

INSIGHTS ON CULTURAL ECOSYSTEM SERVICES IN POST-COLLIDER DEVELOPMENT IN ADDIS ABABA: PERSPECTIVE ANALYSIS

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Abstract

Urban collider development is found as the most important initiative to rehabilitate and develop cultural ecosystem services in Addis Ababa. The Cultural ecosystem services resuscitated subsequent collider developments have been attracting the attention of residents and people in the country. It is also a radically uplifting image for Addis Ababa. From the Semi-structured interview conducted and data obtained from the convenience non-probability sampling techniques involving 60 interviewees, our thematic analysis reveals that post-Addis Ababa collider development, the provision of cultural ecosystem services increases (Parks, reading areas, green space, etc.). The finding demonstrated that the accessibility and availability of recreational areas increased since the collider development project was implemented in Addis Ababa. So the previous lack of facilities is now addressed, the restorative nature of the green area is observed, and people get open space for sectional purposes. The preference for cultural ecosystem services also differs among visitors depending on their purpose, importance, and impressions. It is also suggested that the issue of governance and sustainability of the quality and beauty created needs to be given serious attention.

Keywords: cultural ecosystem service, Collider development, Recreation, wellbeing, urban

1. Introduction

Cultural ecosystem is an important component of ecosystem service. Cultural ecosystem development is crucial to enhance the residents' well-being, tourism and urban sustainability. The development of cultural ecosystem service increases the space for recreational and spiritual enrichment. Ecosystem benefits can be in the form of provisioning, regulating, supporting, and cultural services (Hall et al., 2021; MA, 2005). Cultural ecosystem service is the non-material benefits or services provided by nature to society. These services enable humans to meet various needs and enhance quality of life (European Commission, 2018; Hamel et al., 2021; Jones et al., 2019).

However, the rapid expansion of urban areas, often coupled with limited consideration of ecosystem services in urban planning and development, has led to a significant decline in the benefits derived from ecosystems (Chen et al., 2023; Shao et al., 2021; Wang et al., 2018). In response to these challenges, the integration of ecosystem services into urban development has emerged as a key priority on the global sustainability agenda (Amini Parsa et al., 2019).

The recent developments in urbanization have shown the need for cultural ecosystem integration in urban development. For this, the Ethiopian Government, particularly the Addis Ababa City Administration, has drawn great attention to cultural ecosystem development through the corridor Development Initiative is a good indication. The Corridor Development Initiative in Addis Ababa has decreased traffic congestion, enhanced mobility, making commuting more efficient and enjoyable, and contributed to the improvement of green spaces, the creation of open public areas, and the rehabilitation of swamp areas for recreational purposes (Girma & Mulatu, 2025).

Most studies of ecosystem services have been carried out on the benefits of ecosystems, including wetlands and forests (Fentaw et al., 2025; Tamire et al., 2023). However, they fail to address the participants' understanding of the benefits they gain from ecosystem services, including wetlands, due to a lack of awareness among the community. Until now, little importance has been given to public perception of the cultural ecosystem services in urban contexts. To date, there is little agreement on investing in urban greenery areas, and even most complain about its advantages compared to relocation to more open spaces in Addis Ababa. In contrary to this, Tamire et al., (2023), argued insufficient attention from policymakers, and lack of sensitization of community and government authorities has been led to decreasing of ecosystem values and preservation.

However, the perception of the people towards the cultural ecosystem service in post collider development is not well explored and addressed.

Within the broad classification of ecosystem services, *Cultural Ecosystem Services* (CES) represent a critical but often underappreciated category. CES encompass the non-material benefits that people obtain from

ecosystems, including recreational, aesthetic, spiritual, and educational experiences (Verma et al., 2020). From what we observed and experienced, cultural ecosystem services in post Addis Ababa collider development has enhanced and attracting visitors.

The aim of this study is to explore the perception of the peoples towards the cultural ecosystem services in Addis Ababa’s post collider development by focusing on their preference, rationale to visit, impression and their observation in general.

2. Material and Method

Data collection methods

To gather the data for this study, visitors of parks in Addis Ababa and peoples enjoying in public open area were interviewed to explore their perception on the cultural ecosystem services in Addis Ababa collider development. The interviews mainly emphasis how they are perceived the cultural ecosystem services in post collider development, they prefer the visiting areas, motivation to visit the area, contribution of the visiting areas for the visitors. To address this, semi-structural interview were employed by using non-random convenience sampling techniques. Accordingly, a cross sectional qualitative survey was conducted from Mid-November, 2025 up to 20 April 2025 among 60 youths in Addis Ababa. Finally, the data transcription, coding and pattern of theme performed, thematic and description analysis performed.

Data Analysis Method

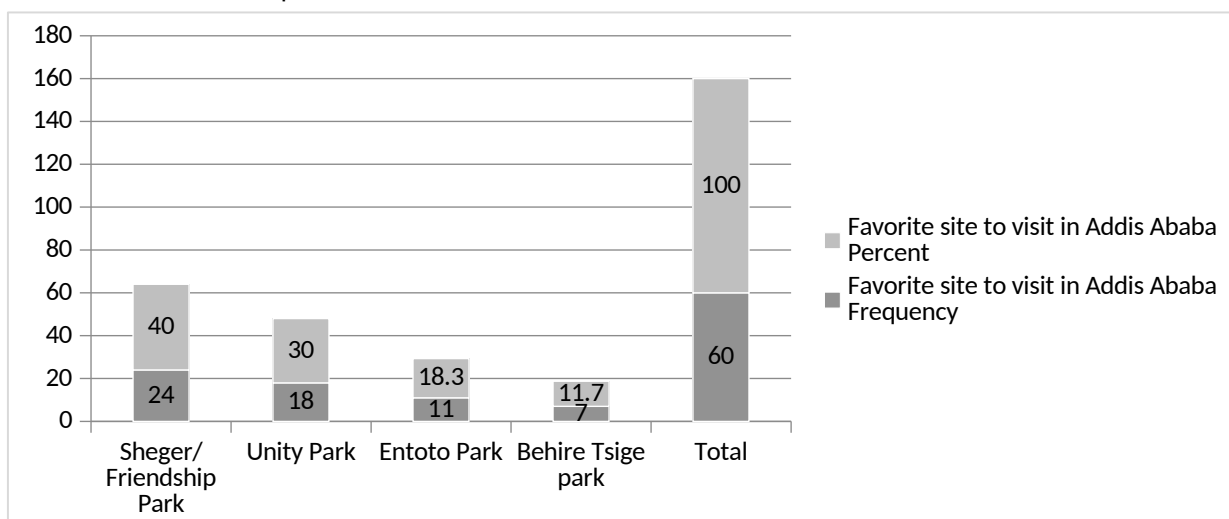
The method deployed to analyses the data was descriptive and thematic data analysis techniques. In the phases of thematic analysis conducted the data reading and rereading to become deeply immersed in the conduct; generating initial code; grouping similar codes together and identifying patterns that form potential themes; refining and checking themes; and overall fitness were the steps followed in the data analysis. The researcher acknowledges the MQ2020 for its support in coddling and creating themes.

3. Results

Participant Demographics and site preference

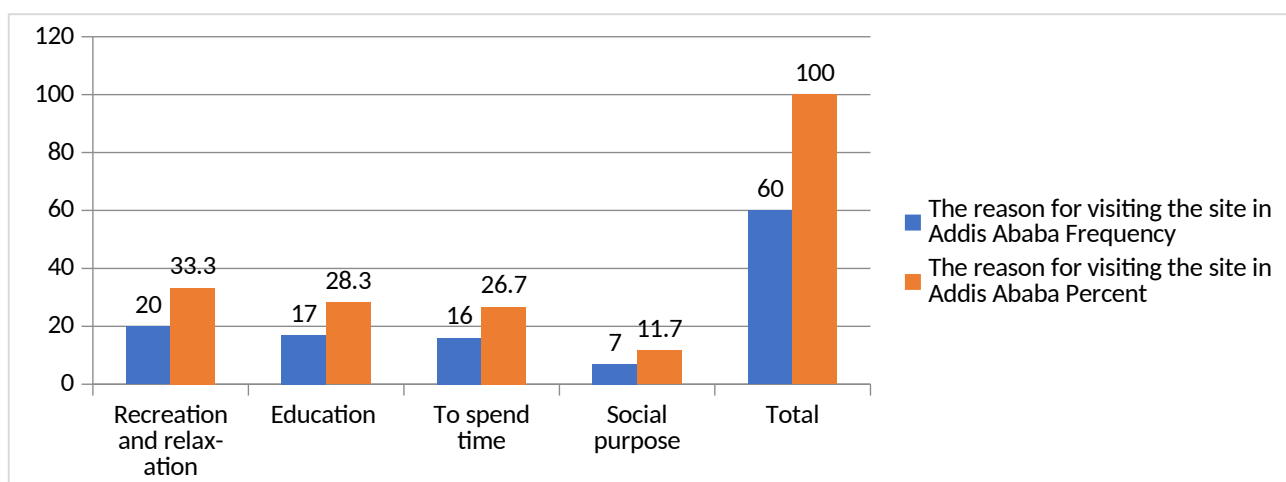
The results indicate that a total of 60 interviewees were selected using availability and accessibility criteria, employing a convenience sampling technique and participated at the end of data collection survey. Data collection was conducted between mid-November 2024 and April 20, 2025. Among the participants, 30 (50%) were female and 30 (50%) were male.

When asked about their preferred recreational sites in Addis Ababa, 24 respondents (40%) indicated Sheger/Friendship Park as their favorite. Unity Park was preferred by 18 participants (30%), while 11 respondents (18.3%) favored Entoto Park. Behire Tsige Park was the least selected, with 7 participants (11.7%) identifying it as their preferred site. It is also important to notice that Sheger/friendship Park is mainly served for recreational and relaxation type of cultural ecosystem services. This implies majority of the visitors prefer recreational and relaxation place.



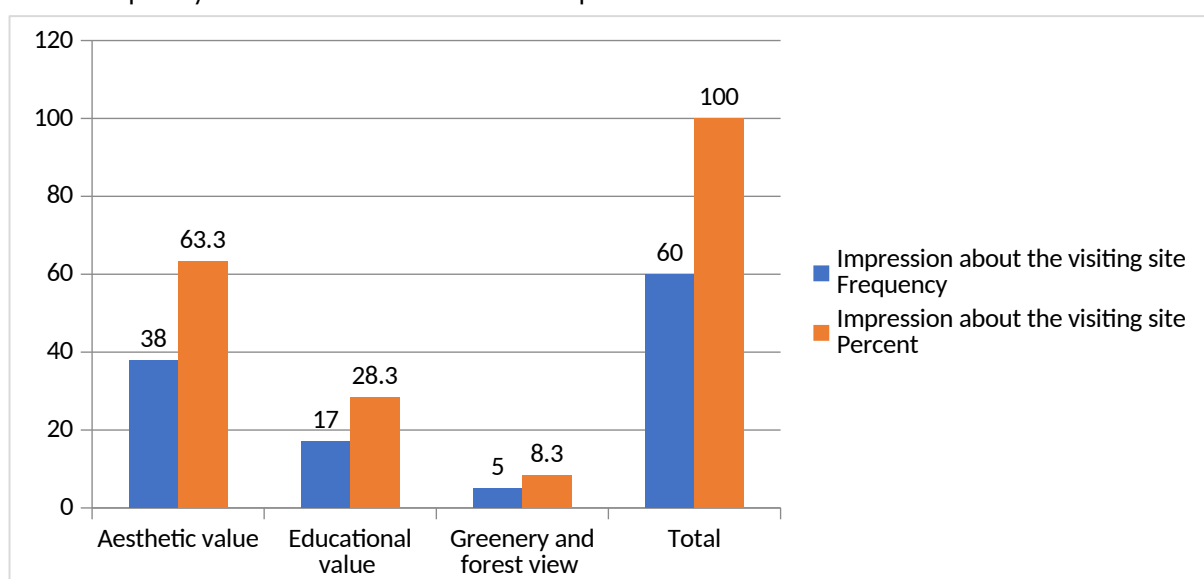
Motivations for Site Visitation and Perceived Cultural Ecosystem Services

The study further examined participants’ motivations for visiting urban green spaces and parks in Addis Ababa, focusing on the cultural ecosystem services perceived at these sites. The findings suggest that visitors’ choices were influenced by key factors such as educational, aesthetic appeal, recreational opportunities, and the overall environmental quality of the parks. The result summary displayed in the diagram



Among the total 60 participants (100%), 38 (63.3%) expressed appreciation for the aesthetic value of the sites, identifying visual and attractive beauty as their primary motivation for visitation. Additionally, 17 participants (28.3%) highlighted the educational value of the parks, noting their role in learning and environmental awareness. A smaller group, comprising 5 participants (8.3%), indicated that they were particularly impressed by the greenery and forest views, reflecting the importance of natural vegetation in enhancing visitor experience.

These findings reflect the recreational, historical, and social interaction function of cultural ecosystem services developed by the Addis Ababa corridor development initiative.



Cross-Tabulation of Preferred Sites and Perceived Importance of Visitation

The cross-tabulation analysis between respondents' favorite recreational sites and their perceptions of the importance of site visitation revealed notable patterns. Sheger/Friendship Park emerged as the most preferred site and was also rated as the most important by respondents. Unity Park was identified as the second most preferred and important site, followed by Entoto Park, which ranked third in both preference and perceived importance. Behire Tsige Park was the least preferred and was also perceived as the least important among the four sites.

These findings suggest a strong correlation between site preference and perceived importance, with Sheger/Friendship Park standing out as the most valued recreational space among participants.

Favorite site to visit in Addis Ababa* Perception on the importance of visiting site

Favorite site	Perception on the importance of visiting site			Total
	Somewhat important	Important	Very important	
Sheger/Friendship Park	4	9	11	24
Unity Park	1	7	10	18
Entoto Park	1	4	6	11
Behire Tsige park	0	5	2	7

Total	6	25	29	60
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Cross-Tabulation of Preferred Sites and Visitor Impressions

The cross-tabulation analysis between preferred sites and the sites that left the strongest impression on visitors reveals distinct patterns in recreational, relaxation, and educational values. Sheger/Friendship Park was ranked highest as both the most preferred and most impressive site for recreational and relaxation purposes. It was followed by Entoto Park and Behire Tsige Park, which were also recognized for their contribution to relaxation and relaxation.

In contrast, Unity Park was the least preferred and least impressive site in terms of recreational and relaxation value. However, it ranked highest in terms of educational value, with many respondents identifying it as the most impressive site for learning and historical significance.

These findings suggest that different urban green spaces in Addis Ababa are valued for distinct cultural ecosystem services, with Sheger/Friendship Park serving primarily recreational functions, while Unity Park fulfills an important educational role.

4. Discussion

This study aim to insights on cultural ecosystem services in post-collider development in Addis Ababa. On the basis of this aim, we explore the perception of the visitors through semi-structured interview. Our result shows that cultural ecosystem services in post-collider development widen the opportunity and preference of the visitors based on their purpose of visiting. Some visit for recreational and relaxation values, others for educational, social and greenery values. The preferences among the participants were observed different depending on their perceptions of the site importance, reason for visiting and impressions.

The results of this study indicated the existing significant difference among visitors regarding their preference of the cultural ecosystem service they would like to visit. . The prevalence of diversified urban parks for different visiting purposes creates an opportunity for the visitors' accordance of their preference. The preference of the person may depend on the motive of visiting or/and driving factors such as media. Zhang et al, (2020), social media can influence perceptions, preferences, and usage patterns regarding cultural ecosystem service.

The key informant interview revealed that *"The cultural ecosystem service in Addis Ababa, in aggregation with the collider development, includes green space, parks, sports facilities, and reading areas..."* T& J, 2024. Likewise the in-depth interview result recognized a new Addis Ababa collider development project has increased cultural ecosystem services accessibility and availability of cultural ecosystem services that benefits the residents from recreation, aesthetic enjoyment, social interaction, and spiritual well-being including job opportunities. There are similarities in benefits cultural ecosystem services including recreational and ecotourism between the present study and those described by (Mitra Ghasemi, Zabih Charrahy, 2023)

Most participants in the in-depth interview accredited the Addis Ababa collider development initiative for its contribution in addressing the problem of cultural ecosystem services. The interview with the Key Informant also agreed with the idea and coted as follows:

"I believe it has solved the problem of lack of youth recreation facilities... there was no open space for children to adults." Asf, 2024.

The study also show that the development of urban green space and parks provide areas for sport, plays, education and others aesthetic and recreational activities that are vital for mental, social and physical health (Liu et al., 2025)

Additionally, the key informant interview conducted with two persons concretized; *"Now there is a lot of entertainment and open space. There is a place to rest... to entertain his mind and see something green. This is good for mental health."* G & D, 2027. In line with this study also shows the benefit of cultural ecosystem service provision in contributing to improve the mental well-being of the society(Liu et al., 2025).

The Key informants expressed that *".....post corridor development, we observed the increasing of social interaction in park and other open space areas...I think the corridor development is beyond solving the road problem...increasing the area for people interacting.."* In similar manner an interview with a Young person shows *"....the open green area creates the cheering place for partners....children and elders...to enjoy their free time there....."* moreover he said *"..it solves the problem of wasting time at unnecessary place such as Kchat, and smoking, so, it is providing keeping services to prevent youth and young from addictive behavior...it is a relief place for stress."* D&K,2025

Post Addis Ababa Collider development is a symbol of intergenerational use and social cohesion.

"Both young and old have fun here. I also see people from the area coming and having fun."

The infrastructure encourages inclusive usage across age groups, strengthening intergenerational interaction and local community engagement. Social sustainability frameworks emphasize the need for public spaces to cater to all demographic groups to promote equity and social cohesion (Dempsey et al., 2011).

The collider development of Addis Ababa is lifting up the cultural ecosystem services. There was lack of attention for cultural ecosystem services before the launching of Addis Ababa Collider development. The shortage of the cultural ecosystem services in Addis Ababa was a big challenges and stressful for the life.

"This plays a major role in domestic tourism."

Beyond serving locals, the development is seen as enhancing internal tourism, possibly due to its attractiveness, accessibility, or facilities.

The results contribute insights with regards to cultural ecosystem services in post collider development to provide alternative opportunities for visitors based on their preference. One can understand that the practical implication of this study is that the purpose of integrating cultural ecosystem services in urban collider development has multifaceted advantage for mental health and wellbeing, social interaction and integration, educational and historical significance, recreational and relaxation as well as tourism attraction. In addition to this diversification of the cultural ecosystem services expand the choice of the visitors depending on its purpose, impression, and importance. The study design and small sample size are important limitation. This could lead to narrow exploration of the wide and diversified perceptions that might be influences the current findings. Therefore, future research should reconfirm the findings of this study by conducting large scale study, employing different methods and approaches.

5. Conclusion

The study has shown that the difference in preference for the visiting area depends on the interest and preplanned or arranged mental setup of the visitors. The study adds to the understanding of the visitors' reasons to visit the cultural ecosystem services sites in Addis Ababa, and disclosed that some visit for recreational and educational purposes, whereas others visit for aesthetic and enjoyment purposes. These are mainly influenced by personal preferences and the arrangement at home. There is a significant association between preference and perceived importance of the area. The study also allows understanding the contribution of cultural ecosystem services in increasing job opportunities, and becoming a source of income for individuals and revenues for the government. Several limitations need to be acknowledged, including that the study should incorporate quantitative aspects and provide details about the holistic benefits from cultural ecosystem services. Future research should be done to investigate the separate benefits of ecosystem services enhanced post-collider development, including fisher activities and their contribution to improving healthy environments. The findings of this study have a number of important implications for practitioners, including the governance issue, waste management policy, and sustainability.

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