

URBAN FORESTRY AND GREEN SPACES IN UGANDAN CITIES: YOUTH AND WOMEN PERCEPTIONS AND PARTICIPATION

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Abstract

Despite the fundamental character and role of urban parks and green places in providing and improving quality of life in urban settings, there is a noteworthy gap in appreciating and comprehending public opinions and engagement in such initiatives and programs in Uganda. This study aims to explore such perceptions and the level of community involvement throughout the four districts of Kampala, Fort Portal, Mbarara, and Gulu in Uganda. The study used an online survey questionnaire to gather data (n=501) responses through a simple random sampling approach to guarantee representativeness. The key findings discovered that whereas about 66% of the participants stated satisfaction with current urban parks, about 70% keenly engage in urban initiatives such as gardening and tree planting activities. Additionally, a noteworthy 99% articulated support for improved investment in green spaces demonstrated society's awareness and the need for improvement and increment. Even though there were positive opinions, the study recognized a gap in the need for inclusivity of sidelined groups, mostly youth and women. This investigation underscores the need for focused policy interventions to tackle these gaps. The study recommends prioritizing funding for improving green spaces, guaranteeing the active involvement of marginalized inhabitants in the planning and developing educational schemes to promote greater societal engagement in ecological activities. This is crucial for generating more inclusive urban environments that support sustainable community development, resilience, and improved overall urban health in Uganda.

Key words: air quality, biodiversity support, forest services, quality of life, recreation activities, climate regulation, urban parks and forestry, Uganda, youth and women

Introduction

The worldwide urban forestry field faces multiple obstacles, and Uganda demonstrates how these barriers prevent proper management and development of urban green spaces (Cilliers et al., 2013; Chisika & Yeom, 2023). Fast urban development because of population expansion and industrial activities has created major land transformations, which reduced the number and quality of urban green spaces. The health and accessibility of urban forests and green areas in Kampala suffer from severe challenges, including deforestation and waste management problems and inadequate urban planning. The absence of sufficient green space funding and economic conditions create a situation where vulnerable populations experience additional disadvantages in urban areas (Binyanya et al., 2022).

The various functions of urban green spaces emerge from research demonstrating their impact on community wellness and environmental sustainability (Kuchelmeister, 2000; Doli et al., 2021; Ale et al., 2025). Multiple research findings prove that access to green spaces produces better physical and mental health results. Urban green areas serve as locations for exercise, socializing and recreational activities, which help build community unity and create better urban environments. Urban forests are vital to ecological health because they remove air pollution while cooling cities through temperature reduction and supporting biodiversity (Lwasa et al., 2014; Lwasa et al., 2015).

Urban dweller's support for the essential role of urban greeneries, parks, and forests is based on fundamental to urban existence from ecological functions and socioeconomic roles such as energy and food security (Bamwesigye et al., 2019; Bamwesigye et al., 2020; Bamwesigye, 2023). Research reveals that local communities increasingly understand how urban greening programs generate environmental and health advantages. The participation of residents in tree planting combined with horticultural work enhances environmental health while developing their sense of ownership toward natural resources. Sustainable urban development requires this kind of communal commitment.

The successful improvement of urban forestry demands the implementation of stakeholder collaboration with sustainable practices and increased investment in green space initiatives. Urban greenery integration during planning stages strengthens ecological resistance and promotes social

health so cities remain vibrant and livable for every resident despite global challenges. Cities must establish environmental stewardship through urban green spaces because this approach will lead to sustainable community development and better urban quality of life.

The study aimed to explore the character/role and impact of urban forestry and green spaces on Uganda's urban livelihood, welfare and environmental sustainability. The results show pathways for policy direction and further research.

Material and methods

A simple random sampling method was employed to select participants from four districts: Kampala, Mbarara, Fort Portal, and Gulu in Uganda. This method ensured that each individual had an equal chance of being selected, thus enhancing the sample's representativeness.

Data were collected from 501 respondents through an online questionnaire, with distributions employed for one month.

Demographic attributes of the respondents, including gender, age, income, education, and employment status, were also collected to facilitate a comprehensive analysis of their perceptions. To identify any gaps in the perceived inclusion of youth and women in urban forestry initiatives.

The study hypothesizes that urban parks and green spaces, along with effective urban forestry initiatives, significantly enhance society/community satisfaction, encourage participation in environmental activities, and improve the overall quality of life (livelihood) in urban settings. Also, increased investment in urban green spaces in these areas positively influences youth engagement and community perceptions of environmental health.

The aim is to inform policymaking and urban planning processes to create more inclusive and sustainable green environments.

This study evaluates community members' perceptions regarding urban parks, green spaces, and forestry initiatives within their city.

- quality of urban forestry, Satisfaction with Parks and Green Spaces, Participation in Urban Greenery
- Investment in Green Spaces and Urban Forestry for Youth, Utilization of Urban Green Spaces, Stimulus for Youth Outdoor Activities, Youth and Women in Urban Forestry Resourcefulness
- Urban Trees and Air Quality Perception

The collected data has been subjected to statistical analysis to get the main trends and ratios to get the meaning necessary for policy advice and future studies.

Results

A collective outcome of 65.8% of residents stated satisfaction with urban parks and green spaces, i.e., Very satisfied plus satisfied. While 27% articulated dissatisfaction with the state of the green spaces, forestry, and trees in their cities (Tab. 1). This showed a largely positive viewpoint on the accessibility, availability, and quality of green spaces and parks in Uganda; also, a noteworthy proportion remains dissatisfied, underlining an area for improvement.

Tab. 4: Residents stated satisfaction with urban parks and green spaces

Answer	Responses	Ratio
Very Satisfied	183	36.5%
Satisfied	147	29.3%
Neutral	36	7.2%
Dissatisfied	102	20.4%
Very Dissatisfied	33	6.6%

A majority results i.e., 66.5% of the residents agreed that urban forestry and green spaces met their expectations. Thus, it suggests that city residents appreciate the status of the existing trees and green spaces. Conversely, 22.8% of residents disagreed or felt neutral, indicating aspects of urban forestry and green spaces needed improvements (Table 2).

Tab. 5: The quality of urban forestry in my city meets my expectations

Answer	Responses	Ratio
Strongly Agree	227	45.3%
Agree	106	21.2%
Neutral	54	10.8%
Disagree	88	17.6%
Strongly Disagree	26	5.2%

The study outcomes showed that 69.7% of participants often engaged in urban gardening or tree-planting activities. This showed a strong public engagement in increasing and improving local greenery and forests/trees. Merely 13.6% of the respondents participated rarely or never jointly, confirming a vigorous interest in environmental/ecological initiatives (Tab. 3).

Tabl. 6: Participation in urban gardening or tree planting activities

Answer	Responses	Ratio
Very Often	227	45.3%
Often	122	24.4%
Sometimes	84	16.8%
Rarely	47	9.4%
Never	21	4.2%

An irresistible majority of 98.8% supported and louted for more investment in green spaces and urban forestry focused on youth (Tab. 4). This suggested a robust agreement among other society members on the significance of urban green spaces for the youth, stressing a possible priority for urban planners and policymakers.

Tab. 7: Investing more in maintaining and improving green spaces

Answer	Responses	Ratio
Strongly Agree	400	79.8%
Agree	95	19.0%
Neutral	3	0.6%
Disagree	3	0.6%

The outcomes showed a substantial share of 80.4% frequently exploited green spaces and parks for recreational activities (Tab. 5). This indicated that urban green spaces and forestry or street trees are vital for community lifestyle, welfare and social connections. A low fraction of residents who were non-users were observed, suggesting a largely lively commitment to outdoor recreational services.

Tab. 8: Frequency of utilizing green spaces for recreational activities

Answer	Responses	Ratio	A remarkable 98.5% of respondents
very Often	251	50.1%	
Often	152	30.3%	
Sometimes	69	13.8%	
Rarely	28	5.6%	
Never	1	0.2%	

s believed that urban trees and/or forestry positively improve air quality (Tab. 6). Thus, this indicates a

strong public understanding of the benefits and services provided by urban forestry/trees to environmental and ecological ecosystems.

Tab. 9: Urban trees contribute positively to air quality in my city

Answer	Responses	Ratio
Strongly Agree	373	74.5%
Agree	120	24.0%
Neutral	7	1.4%
Strongly Disagree	1	0.2%

The results illustrated that 91.7% of respondents agreed that urban greenery boosts youth outdoor involvement (Tab. 7). This indicates that urban planning and policymaking ought to emphasize the attractiveness of urban green spaces and parks to promote and improve the active lifestyles of the city's youth.

Urban greenery and forests in the city encourage youth to spend more time outdoors.

Tab. 10: Urban greenery boosts youth outdoor involvement

Answer	Responses	Ratio
Strongly Agree	339	67.7%
Agree	120	24.0%
Neutral	27	5.4%
Disagree	14	2.8%
Strongly Disagree	1	0.2%

The outcomes of the survey about youth and women's perspectives in urban forestry and green spaces programs and activities are worth examining. The results showed that the majority of 81.3% of respondents agreed that urban forestry and green spaces initiatives included youth and gender perspectives, while merely 9.4% remained neutral or disagreed, suggesting disengagement (Tab. 8).

Tab. 11: youth and women's perspectives in urban forestry and green spaces

Answer	Responses	Ratio
Strongly Agree	325	64.9%
Agree	82	16.4%
Neutral	47	9.4%
Disagree	44	8.8%
Strongly Disagree	3	0.6%

Discussion and Conclusion

The study results emphasized the critical role of green spaces, urban parks, and forestry initiatives and mechanisms in improving community fulfillment and promoting environmental stewardship. Most residents articulated affirmative opinions concerning the quality and accessibility of Uganda's urban greeneries, parks and forests. This underlined the role and importance of urban nature as vital fundamentals of urban being/life (Doli et al., 2021; Omolo-Okalebo & Buyinza, 2024). The opinions showed satisfactory facts to the efficiency of existing initiatives. More so, the study specified scopes for improvement, mainly for those community/city residents who feel underserved.

The significant public commitment and participation in urban horticulture and tree-establishing activities exhibited an aspiration for participation in urban environmental and ecological determinations. Thus, signifying that urban inhabitants are beneficiaries and vigorous providers of ecological health in the cities. This communal response stimulates a sense of public ownership and obligation, which is essential for the sustainability and resilience of urban environments. Moreover, the prominence on the improved venture in an urban environment and ecology wellbeing, mainly for

youth, displayed an extensive acknowledgement of the long-standing benefits urban greeneries, forests and parks deliver in promoting healthy lifestyles and resilient communities.

The residents' strong opinions on the optimistic impact of urban trees/forests on air quality demonstrated a profound mindfulness of environmental matters, emphasizing the requirement of assimilating nature into urban planning and settings. The robust connection between accessibility to green environments and spaces and vigorous outside daily life among the Ugandan youth echoes the precious potential for urban environments and spaces to become promoters for social connections, physical and mental health, and educational prospects. As public health worries continue to rise in the cities globally, the inevitability of sustained urban greenery, forests and parks becomes increasingly apparent.

The study also ascertained dire gaps concerning the perceived inclusiveness of vulnerable groups, including youth and women, in urban forestry and greenery initiatives and mechanisms. While many residents believe their viewpoints are considered, a notable percentage expressed neutrality or disagreement. To address such concerns/issues, it is crucial to develop approaches and policies that are inclusive as well as effective and optimal in achieving the various needs of the urban society and neighborhoods. Appealing and involving all stakeholder groups in planning and decision-making processes helps to obtain maximum and optimal desired and impactful results. This would promote a solid association between urban residents and their environment for resilience and sustainability.

This study emphasized the significance of urban parks, forests and other green spaces as essential community welfare mechanisms and environmental and ecological health (Doli et al., 2021; Omolo-Okalebo & Buyinza, 2024). The findings call for continuous, resilient, and increased investment in urban nature conservation, cognizant of their multidimensional benefits. More so, there is the necessity for comprehensive stakeholders' participation that vigorously involves all public memberships in Kampala's Capital City. Giving priority the voices of youth and, women and other vulnerable in future urban forestry and greenery creativities, cities and urban areas can nurture more lively and vibrant, sustainable, and resilient environments that promote a logic of fit in or belonging hence improved quality of urban life of inhabitants and ensure ecological and environmental sustainability.

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Souhrn

Navzdory zásadnímu charakteru a úloze městských parků a zeleně při zajišťování a zlepšování kvality života v městském prostředí existuje v Ugandě pozoruhodná mezera v hodnocení a pochopení názorů a zapojení veřejnosti do těchto iniciativ a programů. Cílem této studie je prozkoumat takové názory a míru zapojení veřejnosti ve čtyřech okresech Kampala, Fort Portal, Mbarara a Gulu v Ugandě. Studie použila ke shromáždění údajů (n=501) dotazník online průzkumu, který byl proveden prostým náhodným výběrem, aby byla zaručena reprezentativnost. Hlavní zjištění ukázala, že zatímco přibližně 66 % účastníků uvedlo spokojenost se současnými městskými parky, přibližně 70 % se s nadšením zapojuje do městských iniciativ, jako jsou zahradnické aktivity a výsadba stromů. Kromě toho pozoruhodná 99% podpora zlepšení investic do zeleně ukázala, že společnost si uvědomuje potřebu zlepšení a zvýšení. Přestože se objevily pozitivní názory, studie rozpoznala mezeru v potřebě inkluze odsunutých skupin, především mládeže a žen. Toto šetření zdůrazňuje potřebu cílených politických zásahů k odstranění těchto nedostatků. Studie doporučuje upřednostnit financování zlepšování stavu zeleně, zaručit aktivní zapojení marginalizovaných obyvatel do plánování a rozvíjet vzdělávací programy na podporu většího zapojení společnosti do ekologických aktivit. To má zásadní význam pro vytváření inkluzivnějšího městského prostředí, které podporuje udržitelný rozvoj komunit, odolnost a zlepšení celkového zdraví měst v Ugandě.

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