	6.87
Primary	19	11.87
Secondary	33	20.62
University	97	60.62
Employment Status	Number of respondents	Relative frequency (%)
Unemployed	19	11.87
Student	45	28.12
Employed part-time	9	5.62
Employed full-time	49	30.62
Temporarily employed	25	15.62
Retired	13	8.12
Number of visits (per yr)	Number of respondents	Relative frequency (%)
Daily basis	20	12.50
1 time per week	49	30.63
1 time per month	46	28.75
1 time per 6 months	33	20.63
1 time per year	12	7.50

Interestingly, 36-45 age group of people were found less (8.75%) in comparison to >55 age group (13.75%) in all the four parks considered for the study. Van Hecke *et al.* (2017) suggested that individuals aged 55 and above generally exhibit lower levels of engagement in physical activities. In contrast to the previous research, in our study respondents >55 age group were significantly

present in parks to sit and enjoy greenery. But there is strong evidence that constraints on park visitation are influenced by a person's age, gender, race, income, and education status (Zanon *et al.*, 2013). Among the respondents, around 11.88% had a primary degree and 20.63% had a secondary degree in education. A higher portion of participants completed university education

(60.63%), and only a small proportion had no formal education (6.88%). Paul & Nagendra (2017) found that educational level significantly influences the accessibility of urban parks in their study. Most of the respondents

(30.63%) were full-time employed, 28.13% of them were students and a very small number of respondents (5.63%) were employed on a part-time basis.

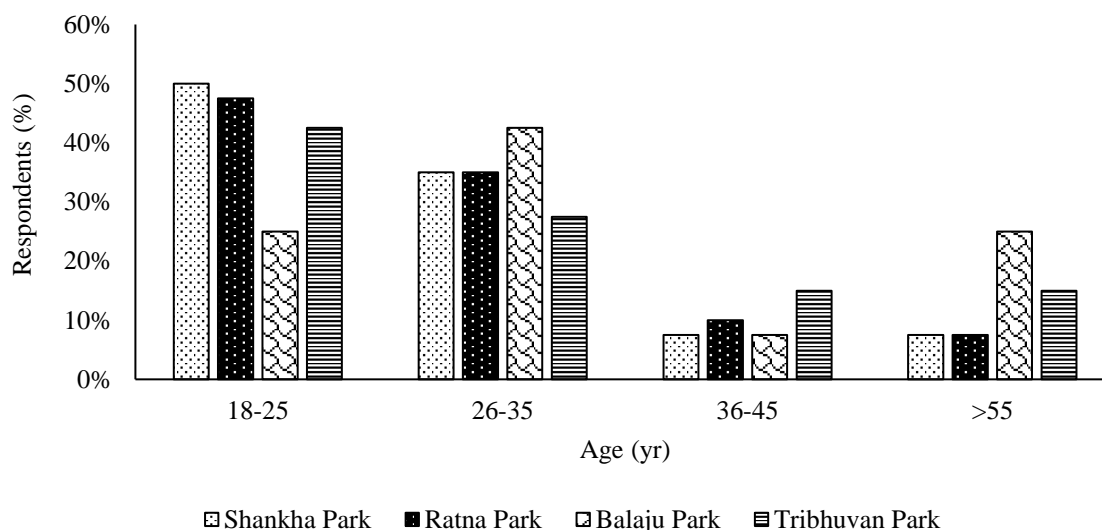


Figure 2. Age of the respondents in the studied parks

The survey results indicate that younger respondents frequently visited parks, likely due to their easy accessibility and preference for recreational spaces. In Balaju Park, the 26-35 age group represented the highest proportion (42.50%) of visitors. Conversely, older visitors (>55 age group) were less common in Shankha

Park and Ratna Park, which aligned with the survey done by Dinda and Ghosh (2021), where 10% of respondents from old age group visited to the park. A substantial proportion of participants were university students, in Ratna Park, which contributed to a low number of respondents with no formal education (Fig. 3).

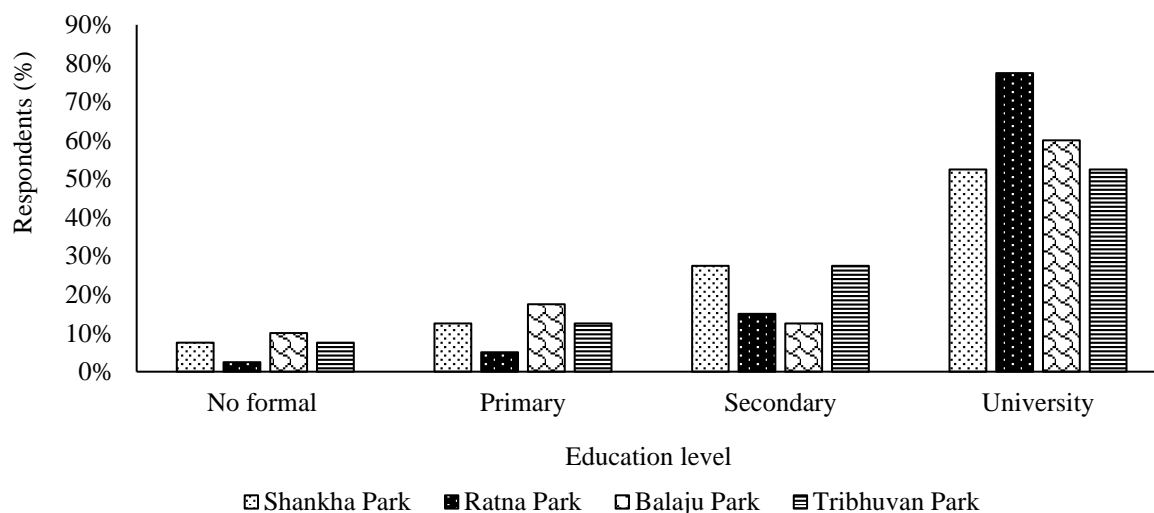


Figure 3. Education level of the respondents in the studied parks

Employment status revealed that Shankha Park (32.50%) and Ratna Park (42.50%) had a notable number of student visitors, likely due to their proximity to educational institutions and entry fee structures. In Balaju Park, most respondents (42.50%) were temporarily employed, while Tribhuvan Park had a mix

of full-time and temporary employment among 30% of its visitors (Fig. 4). Income trends of respondents varied across parks, viz. Shankha Park had the largest segment of respondents (30%) earnings between Nepalese Rupees (NPR)10,000-20,000 while in Ratna Park was observed with 27.50% respondents within the range of

NPR 30,000-50,000. Balaju Park recorded the highest percentage (22.50%) of respondents earning between NPR 0-5,000, whereas Tribhuvan Park had 27.50% earning NPR 10,000-20,000. Previous studies suggest that income significantly influences park visitation, with higher-income groups often constrained by time (Fig. 5).

Regarding visit frequency, Shankha Park attracted the most daily visitors (30%), likely due to its free entry and

well-maintained facilities (Fig. 6). Ratna Park also had a significant annual visitor rate at 32.65%. Once known for attracting unemployed individuals and drug users (RECPHEC, 2016), Ratna Park has transformed into a safe space for students due to its accessibility and location near busy roads. In contrast, Balaju Park and Tribhuvan Park saw monthly visitation rates of 40% and 35%, respectively.

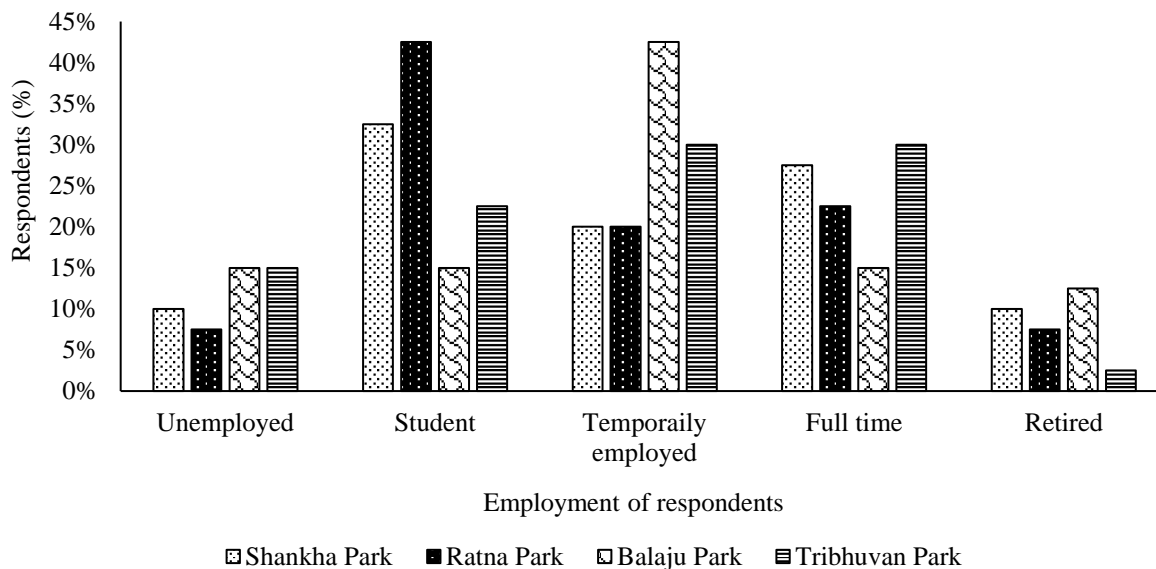


Figure 4. Employment status of the respondents in the studied parks

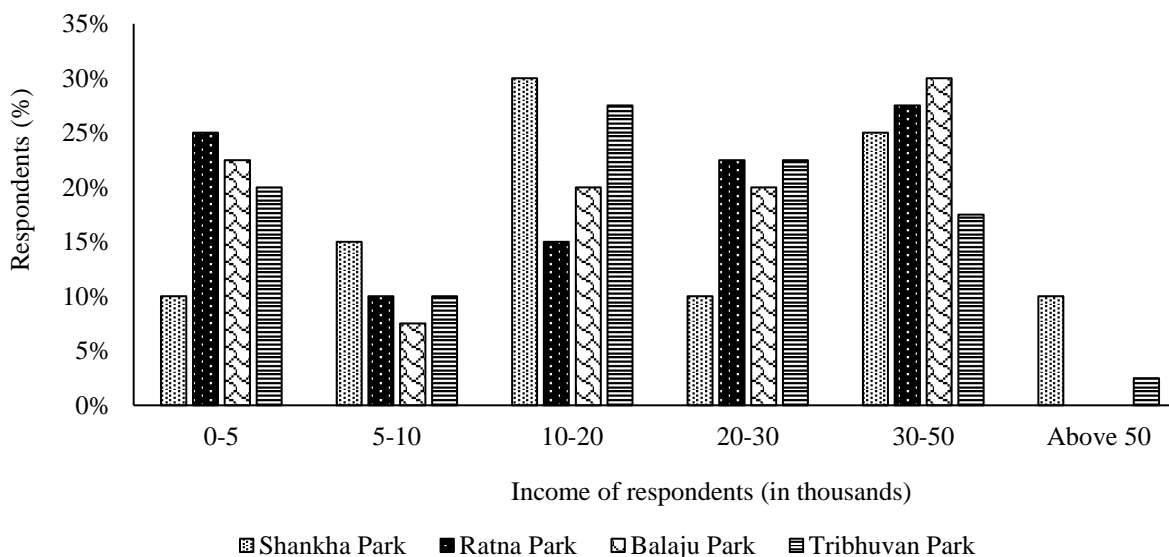


Figure 5. Income level of the respondents in the studied parks

Interestingly, while previous research indicated smaller parks face more issues than larger ones (Pun & Maharjan, 2013), our findings showed that larger parks encountered more challenges compared to smaller ones. Both Tribhuvan and Balaju Park were reported with facing issues such as inadequate seating places, limited plant diversity, and solid waste management problems. Poor maintenance can deter visitors from the urban parks despite their convenient locations (Powell *et al.*,

2003). The frequency of physical activities in parks is closely linked to their development and cleanliness (Akpinar *et al.*, 2016), as evidenced by declining visitor numbers in Tribhuvan Park compared to the previous years as reported by the respondents. Similarly, regarding the duration of stay in the parks, most respondents typically spent 1-2 hours, with very few staying for less than 30 minutes across all the parks (Fig. 7).

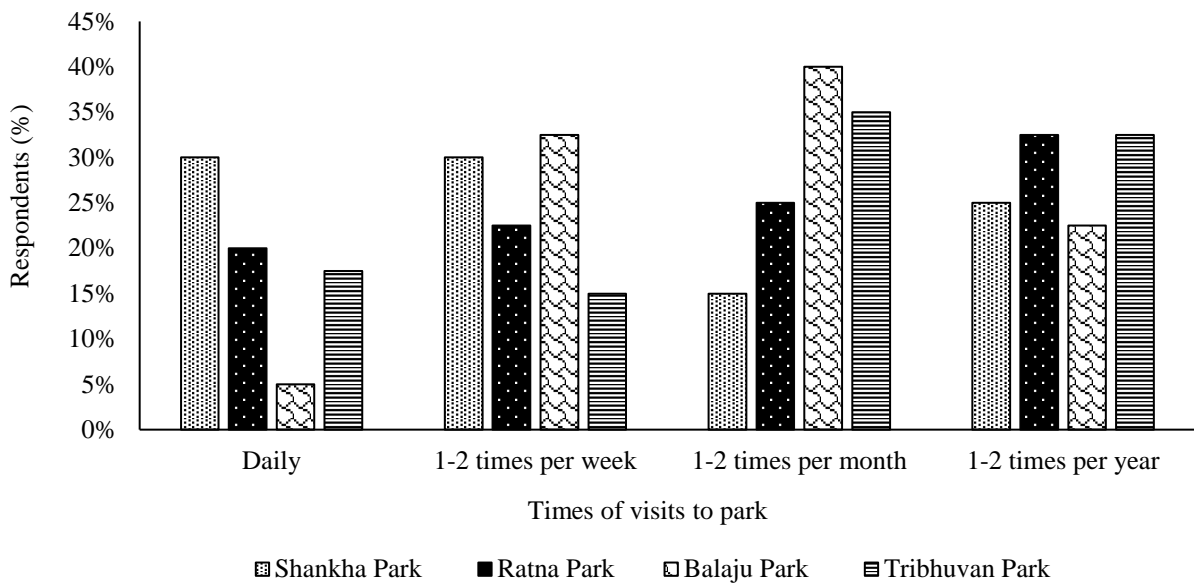


Figure 6. Frequency of visits of respondents in the studied parks

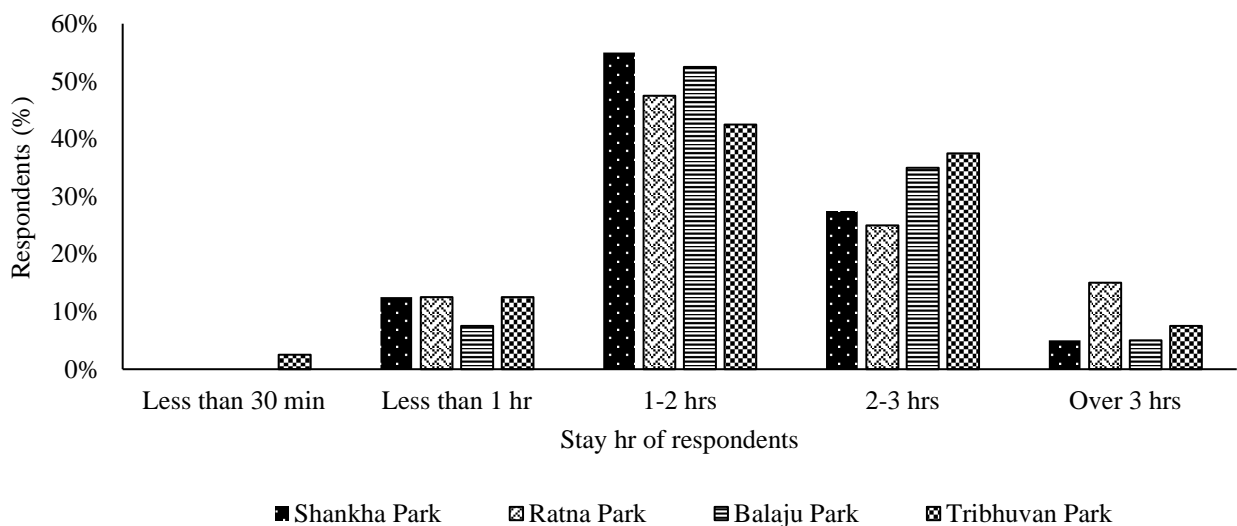


Figure 7. Stay hour of the respondents in the studied parks

Perception of people towards services provided by the urban parks

The visitors' perceptions on park usage and green spaces provide insights into the people's awareness on health, environmental, and their expectations with the urban parks (Maruthaveeran, 2017) (Fig. 8).

Out of the total 160 respondents, 71.87% reported visiting the parks primarily for 'Mental and Physical Health Benefits', among them the main motivation for visiting the park was to get the 'fresh air', which accounted for 26.25% of the respondents. Additionally, 'relaxation' (21.25%) and finding 'mental peace'

(17.50%) were also significant factors driving their park visits. Around (10.62%) of the respondents visited the parks to gain 'Social Benefits'. Among this group, 'meeting friends' (11.87%) emerged as the primary motive, followed by 'spiritual beliefs' (4.37%). Furthermore, (5.62%) of the participants visited the parks for 'Recreational Benefits', particularly to appreciate flowers and birds (2.50%), engage in recreational activities (1.87%), and enjoy the aesthetic view (1.25%). Dinda and Ghosh (2021) also identified a high proportion of respondents visiting the urban parks for emphasizing 'Mental and Physical Health Benefits,' which aligned with our study.

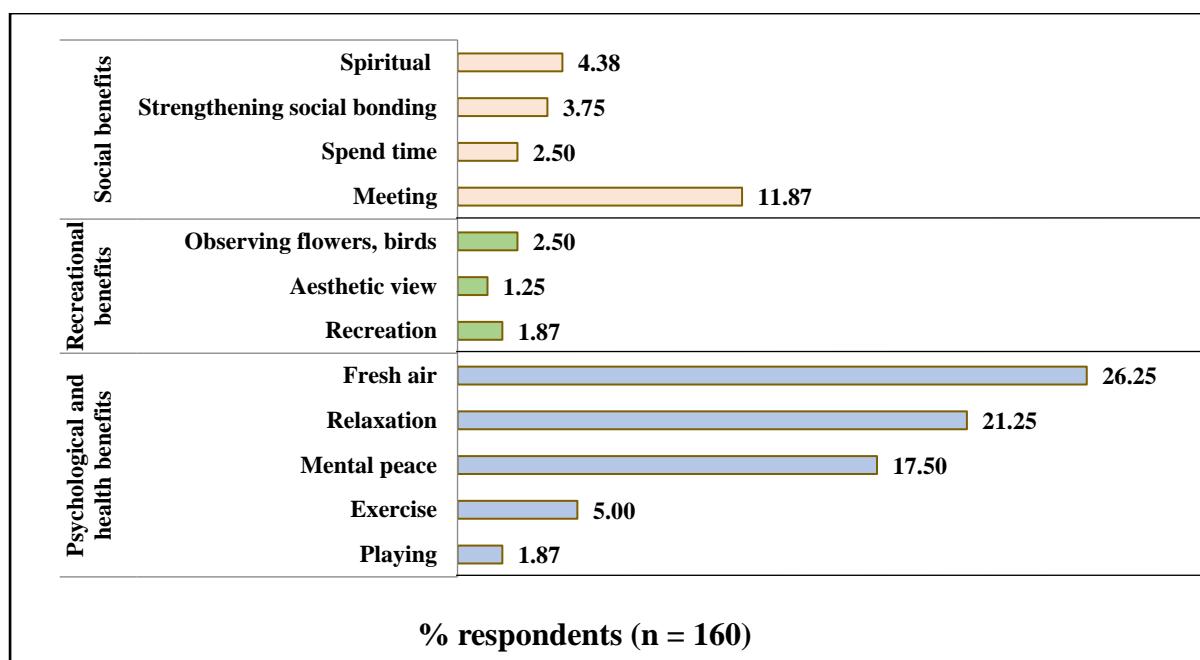


Figure 8. Main purpose of visit in the urban parks (Among the multiple responses, only the topmost priority response was considered)

Perception of people on the quality of urban parks
 Satisfaction levels varied across the four urban parks. Shankha Park received a 100.00% satisfaction rating, reflecting its exceptional quality and facilities. Ratna Park recorded a 95.00% satisfaction rate, with minor concerns regarding limited greenery, insufficient staff, suboptimal orchard management, and inadequate provisions such as drinking water, fencing, and parking spaces. Balaju Park achieved 90.62% satisfaction, with dissatisfaction attributed to poor sanitation, insufficient seating, inadequate fencing, and the lack of proper pond and orchard maintenance. Tribhuvan Park had the lowest satisfaction rate at 87.50%, with dissatisfaction linked to proper waste management, poor sanitation, insufficient fencing, and encroachment issues. These findings underscore the importance of addressing infrastructural and maintenance deficiencies to enhance the visitor experience and ensure the long-term sustainability of urban parks.

WTP of the respondents visiting the urban parks
 A majority (66.00%) of respondents expressed their WTP for the establishment and maintenance of urban parks, emphasizing their importance. Conversely, approximately one-third of the respondents were unwilling to contribute financially, stating that the responsibility for park development and upkeep lies solely with the government.

While socioeconomic factors such as gender, age, income, and family size did not significantly influence

WTP, previous studies have indicated that lower income levels can negatively impact WTP for public parks (Idris et al., 2022).

In contrast, our study found that 66% of respondents expressed their willingness to pay for urban parks, irrespective of their income levels. The results in Fig. 9 indicated that a significant portion of visitors (74.37%) were willing to pay less than NPR 50 to visit urban parks. Additionally, 18.12% of visitors were willing to pay between NPR 50 and NPR 100, while 6.25% are willing to pay between NPR 100 and NPR 150. A small number of respondents expressed their readiness to pay between NPR 150 and NPR 250 to visit recreational sites. In summary, this study reveals that, on average, respondents were inclined to pay less than NPR 50 to visit urban parks. According to Zhang et al. (2020), younger respondents, potentially with lower incomes, expressed a higher WTP compared to elderly respondents which was similar with our study.

Ecosystem services provided by the urban parks
 Surveys with key informants from each park helped identify various ecosystem services. Notably, none of the four parks provided fuel, fiber, natural medicines, or ornamental resources. However, all parks offered shelter through pavilions to protect visitors from rain and sunlight. Additionally, Tribhuvan Park was unique in providing fresh water, while the other parks relied on water collected in tanks without natural regeneration (Table 3).

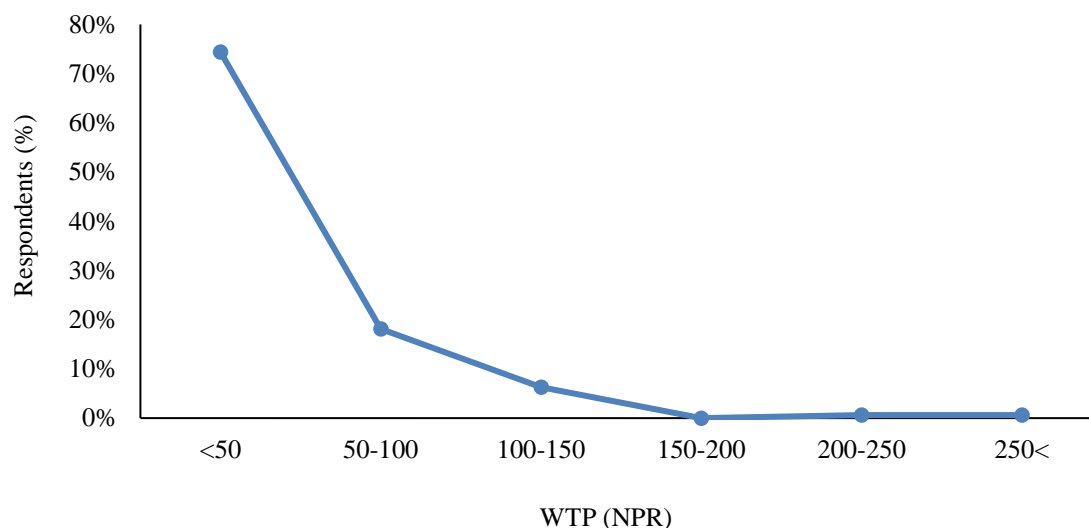


Figure 9. Respondent's WTP in the studied parks

Table 3. Provisioning services of the studied parks

Name of parks	Provisioning services							
	Fuel and fiber	Genetic resources	Bio-chemicals	Natural medicines	Fresh water	Ornamental resources	Shelter	Food
Shankha Park	0	0	0	0	0	0	3	0
Ratna Park	0	0	0	0	0	0	2	0
Balaju Park	0	0	0	0	0	0	3	0
Tribhuvan Park	0	0	0	0	5	0	2	0

Respondents reported that all the four parks have played roles in climate regulation, being the only green spaces in the areas. They provided fresh air and greenery, contributing to improved air quality. While some flowers and plants were artificially cultivated, however, have played an important role in facilitating pollination too. Tribhuvan Park was reported with water purification services. However, specific aspects such as pest regulation, erosion regulation, disease regulation, and natural hazard control were not explicitly described by the key informants (Table 4).

Table 4. Regulating services of the studied parks

Name of parks	Regulating services								
	Air quality regulation	Climate regulation	Water regulation	Erosion regulation	Water purification and treatment	Disease regulation	Pest regulation	Pollination	Natural hazard control
Shankha Park	4	5	0	0	0	0	0	3	0
Ratna Park	4	5	0	0	0	0	0	3	0
Balaju Park	5	5	0	0	0	0	0	3	0
Tribhuvan Park	5	5	5	0	3	0	0	3	0

All the studied parks hold significant cultural and historical values, particularly Shankha Park, Balaju Park, and Tribhuvan Park, which are rich in heritage and

religious significance due to their temples and notable identities. Tribhuvan Park is especially recognized as one of the inspiring locations. Balaju Park is known for its

Baishdharma and historical celebrations during Baisakh Purnima. These parks also function as educational hubs, attracting scholars for research, while providing recreational spaces that contribute to tourism. Despite some aesthetic amendments required for Shankha Park,

all the parks have potential for aesthetic benefits. Ratna Park, although lacking spiritual significance (not located very near), remains valuable for its recreational and educational services (Table 5).

Table 5. Cultural services of the studied parks

Name of parks	Cultural services				
	Spiritual and religious values	Educational values	Inspirational values	Aesthetic values	Recreation and tourism
Shankha Park	4	5	2	5	5
Ratna Park	0	4	1	3	3
Balaju Park	5	2	0	3	2
Tribhuvan Park	5	4	5	3	3

Tribhuvan Park and Balaju Park exhibited towards soil formation, indicating the presence of fertile soil. On the other hand, Ratna Park and Shankha Park required the introduction of soil in certain areas to support plant growth. Despite these differences, all four parks shared comparable capacities to perform photosynthesis. The abundance of green plants in these parks contributed to higher primary productivity, allowing for the efficient

conversion of sunlight into organic materials. Furthermore, all parks played a vital role in nutrient cycling, ensuring the recycling and availability of essential nutrients within their ecosystems. While all parks contributed to water cycling to some extent, Tribhuvan Park played a particularly important role in this aspect, indicating its significant impact on water availability and circulation within the park (Table 6).

Table 6. Supporting services of the studied parks

Name of parks	Supporting services				
	Soil formation	Photosynthesis	Primary production	Nutrient cycling	Water cycling
Shankha Park	3	3	4	3	0
Ratna Park	3	3	4	3	0
Balaju Park	5	3	4	3	0
Tribhuvan Park	5	3	4	3	3

The significance of ecosystem services in the urban areas is highlighted by initiatives like Millennium Ecosystem Assessment (2005), which categorizes the services into four types: Supporting services (e.g., nutrient cycling, soil formation), Provisioning services (e.g., food, fresh water, wood, fiber, fuel), Regulating services (e.g., climate regulation, flood control, disease regulation, water purification) and Cultural services (e.g., aesthetic appreciation, spiritual enrichment, education, recreation). Urban parks attract visitors based on their unique ecosystem services. By enhancing cultural experiences through activities and education, parks can increase their appeal. Focusing on distinct features and engaging experiences maximizes their attractiveness to the community (Zwierzchowska et al., 2018). Selected urban parks provide a range of ecosystem services, including shelter, climate regulation, improved air quality, and cultural significance. These findings

emphasize that urban parks serve not only as green spaces but also as important cultural and educational resources for the communities. The parks act as educational natural laboratories, attracting scholars for research while also providing recreational spaces for tourism.

Travel time of respondents to access the urban parks

43.12% of the respondents took 10-20 min to reach urban parks, whereas 5.62% of people took 1 hour to reach urban parks. Majority of people (30.63%) of people used to visit the urban parks once in a week and very less used to visit only once per year. In line with study done by Akpinar et al. (2016), the closer an urban green space is to a person's residence, the more likely it is to be utilized for engaging in physical activities, which aligns with our study as majority of people from the

survey were living very near to the park. Proximity to green spaces in urban areas plays a crucial role in enhancing human health and overall well-being (Lee et

al., 2015). This highlights the important roles the parks play in the lives and well-being of the local residents (Fig. 10).

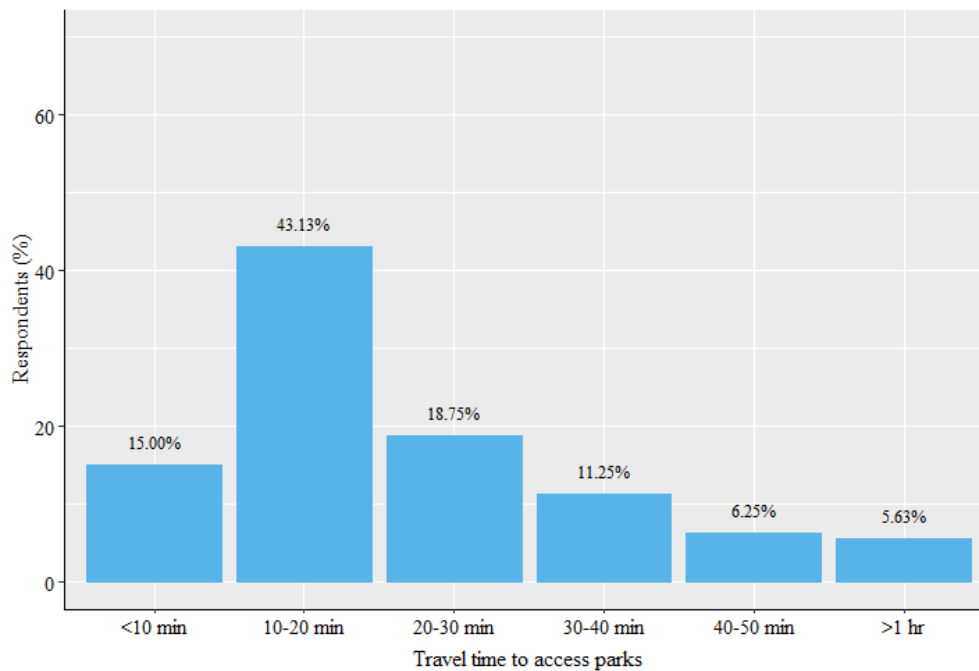


Figure 10. Travel time of the respondents to access the studied parks

A large proportion of individuals (28.75%) visited the parks on a monthly basis, making it the most common visitation pattern. Following, 28.13% of the people visit the parks once in 1-2 times in a year. About 25% of people visited the parks on weekly basis. A small percentage (18.13%) indicated that they only visited the parks on a daily basis. These statistics highlighted that most people frequently visited urban parks.

Round trip travel cost per respondents in the urban parks

Out of the total respondents, 44 individuals reported having no travel costs when visiting the parks. Among them, 13 respondents were from Shankha Park, since this park does not have an entry fee system in place. Similarly, only 3 individuals from Ratna Park reported no travel costs, likely because the elderly individuals had a provision of not paying the entry fee, resulting in their visits being cost-free. In Balaju Park, 13 respondents had no travel costs which can be explained as this park exempted elderly individuals from paying the entry fee, leading to a portion of the respondents not incurring any travel costs. Additionally, residents living in close proximity to these parks were also not charged an entry fee, further contributing to the absence of travel expenses for some respondents. It is worth noting that in the case of Tribhuvan Park, the presence of improper fencing allowed people to enter from various directions without paying the entry fee. This may explain why 13 individuals reported no travel costs despite the park has a provision for entry fees. Among all respondents one

respondent had the highest amount of travel cost visiting the park which was NPR 420. The survey also examined the round-trip travel costs, revealing that 48.75% of respondents had travel expenses below NPR 50. Additionally, 34.35% of participants reported travel costs ranging between NPR 50 and NPR 100. These findings indicate that the proximity of these residents to the parks significantly contributes to their ability to access these recreational spaces at a relatively low expense (Fig. 11).

Ratna Park has the highest average travel cost per person per visit at NPR 81.25 and attracted around 360,030 annual visitors during 2079 B.S., outpacing other parks. Twerefou and Ababio (2012) identified travel costs, gender, and knowledge of composite sites as key factors influencing park visitation. However, our study suggests that average travel cost alone does not significantly affect visitation rates. Emmert (1999) found that visitors prefer parks closer to their origins, indicating that travel distance is crucial in park selection. Despite its higher travel costs, Ratna Park has central location in Kathmandu Valley and proximity to various institutions make it appealing, especially to students. The park opens at 9 am, which limits morning activities like jogging, suggesting that visitation may be more related to monetary value than accessibility. Balaju Park follows with about 331,680 annual visitors and an average travel cost per person per visit of NPR 43.25. Its early opening at 6 am and free entry during morning hours likely contribute to lower travel costs and higher visitation

rates, supporting the TCM hypothesis that increased visits correlate with decreased travel costs. Shankha Park attracts approximately 186,840 visitors annually due to its free entrance and the lowest average travel cost of

NPR 41.13 (Fig. 12). While all respondents expressed satisfaction with the park's quality, its smaller size and distance from the city center contribute to lower visitation compared to larger parks.

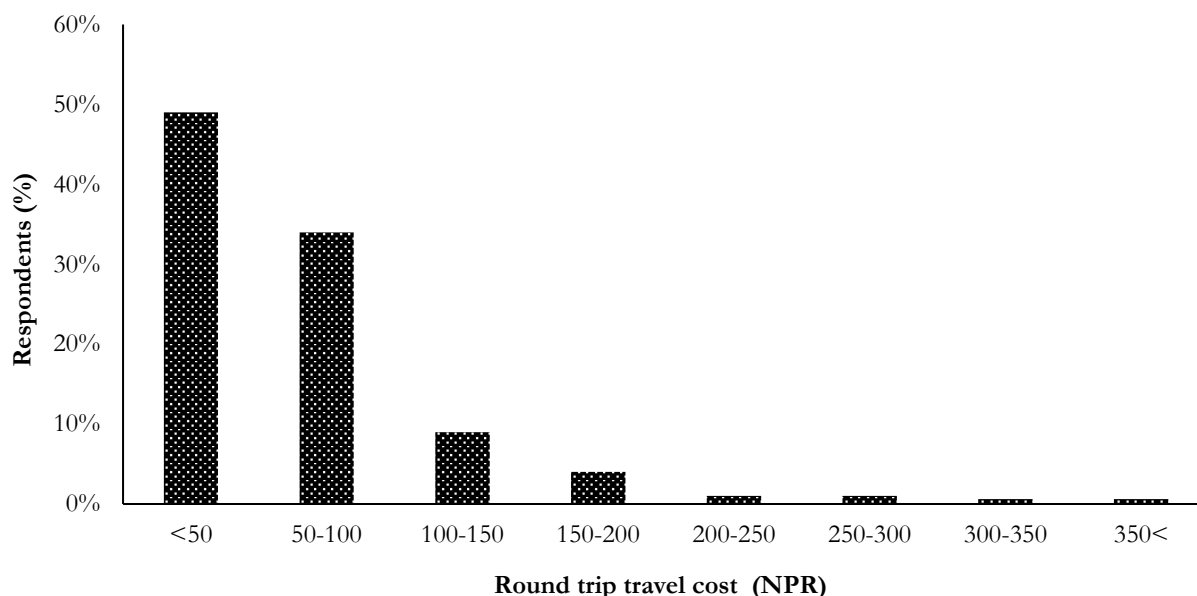


Figure 11. Round trip travel cost per respondent in the studied parks

From the data collected with the help of KIIs, the annual number of visitors visiting the parks was known. Further details are enlisted on (Table 7).

Tribhuvan Park, despite being the largest park, had the lowest annual visitation rate at annual visitors of 80,000 with an average travel cost per person per visit of NPR 69.25. Previous research by Liu et al. (2017) indicates that larger parks attract more visitors from distant areas,

which aligns with the case of Tribhuvan Park as most of respondents were from farther locations, contributing to its higher average travel cost per person. Quality related attributes play a crucial role in determining park utilization (McCormack et al., 2010), whereas according to Ostoić et al. (2017), inadequate maintenance and litter are significant factors that discourage people from visiting green spaces. In line with this, Tribhuvan Park's quality likely affects its visitor numbers.

Table 7. Number of visitors visiting the studied parks

Name of parks	Number of visitors/yr (April 14, 2022 to April 13, 2023)	Average travel cost per person per visit (NPR)
Shankha Park	1,86,840	41.13
Ratna Park	3,60,030	81.25
Balaju Park	3,31,680	43.25
Tribhuvan Park	80,000	69.25

(Data source: Park administration offices of the studied parks for 2079 B.S.)

Conclusions

This study highlights the economic value of the urban parks in Kathmandu Valley, focusing on the travel costs and accessibility. Nearly half of the visitors spent less than NPR 50 on travel, showing the importance of proximity of the parks in reducing expenses. Shankha Park and Balaju Park offered free entry for certain age groups, while Ratna Park, despite having the highest average travel cost per person per visit of NPR 81.25, attracted the most visitors due to its central location.

Findings indicate that proximity, accessibility, and park quality significantly influence visitation patterns. The willingness to pay for park maintenance reflects the public's recognition of the parks' value. Policymakers should prioritize sustainable urban park management strategies, including targeted eco-friendly infrastructure and visitor focused programs to enhance visitor satisfaction and promote long-term sustainability of the urban parks.

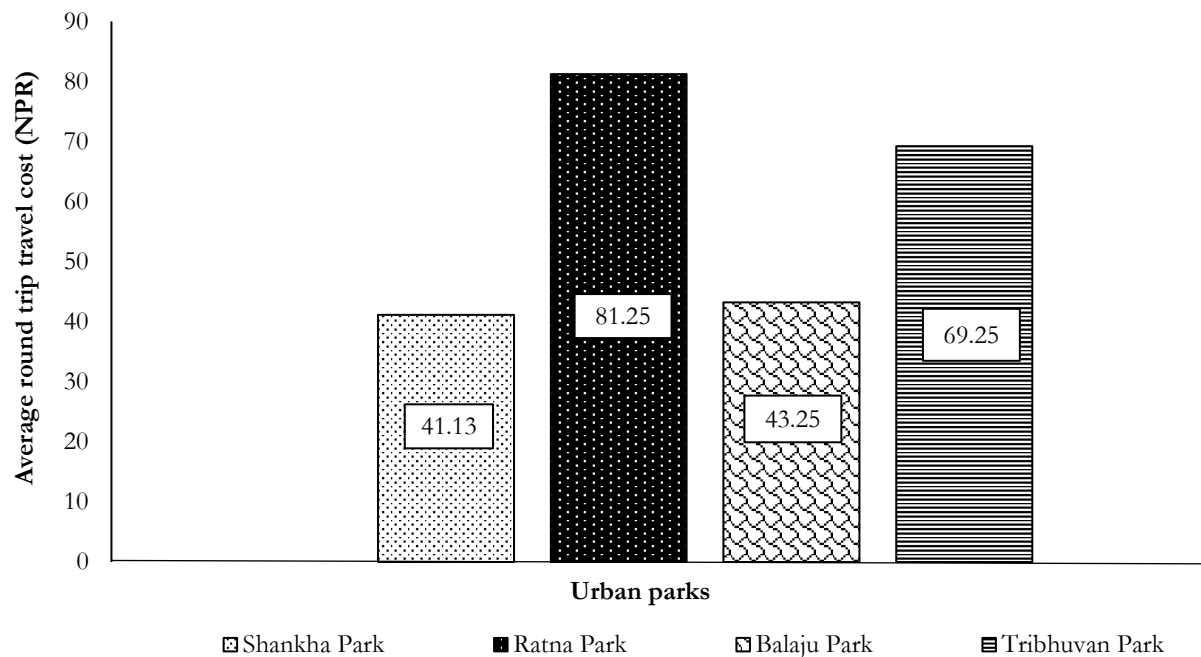


Figure 12. Average round trip travel cost per person per visit in the studied parks

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Conflicts of Interest: The authors declare no conflicts of interest.

Data Availability Statement: The data that support the finding of this study are available from the corresponding author, upon reasonable request.

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