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Beyond Concrete: How Urban Green Spaces are Reshaping Social Life in Narok Town, Kenya

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Engagement.

As the world is becoming more urbanized, understanding the role of green spaces in enhancing the quality of life becomes crucial. This study addressed the knowledge gap regarding the spatial distribution, accessibility, and multifaceted impacts of green spaces in Narok Town. Using a mixed-methods approach, the research incorporated both quantitative and qualitative data collection techniques, including surveys, interviews, and field observations. A diverse demographic participated in the study, providing comprehensive data on public perceptions and attitudes toward green spaces. The research assessed how these spaces influenced stress reduction, mental and physical well-being, and overall community engagement. Additionally, it examined the effectiveness of existing policies and regulations related to green space management and evaluated their adequacy in meeting community needs. The findings highlighted numerous benefits of green spaces, such as improved air quality, aesthetic enhancement, and opportunities for physical activities. However, the study also identified barriers to accessibility and inclusivity, including issues related to maintenance, safety, and community involvement. By providing evidence-based insights, the research proposed recommendations for policy improvements and strategic planning to optimize the use of green spaces. Ultimately, this study contributed to sustainable urban development in Narok Town, offering valuable guidance for urban planners and policymakers. It underscored the importance of integrating green spaces into urban planning to create a resilient, inclusive, and livable urban environment. The research findings supported efforts to harmonize urban growth with environmental sustainability and community health, aligning with broader objectives such as the Sustainable Development Goals and Kenya's Vision 2030.

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INTRODUCTION

Urbanization is rapidly transforming cities and towns across the globe in the 21st century. While this shift presents economic and infrastructural opportunities, it also introduces pressing challenges such as environmental degradation, social fragmentation, and a declining quality of life (United Nations, 2018). In Kenya, secondary towns like Narok are experiencing accelerated urban growth driven by population increase, rural-to-urban migration, and expanding economic activities (UN-Habitat, 2020).

This urban densification exerts mounting pressure on land resources, often resulting in the loss of green spaces to infrastructure and development projects (Kitha & Lyth, 2011). Urban green spaces such as parks, gardens, and recreational areas play a vital role in enhancing city livability. They provide environmental benefits like improved air quality and climate regulation, while also delivering important social functions (Shuvo et al., 2020). These spaces act as communal hubs that foster social interaction, mental well-being, and physical health, contributing to reduced urban stress (World Health Organization, 2010).

However, in rapidly growing urban areas, particularly in the Global South, green spaces are frequently undervalued, fragmented, and poorly maintained. (Odhengo et al., 2024). Challenges such as insufficient amenities, lack of accessibility,

and limited investment further diminish their usability and appeal (Odhengo et al., 2024). In towns like Narok, the expansion of the built environment, unregulated land use, and weak policy enforcement have led to the neglect or disappearance of these crucial public spaces.

This trend raises serious concerns about the long-term impacts on social cohesion, public health, and sustainable urban development. As towns such as Narok continue to grow, it is increasingly important that green spaces are protected, equitably distributed, and responsive to the diverse needs of urban residents (Ngayu, 2011). The UN Sustainable Development Goal 11 is intended to make cities and human settlements inclusive, safe, resilient and sustainable. To achieve this, UGS is considered the nature-based solution for sustainable urbanization (UN-Habitat, 2020; Okech & Nyadera, 2021).

While substantial research on urban green spaces exists, much of it focuses on developed countries, leaving a gap in knowledge regarding their role in emerging urban centres (Farkas et al., 2023). This study aims to address that gap by exploring how urban green spaces are reshaping social life in Narok Town. It examines the availability, accessibility, and social value of existing green spaces, offering insights into how they contribute to community engagement, well-being, and urban resilience. Ultimately, the research emphasizes the need for people-centred planning that balances

urban growth with sustainability, fostering resilient and inclusive urban environments.

Objectives of the Study

This study sought to explore the social impacts of green spaces in Narok town. The specific objectives of the study were to evaluate the public perception and attitude of the people of Narok town towards green spaces and explore the health impact of green spaces by examining their role in stress reduction and mental and physical well-being. The study was also meant to assess the effectiveness of current policies and regulations related to green spaces in Narok Town.

LITERATURE REVIEW

The Concept of Green Spaces

Different scholars have different definitions but similar concepts that support the integration of green spaces into the physical landscape of urban areas to enhance the living conditions in these areas. To clarify the meaning of green space and distinguish it from other concepts in the urban landscape, some authors came up with the following definitions. Yang (2003) defines urban green spaces as “public and private open areas, primarily covered by vegetation, which are directly (active or passive recreation) or indirectly (positive influence on the urban environment) available for the users.” Urban green space may also refer to everything in cities that has vegetation (Gairola, 2010). Jim, & Chen (2003) describe urban green spaces as outdoor places with significant amounts of vegetation that exist in cities as semi-natural areas, managed parks and gardens, supplemented by scattered vegetated pockets associated with roads and incidental locations. Fam *et al.* (2008) defined green space as all vegetated space including trees, shrubs, and grass while Kit Cambell Associates (2001) suggests that green spaces consist of any vegetated land or structure, water or geological features found in a given area.

The term urban green space is used to mean parks, gardens, and other areas that are occupied mostly by vegetation, these public green spaces serve as a vital component of the urban landscape. This extends beyond the aesthetic appeal that they give and this is because these areas or spaces provide numerous environmental, social, and health benefits. In the year 2017, the World Health Organization (WHO) presented a classification of eight classes of green spaces, one is roadside greenery and other vegetation barriers that are found along streets, roads, paths, or railroad tracks, the second is small urban green spaces which includes gardens or pocket parks and playgrounds, the third is green roofs and facades, the fourth classification is parks and urban meadows, the fifth is greenways and corridors which include green trails for walking or cycling, the sixth is green with blue spaces which are typically found in coastal, riverside or lakeside trails, the seventh is recreational and urban gardening facilities which include community gardens, sport and play areas and school grounds and finally the eighth is facilitated access to urban woodlands, forests, and natural wildlife populated areas.

Green spaces may be linear (occurred along transport routes such as roads and railways), semi-natural (wetlands, woodland), functional (allotments, churchyards, school grounds) and amenity (parks and gardens). The second component of the external environment which is ‘grey space’ covers land that to a greater extent sealed, impermeable and has ‘hard’ surfaces such as concrete, paving or tarmac. Urban green spaces can therefore be said to be a sub-set of urban open spaces, limited only to the vegetative part of the urban environment especially the soft lands while urban open spaces encompass all aspects of green spaces in addition to those grey surfaces (hard lands) purposely made for human usage (Mensah, 2014). As Narok Town continues to urbanize, green spaces are emerging as crucial elements in shaping social interactions and community well-being. With Narok’s unique blend of traditional and modern

economic activities, the integration of green infrastructure not only enhances the town's aesthetic appeal but also supports ecotourism, creating additional economic opportunities.

Urban Planning and Health

Barton *et al.* (2009) describe that the idea of health in urban planning has long been an issue that planners have been addressing and trying to develop ideas to promote healthier living, especially in urban areas. The author goes on to describe that with industrialization in the late 19th and early 20th century, the issue of health became more urgent, mainly in the context of air pollution and diseases linked to living in urban areas and air pollution. The problems of poor health and disease were related to poor water supply, sanitary problems, insufficient lighting, and air pollution. The healthy city was created at the beginning of the 20th century and has since been part of urban planning in various ways (Barton *et al.*, 2009). The idea of a healthy city and what healthy means has been discussed for a long time, and the idea of a healthy environment has not always been at the heart of planning for health. The idea of planning for hospitals, clinics, and doctors to be in the immediate vicinity of people was a central issue in planning. But the actual environment and its impact on people should have been considered. National public health authorities have focused on preventing infectious diseases, addictions, and nutritional deficiencies, preventing people from these health risks and not creating a healthy environment for people to live in. It wasn't until 1945 that the WHO first defined physical health, stating that physical health is not just the absence of disease and infirmity but a complete state of physical, mental, and social well-being. They also say that the highest form of a healthy life is one of the fundamental rights of people regardless of race, religion, political beliefs, or economic and social conditions in which people live (Barton, 2017).

WHO Recommendations for Physical Activity

The sedentary lifestyle has become a growing concern in today's world, where people are becoming less physically active and failing to meet the minimum recommended levels of physical activity. To combat this issue, the World Health Organization (WHO) has established guidelines regarding the amount of physical activity required for individuals of different age groups. For children and adolescents aged 5-17 years, it is recommended that they engage in at least 60 minutes of moderate to vigorous-intensity aerobic physical activity every day, with a focus on strengthening bones and muscles through vigorous aerobic intensity workouts at least three times a week.

For adults between the ages of 18 and 64, it is recommended that they engage in at least 150-300 minutes of moderate aerobic physical activity or 75-150 minutes of vigorous aerobic physical activity per week. Additionally, adults should engage in strength training workouts at least two days per week for additional health benefits. Older adults aged 65 years and above should also follow the same guidelines as adults but with a lower intensity. By following these recommendations, individuals can ensure they maintain good physical health and reduce the risk of chronic diseases. (WHO, 2020).

Art and Mental Health

The importance of the visual arts in contributing to the well-being of adults with mental health conditions has been little documented beyond some insightful and influential interventions and exploratory studies. Initiatives such as Arts on Prescription projects have, in the UK provided examples of the positive effects of engagement in artistic and creative activity can have, and some of these have been documented in small-scale studies of interventions. (Tomlinson *et al.*, 2018). Exposure to art in a natural setting can have therapeutic effects, reducing stress and promoting mental relaxation. Engaging with art in parks can evoke emotions, provoke thought, and provide a sense of escapism. This effect can be experienced both by creating and experiencing art.

METHODOLOGY

Primary Data

Primary data used in this study consisted of information collected from field surveys in the study area, this involved asking questions to a representative sample of the target population. A total of 40 standard household questionnaires were administered, key informants from the county government department of Physical Planning. Photography in key locations in the study area, observations, and existing maps and satellite imagery were used to complement the questionnaire. Part two aimed to examine the respondents' views on green spaces in Narok town

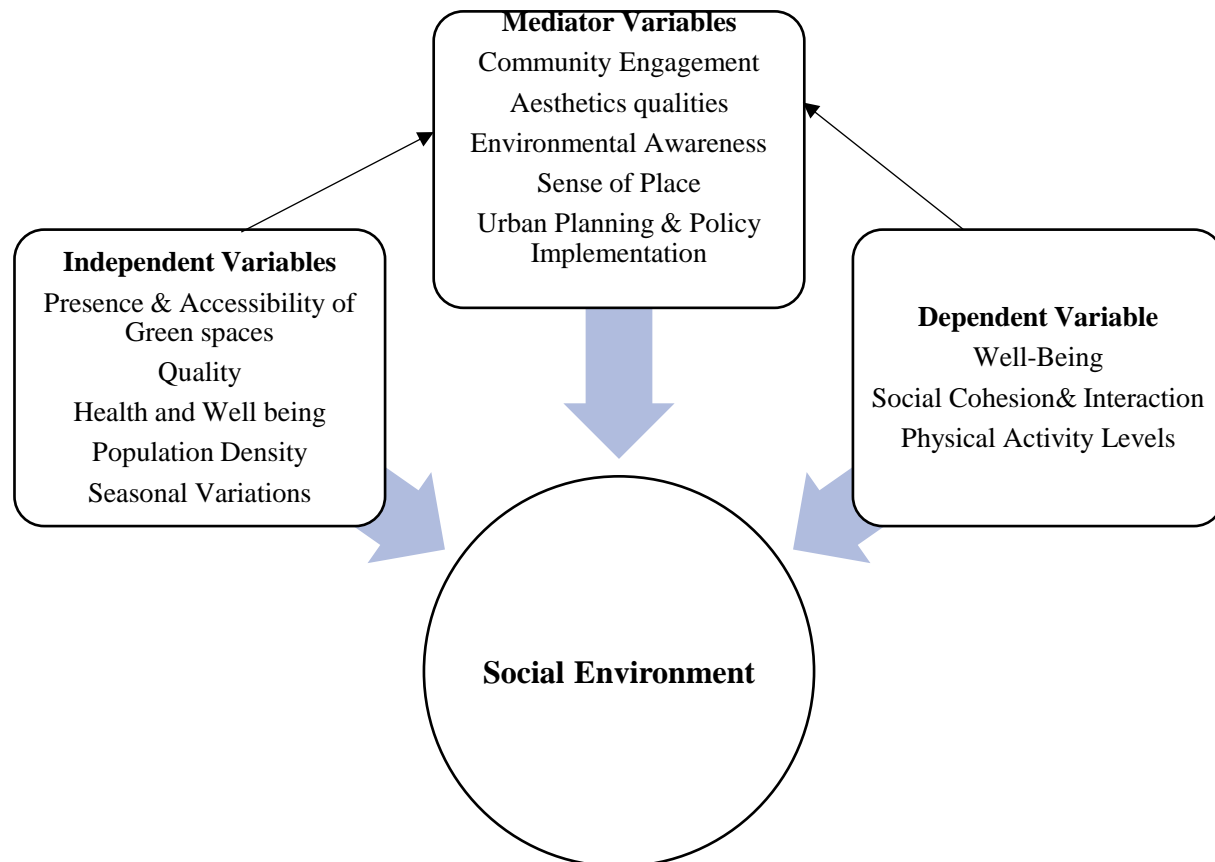
and opinions on the impacts of green spaces in their surroundings. The information required for the study included analyzing the situation of green spaces in Narok town, the views of the people on the state of green spaces in the town, the people understanding of green spaces, and the exercising routines of the people of Narok among other things.

Secondary Data

Secondary data included previous documentation on studies on the topic of green spaces, these documents were acquired online in the form of publications, journals, photographs, and maps.

CONCEPTUAL FRAMEWORK

Figure 1: Conceptual Framework Showing the Social Impacts of Urban Green Spaces



Study Area

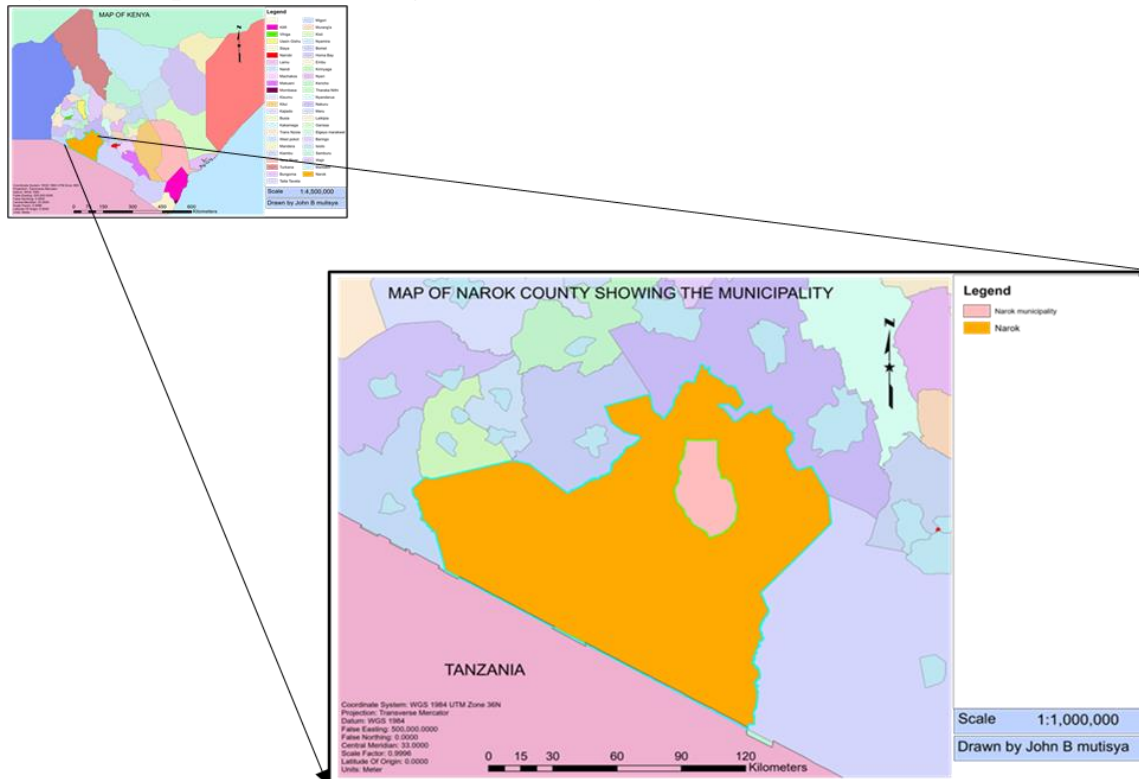
Location

Narok Town is situated in southwestern Kenya at coordinates 1.0834° S, 35.8711° E. It lies

approximately 140 kilometres west of Nairobi along the Narok-Bomet Highway, serving as a key urban centre in the Great Rift Valley region. The town is strategically positioned as the administrative capital

of Narok County and acts as the primary gateway to the renowned Maasai Mara National Reserve.

Figure 2: Map of Kenya Showing Narok County



Source: Author, 2024

Climate

Narok Town is located at an elevation of approximately 1,827 meters (5,994 feet) above sea level with an average annual rainfall range from 500mm to 1,800mm, supporting both agricultural and pastoral activities.

Population

According to the 2019 Kenya Population and Housing Census, Narok Municipality has a population of 111,609 residents and comprises 31,757 households. Narok is deeply intertwined with the Maasai community, who predominantly inhabit the surrounding hinterlands. Traditionally, the Maasai people engage in livestock herding, which remains a central aspect of their economic and cultural identity. In recent years, urbanization

and economic diversification have introduced new livelihood opportunities, including trade, tourism, and agriculture.

FINDINGS

Existing Public Green Spaces

From the study, 78% of the respondents agreed that the number of green spaces is not adequate, while 21% agreed that the green spaces were adequate. From the key informants' interview, it was noted that the only documented public green space is Koonyo Park. The Park is located in the middle of Narok town and its size has however been reduced due to encroachment from the commercial space. The town also does not have any other location set aside for public green as seen in recent proposals for beautification of the town.

Figure 3: An Aerial Overview of Koonyo Park

Source: Google Earth modified by the Author

Green Space Availability in Narok Town

Land use in Narok Town According to a study done by Njoki (2023) on urban green spaces, it was noted that green space coverage in Narok town is 9.8%. This percentage is relatively high compared to values reported for other secondary cities in Sub-Saharan Africa. Amaoko, & Koroboe (2011) found that Lagos city (Nigeria) and Kumasi city (Ghana) had 3% and 10.5% of green space, respectively. This green space availability may be exaggerated since most of this green space is found in areas inaccessible to the public. This is an indication that most of the green spaces are not directly accessible to the public, but mostly to residential members. Besides, some of these areas are found along streams and roads and hence not safe for leisure and recreation. (Njoki, 2023)

The town centre features small pockets of green spaces, such as stand-alone trees and planted vegetation connected to certain buildings. These areas offer shade for pedestrians and add to the visual appeal of the surroundings. Introducing larger green spaces could enhance ecological processes and create more opportunities for leisure and recreation. Narok town seems to be lacking

creative and innovative forms of green spaces, such as traffic island greens, rooftop greens, and vertical green spaces like green walls. These types of green spaces not only add to the aesthetic value of the town but also serve as effective buffers against traffic and noise. Unfortunately, the local authorities in many developing countries are often unaware of these innovative green space options, resulting in their non-existence or only partial and unsystematic integration in urban development. (Byrne, & Sipe, 2010).

Current State of Green Spaces in Narok Town

When analyzing the state of public green spaces in Narok town, it is clear that one can only examine the state of Koonyo Park since there are no other parks in the town. With this in mind, there is a criterion to examine the state of public green space and its effectiveness in providing services to the people of Narok town can be broken down into multiple factors;

Accessibility

This is concerned with how easy it is for people to access the park. This can be broken down further

into Physical access and socioeconomic access for more intensive assessment;

Physical Access

With physical access, the physical aspect of accessing the park is put into consideration, this includes multiple factors including; proximity the Park is located in Narok CBD which makes it fairly

accessible to the people in the area including business owners and visitors of the town, estates close to the CBD such as London, Majengo and Lenana are also located relatively close to the town. The Park is centrally located and thus easily accessible via public transportation and this makes it more likely to be used by a diverse range of people.

Figure 4: An Entrance of Koonyo Park



In terms of Pathways and Entrances, there are many areas that one can use to enter the park since it is not fenced. Although, there are only two designated entrances to the park Only one of them is gated, and the other one is just open leading to the main road. The gate is not constructed very well and does not consider accessibility by the disabled, it is also poorly managed with its remaining open throughout the day. Part of the gate's doors have been ripped off and metal that could potentially injure parkgoers is poking from the columns.

The pathways at Koonyo Park are a worrisome example of neglect and deterioration this is because they are small, uneven, and full of potholes that seriously endanger the safety of anyone who uses them. These problems are made worse by poor drainage, which creates muddy and hazardous situations, especially in low-lying locations. The pathways also lack necessary accompanying safety elements, such as sufficient lighting and obvious signs, jeopardizing user safety even more, the absence of handrails and ramps makes it difficult for people with disabilities to access them. The whole parkgoer experience is negatively impacted by the condition of the pathways, which discourages return visits and lessens the park's appeal as a community and recreational area.

Socio- Economic Access

Koonyo Park is accessible to all visitors without an entry fee, ensuring that the cost is not a barrier to

enjoying its limited amenities and natural beauty. However, despite the absence of an entry fee, there are still financial considerations for visitors. For instance, many visitors rely on personal vehicles and public transport to access the park, incurring potential parking costs since there is no parking in the park. Within the park, things like food from food vendors, and special events may entail additional expenses for visitors seeking a full recreational experience. For low-income individuals and families, who make up a big percentage of the parkgoers, these supplementary costs could limit their ability to frequent the park regularly or participate in certain activities. Therefore, while Koonyo Park is technically affordable in terms of entry, its overall accessibility remains influenced by financial considerations beyond the park's boundaries.

Koonyo Park has a lot of missed opportunities for community engagement, education, and

recreational enrichment. Without programming and outreach initiatives, the park continues to fail to fulfil its potential as a vibrant community space. Programming the park could include organized sports leagues, fitness classes, cultural events, and educational workshops, catering to a diverse range of interests and demographics within the community. Using modern means, outreach efforts, such as social media campaigns, community newsletters, and partnerships with local organizations, are essential for promoting park activities, fostering community connections, and attracting visitors. Without such initiatives, the park struggles to attract regular visitors, particularly from underrepresented or marginalized groups, resulting in a lack of diversity and inclusivity. Additionally, the absence of programming and outreach limits opportunities for community members to engage with nature, learn new skills, and develop a sense of ownership and pride in their local park.

Parks should aim to reflect and celebrate their communities' diverse cultural backgrounds and linguistic diversity, by 'their communities' the community that is native to the location of the park in question is referred which in our case is Koonyo Park with the native community being the Maasai community. Without language and cultural considerations of other communities, Koonyo Park may also inadvertently exclude non-native speakers or individuals from culturally diverse backgrounds, limiting their sense of belonging and engagement with the space. One way of doing this is by providing multilingual signage, interpretive materials, and programming that can enhance accessibility for non-English and Swahili speakers and ensure that all visitors feel welcomed and included. Incorporating cultural elements such as

artwork, performances, and events that celebrate the heritage and traditions of the Maasai and other various communities can enrich the park experience and foster cross-cultural understanding and appreciation. By neglecting language and cultural considerations, Koonyo Park misses an opportunity to promote diversity, equity, and social cohesion within its community.

Park Utilization

To assess the utilization of Koonyo Park, mainly it was through observation. This is because, unlike in more modern parks, where automated turnstile counters are installed at main entrances that provide a baseline count of daily visitors to the park, Koonyo Park has no way of identifying daily visitors unless one is willing to stand at the gate and count all people manually, which is close to impossible since people enter the park from multiple points. Also, it is neither efficient nor effective in determining park users. The method used to see the utilization of the park is by visiting it multiple times a day and looking around to see the amount of people in the park, it was clear that Koonyo Park had low utilization for a park located in the CBD of a town, compared to parks like the Kitui Eco park which is a park in the outskirts of Kitui it is clear that Koonyo is not fully utilized, this is partly the fault of the NCG for not managing the park well and the lack of activities in the park.

Maintenance and Cleanliness

In terms of waste management, it was observed that litter scattered throughout the park, including discarded food wrappers, plastic bottles, and other types of trash.

Figure 5: Poor Waste Management at Koonyo Park

The Park lacks trash bins and this encourages visitors to throw their trash on the ground, some of the residential and commercial buildings around the park empty their sewage in the park which brings about a foul odour in the park, some also spill their garbage or trash onto pathways and green spaces. This not only detracts from the park's aesthetic appeal but also poses health and safety hazards for visitors, wildlife, and the environment. Additionally, the accumulation of garbage can attract pests and rodents, further exacerbating the cleanliness issue.

Figure 6: Dilapidated Bench at Koonyo Park

The infrastructure inside Koonyo Park, including benches and bridges, is showing signs of wear and tear, with broken or damaged components requiring immediate repair. In the absence of regular maintenance and upkeep, the deterioration of the park's infrastructure continues, leading to further safety concerns and reduced usability.

Restroom facilities in Koonyo Park suffer from cleanliness issues and maintenance deficiencies. Visitors encounter dirty and unkempt restrooms with insufficient supplies of soap, toilet paper, and hand sanitiser. Unpleasant odours further contribute to a negative restroom experience for park users. The lack of proper restroom maintenance not only reflects poorly on the park's overall cleanliness but also undermines visitor comfort and satisfaction.

Landscaping and green spaces in Koonyo Park are often overgrown and unkempt, with shrubs, tall grass, weeds, and invasive vegetation encroaching on pathways and areas reserved for recreation. Neglected landscaping detracts from the park's visual appeal and creates barriers to access, especially for the handicapped, as overgrown vegetation may impede pedestrian pathways and obstruct the sightlines.

Figure 7: Overgrown Lawn at Koonyo Park

When the landscaping is poorly maintained in a park, it can detract from the overall experience. For starters, overgrown trees and shrubs can make the park feel cramped and confined, which can be unpleasant for visitors looking to escape the hustle and bustle of town life. Additionally, unkempt lawns and gardens can be an eyesore, reducing the park's aesthetic value and making it less inviting for people to spend time in. Not to mention, it can be a safety hazard too. Thick, overgrown foliage can hide dangerous objects, such as broken glass or sharp rocks, which can be harmful to both people and their pets.

Threats to Public Green Spaces in Narok Town

Urban public green spaces continue to face several significant threats, including encroachment and commercialization due to urban development. The maintenance of green spaces faces various challenges, including funding shortages and vandalism, which can worsen the issues. Biodiversity loss caused by invasive species and habitat fragmentation further adds to the difficulties. Additionally, social problems like unequal access and safety concerns can limit the usefulness and advantages of green spaces. Moreover, inadequate long-term planning and weak legal protections make these areas susceptible to continuous pressures.

Encroachment

Koonyo Park and other green spaces in Narok town face the threat of encroachment from other various land uses. This can take several forms, including illegal building construction, extension of private properties into public areas, and conversion of green spaces for commercial uses such as shops, parking lots, or industrial facilities. Encroachment can also manifest in the informal settlement of homeless populations or unauthorized vendors setting up stalls within these spaces. Such activities not only reduce the physical size of green spaces but also degrade their environmental quality, disrupt local ecosystems, and diminish their aesthetic and recreational value.

Figure 8: Encroachment of a Business Premise to the Park

Figure 8 depicts a clear indication of an encroachment to the park. Comparing the latest proposed beautification plan of Narok town with satellite images, it is clear that there are some discrepancies.

It is important to mention that the boundary drawn in the satellite image was done from observation and some parts may not be accurate, with this in mind from the two images, one can see many differences between the actual and the plan, some of the

buildings extending into the park are not accounted for in the plan, it is crucial that a clear plan for the park is chalked out and boundaries put up around the park to define it from the surrounding clearly.

Figure 9: Shape of Koonyo Park in the Beautification Plan and its General Shape Traced from Google Maps

Loss of Green Cover

Koonyo Park and other green spaces in the town are threatened by multiple things, one of them being the

loss of green cover or vegetation. This is evident because the area initially referred to as a forest now has only a few trees remaining. This is depicted in Figure 10.

Figure 10: Changes in Vegetation Cover in Koonyo Park Over the Years



Unauthorized Grazing

Livestock grazing in public green spaces, especially in urban areas, can present various challenges and consequences on flora and fauna such as soil structure, diminishing the biodiversity and visual

appeal of the area. Overgrazing can also contribute to soil erosion, compaction, and degradation, making it difficult for vegetation to regenerate and for the space to maintain its lush, vibrant appearance.

Figure 11: Cattle Grazing in Koonyo Park



The presence of livestock can create conflicts with recreational use, as animals may pose safety risks or create unsanitary conditions with their waste including foul odour and diseases. Grazing can be permitted as a controlled activity for specific environmental management purposes, such as controlling invasive plant species or managing grassland ecosystems.

This however requires careful planning and management to ensure that the ecological balance is maintained and that the space remains safe and accessible for public use. Koonyo Park falls victim to unauthorized grazing and often one finds cattle, sheep and pigs roaming the area or asleep under the trees.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Green spaces are essential for urban environments, contributing to ecological, social, health, and economic needs. The provision of adequate, high-quality green spaces has become increasingly important for enhancing urban livability. In Narok town, green spaces are unevenly distributed, with concentrations on the periphery and low coverage in the urban core. The types of green spaces are mostly parks, residential areas, and riparian zones, with a lack of innovative forms like vertical greenery. The town has potential areas for retrofitting into green spaces, such as road reserves and built-up areas. Efforts by the County Government should focus on preserving and enhancing green spaces within urban blocks and along riparian zones. Policies like the Physical Planning Act and Urban Areas and Cities 2011 need stricter enforcement. Additionally, new policies could encourage the development of innovative green spaces, and global strategies should be adapted to local contexts to improve urban green spaces.

Figure 12: A Model of a Bicycle Rack



Recommendations

Several recommendations have been outlined focusing on maintenance, infrastructure, and safety. First, a structured maintenance schedule is needed, detailing daily, weekly, and monthly tasks such as garbage removal, restroom cleaning, and equipment inspections. Additionally, increased staffing through contracted employees or volunteers, along with the appointment of a park manager, would ensure regular upkeep and efficient task management.

For waste management, installing more trash bins, including colour-coded ones for recycling, is essential. An efficient trash pickup system should be established, ensuring bins are emptied frequently to maintain cleanliness. Koonyo Park also requires infrastructure improvements, including the expansion and repair of pathways to enhance accessibility and connection between park areas. Playground equipment for children and picnic areas with new benches and tables are vital for improving recreational spaces. Lighting improvements are necessary to ensure safety, with energy-efficient and durable lighting solutions.

Restroom facilities should be upgraded for cleanliness and accessibility, and parking facilities should be constructed near entrances, integrating sustainable practices.

Providing secure bicycle parking would encourage eco-friendly transport. Furthermore, emergency facilities, including first aid stations and an emergency alert system, are crucial for enhancing safety and health response.

Figure 13: A Model of a Bioswale

Source: Google, 2024

In addition, to improve the landscaping and green spaces at Koonyo Park, several key recommendations have been proposed. First, the incorporation of native plants and trees, such as *Acacia* species, is vital to enhance biodiversity and ecological restoration, as they are adapted to the local climate and require less maintenance.

Regular landscaping activities, including mowing, pruning, weeding, and seasonal planting, will maintain the park's aesthetic appeal and health, ensuring it remains inviting and well-maintained. Beautification projects, such as vibrant flower beds and community gardens, can foster local pride and social engagement while supporting community involvement in activities like fitness classes and environmental clean-up days.

Erosion control is another priority, with strategies like planting native species, mulching, and installing retaining walls in areas prone to soil degradation. Additionally, community engagement through events, educational programs, and volunteer opportunities will strengthen social bonds and increase participation in park upkeep. Feedback

channels will help ensure continuous improvement, allowing parkgoers to contribute their ideas.

Accessibility and inclusivity are central to the park's development. Enhanced signage, including multilingual options, will help visitors navigate the park easily, while inclusive programming will cater to seniors, children, and individuals with disabilities.

Sustainable practices, such as rainwater harvesting, solar-powered lighting, and composting, are crucial for environmental stewardship, ensuring the park remains ecologically viable for future generations. To improve Narok's urban green spaces, the integration of greenery into construction and the development of additional green spaces, such as along streams and traffic islands, are recommended.

Figure 14: Recommended Location for Construction of a Park**Figure 15: Recommendation on Constructing the Trench in Koonyo Park**

A new park, located behind the Naivas area along the Enkare River, is identified as an ideal site for development. Effective space utilization in Koonyo Park, through strategies like multi-story buildings and creative designs such as using trench spaces for shops, will maximize the park's community benefits. This holistic approach will create a more sustainable, inclusive, and vibrant park for Narok residents.

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