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**ADDIS ABABA UNIVERSITY
ETHIOPIAN INSTITUTE OF ARCHITECTURE,
BUILDING CONSTRUCTION AND CITY
DEVELOPMENT (EiABC)**

**ASSESSMENT OF COMMUNITY BASED
NEIGHBORHOOD PARKS' PLANNING, PRACTICE
AND MANAGEMENT:
THE CASE OF WOREDA SIX IN KOLFE KERANIYO
SUB-CITY, ADDIS ABABA**

BY

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APRIL, 2024

ADDIS ABABA, ETHIOPIA

**Assessment of Community Based Neighborhood Parks’
Planning, Practice and Management:
The Case of Woreda Six in Kolfe Keraniyo Sub-City, Addis
Ababa**

**By
Mulatu Assefa**

**A Thesis Submitted to the School of Graduate Studies of Addis Ababa
University, Ethiopian Institute of Architecture, Building Construction, and City
Development (EiABC), in Partial Fulfillment of the Requirement for the Award
of a Master’s Degree in Urban Planning.**

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**APRIL, 2024
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Declaration

I, Mulatu Assefa, with Registration Number/ID Number GSE/7226/12, hereby state that the research project titled “Assessment of Community Based Neighborhood Parks’ Planning, Practice and Management: The Case of Woreda Six in Kolfe Keraniyo Sub-City, Addis Ababa” is my original work that was completed under the guidance of Hayal Desta (PhD), and that it has not been submitted partially; or in full, by any other person for an award of a degree in any other university/ institution.

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Approval

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Abstract

The proportion of people living in major cities is rapidly growing. There was high movement of individuals from rural to urban areas. Built-space density is rising, housing is developing, infrastructure is being created, and industrial zones outside the city are being reorganized. Because of this, the green spaces in the capital have seen excessive exploitation and significant degradation as a result of a lack of meticulous management of green spaces and insufficient greening operations. One of the solutions would be to build and preserve community-based neighborhood parks and green spaces. The study area location where found in Addis Ababa city, Kolfe Keraniyo sub-city, woreda 6. The main objective of the research was to examine community-based neighborhood-park planning, practice, and management (PPM), with a focus on planning provision, community perception, organization, and administrative issues related to its ecosystem services. The most important issues of the research were assessing urban green area planning provision, and management of communities' knowledge of urban neighborhood park benefit, practice and problem identifying, as well as government involvement in human and funding resources, and stakeholders' contribution to green space development. The research study follows descriptive research approach to notice both quantitative and qualitative data, helps in assessing people's preferences, and including planning status, engagement practice, and management to solve challenges. The method used mainly field survey tactic across the study area through analyzing or investigating existing condition using primary as well as secondary data sources. The data was analyzed and findings were created using SPSS, Microsoft-word, Excel, Arc GIS, Auto CAD, and some related tools. The results were described as follows- A, The Addis Ababa Structure Plan's 30, 30, and 40 percent land use provisions were not intended to be followed in the planning of green space. The green area is smaller than 1 m² per person, it is less than World Health Organization (WHO) requirement; additionally, neighborhood park plan distribution was improperly spread within a 300m radius; farther more, the planning process was not participatory in and of itself; and finally, there are implementation problem issues. The rate of plan change, grading, and monitoring for local parks and green areas received less attention. B, according to half of the respondents, had less awareness on neighborhood parks important and necessary, which explains fewer funds are being contributed to the construction of community

parks. primary objective of the neighborhood park and with regard to its comfort, security, and green space planting, most respondents stated that it was in poor character. The majority of community parks lacked proper plants and had poorly designed features including lights, benches, trash cans, sidewalks, and safety obstacles. C, the neighborhood park committee was not given any official training or experience; members were elected and serve voluntarily. The results show that there was inadequate partner coordination, poor consultation, and a lack of teamwork. Ultimately, the committee's efforts have resulted in the expenditure of time, money, resources, and authority that an individual or group of committee members have committed to the process of growth and management. The majority of community-focused local parks lacked a legally required park design. The majority of neighborhood parks are devoid of elements that should be present in a green area, like playground areas, benches, lighting, gates, and paths. Every green space must abide by the proportionate norm of 80 percent green space and 20 percent amenity. The following recommendations were made based on the study's results. A community-based neighborhood and other parks will need systemic reforms to better link economic, environmental, and social policies and institutions. These changes must be politically and economically feasible while also discovering synergies, weighing and giving solution. Advocate for and promote the creation of a comprehensive, integrated neighborhood park management plan that addresses the pressing concern and opportunity posed by the existing NPs vacant lots. In order to address the aforementioned challenges, the woreda administration must work very hard and also offer training to export personnel working in various institutions as well as devoted community members. When the next structural design is being prepared, it might be important to include neighborhood parks for the protection of land use violation. In order to promote environmental sustainability, create effective plans, formulate strategies, and utilize synergies, it is vital to build on the financial support that the community has previously contributed for local parks.

Keywords: Community, Neighborhood Park, Plan, Practice, and Management.

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Acronym

AACSP	Addis Ababa City Structure Plan
AU	Africa Union
BPCDAA	Beautification, Park and Cemetery Development Administration Agency
CABE	Commission for Architecture and the Built Environment
ECA	Economic Commission for Africa
EIABC.....	Ethiopian Institute of Architecture, Building Construction City Development
GIS.....	Geographical Information System
MUDB.....	Minister of Urban Development Bureau
MUDHC.....	Minister of Urban Development Housing Corporation
NGO.....	Non-Governmental Organization
OAU.....	Organization of African Unity
UGS.....	Urban Green Space
UNECA	United Nation Economic Commission for Africa
WHO	World Health Organization
WCED	World Commission on Environment and Development

CHAPTER ONE

1. Introduction

1.1 Background of the Study

The proportion of people living in major cities is rapidly growing. Feng (2018) discusses that there was high movement of individuals from rural to urban areas. It is undeniable that urbanization improves people's quality of life while also strengthening political, social, and economic structures. Zhongming et al. (2020) assert that smart urbanization creates economic, environmental, social, and intangible value that may be leveraged to enhance people's lives based on the World Cities Report. Conversely, Uttara et al. (2012) state that unchecked urbanization is a primary contributor to environmental degradation, resulting in problems such land instability, declining water quality, high air pollution, noise pollution, and waste management concerns. Roser et al. (2013) estimate that there were one billion people on the planet in 1800, and that there are now more than 8 billion people on the planet. According to DESA, U. (2019), the proportion of the world's population living in cities increased from 30% in 1950 to 55% in 2018 and is expected to reach 68% by 2050. Africa's population is anticipated to increase to over 1.3 billion by 2020, according to the World Population Prospects report from the United Nations. However, just 41 percent of Africans live in cities, according to Roser et al. (2013). By 2050, it's anticipated that over 64 % of Africa would be urbanized.

Despite having some of the world's most densely populated cities, Ethiopia has a total population of 107,334,000 people, according to the Ethiopian Statistics Agency's (July,2022) population projection for 2023, with Ethiopia's urban population in 2022 being 27,959,125.

According to the CSA (2013), many individuals travel to the city in pursuit of employment and services due to its location and popularity. According to the Central Statistical Agency's (2015) national census estimates, Addis Ababa has a population of 3,273,000, which accounts for 3.6 percent of Ethiopia's total population and 18 percent of its urban population. The population is growing at a rate of 2.1% each year. Demographic variables influence the climate changes caused by humid gases in the atmosphere. Natural areas, on the other hand, help to purify the air and water, provide food and medicine, reduce noise and chemical pollution, avoid flooding, and chill the

streets. In particular, ecological functions that are reflected in ecosystem services, as defined by Tolessa et al. (2017), are affected by land use and land cover (LULC), which has an effect on ecosystem dynamics. Urbanization is one of the main factors influencing changes in global land use, land cover, and climate, according to Elmqvist et al. (2013). At end it is clear that globally, human activities have had an impact on ecosystem functions. Studying how urbanization affects eco-systems is essential and necessary, according to Delphin et al. (2016), in order to provide knowledge and recommendations for urban planning and policy development that could decrease their potential environmental harm.

The natural environment component of urban green space is a critical ecosystem in the growth of any community. The history of life on Earth has been one of living species surrounded by a natural environment that supplies water, fresh air, minerals, plants, flora, animals, and all the fruits of nature, among other things, to enable them to live their everyday existence, as explained by Vargas et al. (2017).

According to Bilgili et al. (2012), there are links between urban green spaces and areas that were originally natural or semi-natural ecosystems but became urban areas as a result of human activity.

Using urban green spaces for athletic activities like walking, jogging, football, and other sports helps to minimize ailments including heart disease, muscular issues, cognitive disorders, and cancer, according to a CJC consulting (2005) study.

The Ethiopian National Urban Green Infrastructure Standard was created in 2015 to create environmentally sound, visually pleasing, and socially beneficial green spaces in cities, as well as providing adequate biologically viable green spaces to meet the community's recreational, social, financial, and conservational needs. Furthermore, in order to protect the environment and public health, the Ethiopian government established national urban green infrastructure standards (UGIS) for its residents. According to Molla et al. (2019), the park hierarchy in Ethiopia consists of neighborhood parks, Woreda parks, sub-city parks, and city parks.

Green areas have been demonstrated to enhance psychological well-being, according to Louv (2008) and Taylor et al. (2001). Ernstson (2013) and Maas et al. (2009) both highlight how it reduces stress. According to Woo et al. (2009), it can lessen the severity of several mental problems in children.

As a result of the country's rapid population growth, Addis Ababa, the capital of Ethiopia and the diplomatic capital of Africa, is undergoing massive development.

Built-space density is rising, housing is developing, infrastructure is being created, and industrial zones outside the city are being reorganized. As Addis Ababa's economy and urbanization grow, there is growing concern over the city's green spaces, according to Kefelew et al. (2015). The green spaces in the capital have seen excessive exploitation and significant degradation as a result of a lack of meticulous management of green spaces and insufficient greening operations (Horst 2006).

The absence of green space and the exponential growth of the population, worsening physical, social, psychological, and environmental concerns. Ahmed (2003), emphasizes the need of maintaining existing green spaces and the need to plan for more (future) green spaces.

So, green spaces and other recreational space focused on nature to progress the value of urban environments increase local sustainability, and encourage healthy lifestyles, improving both the health and well-being of urban citizens. Community-based green space facilities not only benefit from improving the quality of lifespan of residential neighborhoods but also offer opportunities for leisure activities, health enhancement, protection of the environment, and recreational purposes as well as for education. According to Kuo et al. (1998), the presence of greenery, such as trees or plants, enhances the attraction of neighborhood gathering spots, possibly increasing their use and promoting casual social interactions amongst neighbors.

Public spaces, such as parks, are another aspect of the physical environment that can build a sense of community by encouraging incidental meetings between neighbors (Talen, 2000). It increasingly understands that the natural, social and economic benefits of community-based green spaces are an integral component of sustainable growth. Community-based green space is visually pleasing and can provide nature with useful semi-natural habitats. Because urban areas play such a significant role in the socio-economic development of local, regional, and national entities, productive and healthy metropolitan areas are necessary for ensuring integrated development that benefits inhabitants. For community use, connectivity, or visual or ecological purposes, green areas are unbuilt land in the built environment. It contributes greatly to society and the quality of life.

As a significant investment that local governments can make on behalf of citizens and their well-being, this thesis study will examine the evidence for the population health benefits of green spaces. It will also serve as a chronicle summary for health policymakers, urban planners, and urban green space providers. The study aims to

demonstrate that community-based green spaces can have a social and economic impact by providing a gathering place for users to form and sustain neighborhood social connections and that this social interaction improves users' personal and social communication skills. In general, the study aims to show that greenery and the establishment of neighborhood social relations in urban areas will contribute significantly to residents' feelings of protection and adjustment.

Trees and green universes are eco-system components that help to clean the air and surface water, provide or regenerate drinkable water, and reduce energy consumption, all of which help to support life, and achieving urban green space requires political support from local governments, as well as a widespread understanding that urban green spaces have social and health benefits that progress the quality of life and well-being of all city dwellers.

The primary goal of this paper was to investigate the current state of community-based neighborhood-park planning, practice, and management. Finally, the research can fill any gaps in policy and service delivery standards.

To ensure that urban green space interferences are incorporated within both the urban planning and health sectors and are planned and delivered with multiple objectives in mind, it is critical to forming diverse, multidisciplinary, and community partnerships. Public involvement can aid in determining how the urban green space involvement should be planned and implemented, allowing municipalities to make well-informed decisions that represent the community's needs.

Specifically, the research seeks to achieve the following objectives: (i) Analyze the availability and state of community-based neighborhood-park planning in the research area; evaluate the study area's spatial plan practice in relation to Addis Ababa's master plan and the practical application of planning concepts; (ii) Examine the public's perception of the neighborhood park in the research region, as well as the community's practices regarding well- and poorly-managed green spaces; (iii) Analyze the research area's green space availability as well as the opportunities and problems associated with creating a neighborhood park with a strong community focus.

1.2 Statement of the problem

For recreational purposes, a community-run neighborhood park is invaluable because open space development is important for the development of the mind, body, economy,

society, and environment. The difficulties that have prevented people from reaping the benefits were of great concern to the study. Nevertheless, there hasn't been as much focus on neighborhood parks management and practiced, but lead by the local community. While some academics have studied the uses and benefits of neighborhood parks, they have not studied development strategy and administration. So, the research was necessary to fill the knowledge gap in the areas of neighborhood park plan provision status, community practice, and management. Its main justification for beginning the study in Kolfe Keraniyo sub-city, woreda six, was that a number of the neighborhood parks were underdeveloped and prone to inappropriate use. Main problem was poor plan recognition, less community awareness in use practice and poor management problem.

The goal of the study is to optimize the benefits of ecosystems and potentially enhance environmental conservation, community-based urban green space management, planning practice provision, management system performance, and stakeholder involvement in the sustainability of green spaces. Finally, by providing suggestions for development and management systems, the research can fill in some gaps.

1.3. Objective of the Study

1.3.1. General Objective

The main objective of the research was to examine community-based neighborhood-park planning, practice, and management (PPM), with a focus on planning provision, community perception, organization, and administrative issues related to its ecosystem services management.

1.3.2. Specific Objectives

- To examine the provision and existing condition of community based neighborhood-park planning in the research area;
- To assess the practice of the public on community based neighborhood-park in the research area;
- To identify the challenges and opportunities in the development of community based neighborhood park in the research area.

1.4. Research Questions

- How is the current status of community based neighborhood-park plan in woreda 6?

- What are the perception status of the public on community-based neighborhood-park in the case of woreda 6?
- What are the challenges and opportunities in the development of a community-based neighborhood park in woreda 6?

1.5. Scope of the study

Based on the objectives of the study, the scope of research has been confined to assessing the performance of community based neighborhood-park development and management of neighborhood park aspects. Moreover, it covers issues about the administrative, institutional, and legal framework in the geographical coverage of the study limited to the boundary of Kolfe Keraniyo sub-city, woreda six. Hence, the coverage of the research is limited spatially, thematically, and temporally.

1.5.1. Spatial Scope

The research effort will be geographically constrained by the administrative boundaries of Addis Ababa, namely the Kolfe Keraniyo sub-city in woreda 6 with a 3.04 sq. km size. Administrative level that the data set plans to cover.

1.5.2. Thematic Scope

The research report's main focus will be on analyzing the current status of neighborhood parks, and their problems in Kolfe Keraniyo sub-city, woreda 6, especially in specific community-based neighborhood parks that help to fill in the gaps of the problem by raising awareness among residents, stakeholders, and decision-makers.

1.5.3. Temporal Scope

The research must be completed within an education completion time frame.

1.6. Significance of the Study

From the experience which was seen in Addis Ababa, there was a research gap on the lack of awareness in the benefit of neighborhood park planning, practice, and management of community-based neighborhood park development and uses coordination which necessitates research to find a solution for the problem of neighborhood park planning, practice, and management (PPM).

Primarily, the study stresses on the assessment of community-based neighborhood park planning status, practices, and/or to identify the knowledge management of the

community, stakeholders, and staff experience in the study area. The result would be a part of provoking the problem and use as a reference for urban planners, policymakers, woreda level concerned offices, gardeners, and volunteer committees in enhancing their programs.

A research report can also help,

- It may fill a gap in the creation of awareness in the necessity of green space;
- The findings of the study would expect to strengthen the needs for integration of different stakeholders and community in the woreda;
- It may fill a gap of dwellers, volunteer committee, and the management group in formulating additional plans and strategies to alleviate the existing problem;
- The findings could also contribute to the solution of the community-based neighborhood park provision problem in the city.

1.7. Research limitation

Limitation of the paper was the fear of respondents' providing to genuine information in response to questions posed, and try to address by explaining the research objective.

1.8. Organization of the Paper

This thesis report follows standard writing procedures in order to maintain the sequence of structured tasks to be completed during the work flow. The thesis report was structured into five chapters to ensure the effectiveness of the analysis. The first chapter covers the introduction (background of the study), the statement of the issue, the objective, the importance of the study, and the organization of the document. Literature reviews discussed in the second chapter. The third chapter deals with, the scope, and the overview of the study field, the organizational meaning of keywords, research methodology adopted, such as research design, research stratagem, research methodology, method of data collection, sample design, sample size, data type and source, tool for data analysis and presentation, and description of the study area. Fourth chapter is about presenting, discussing and evaluating data. The last fifth chapter demonstrates the conclusions and recommendations of the report. The thesis finally incorporate reference /bibliography/ and the supplementary information (Annex).

CHAPTER TWO

2. Literature Review

2.1 Theoretical Literature Review

Around the world, there are many different definitions for urban green space and green areas. In Europe (Germany), green areas are defined as "the vegetation-covered open space or open space with plants that service the city hygiene, that breaks up the city structure, and that serve the recreational use." The classification of green spaces in Land Use Plans and municipal regulations includes "green and park areas, central parks located in residential areas, city forests, traffic green areas, allotments, sport-play and swimming places, graveyards, promenades, tree lines, and green constructed city places.

Urban green space (UGS), according to Tan and associated coauthors in Asia (Singapore), refers to the various types of greenery found in cities, such as parks, green roofs, woodlands, community gardens, etc., which are well known to play a key role in the creation of livable cities (Tan et al, 2013). Definition of a community garden would likely be difficult to develop; the American Community Garden Association takes a broad view: A community garden is "any piece of land gardened by a group of people."

Numerous scholars agree that urban green space may revitalize cities in terms of social, economic, and ecological advantages Givoni (1991); Heidt and Neef (2008). From the views of the providers and consumers addressed by Xiaolu et al. (2012), both accessibility analysis and urban green space valuation are valuable techniques that offer significant measuring approaches in urban green space planning.

They describe the benefit of commons garden, at its core, the community garden movement of the early twenty-first century was about rebuilding a spirit of a local community tied and relationships across age, ethnic, cultural, and linguistic lines through working together and the common interest of gardening to a place and restoring nature and food growing in the inner city. The writer also remarked that the gardens provide an avenue for people to connect to, to form communities of growers and eaters, and to combat the anomie, or social isolation that can come with urban life. According to Jennings et al. (2016), they came to the conclusion that the location was particularly crucial for people who were moving to cities from rural areas because it

shielded them from the social isolation that might come with city life and promoted the development of more cohesive social networks.

Urban green space was connected to well-being in many ways, and green planning policies and projects were often justified for contributing a wide range of benefits and values. The importance of nature to urban neighborhoods is discussed by Sullivan et al. (2004), while Kuo et al. (1998a) found that natural landscapes were favored to hardscape settings. Furthermore, a review of the research demonstrates that greener communities, particularly those where green spaces are easily accessible, foster neighborly ties and enhance the social environment, as claimed by Coley et al. (1997). Benefits- through improved air and water quality, buffering of noise pollution, and mitigation of impacts from extreme events, urban green spaces can reduce environmental health risks associated with urban living. In addition, they support and facilitate health and well-being by enabling stress alleviation and relaxation, physical activity, improved social interaction, and community cohesiveness. Health benefits include improved levels of mental health, physical fitness, and cognitive and immune function, as well as lower mortality rates in general benefit stated by World Health Organization 2017.

The green area may take on a variety of uses. People have come up with amazing ways to use green space all across the world, including on rooftops, balconies, small plots of land, big vacant lots, calm areas, and hubs of activity. It's amazing. Some of the creations include natural play areas for kids, neighborhood gardens, urban agriculture, rooftop gardens, community orchards, recreational fields, cycle lanes and walking trails, Green Street calming, and restoration of city boulevards.

For the persistence of this thesis, I agree that with most experts, urban green space (UGS) interventions are defined as actions that significantly modify the quality, quantity, and accessibility of urban green space. This could be done by establishing new urban green spaces or by changing the characteristics and functions of existing ones.

Urban green space can help to constitute a framework where urban society and culture can develop, and increase identity and a sense of community. Different authors (Fuller et al. 2009; Harting et al. 2014; and Jansson 2014) contend that the city needs green spaces because they serve as regulating areas and thus a good relationship between people and nature is crucial. Through my thesis research study, I try to draw attention to the fact that the need for parks and other green spaces, particularly in lower-income

neighborhoods, is now being framed as an issue of environmental justice. The reality also shows that green space has both direct and indirect effects on individual and societal health. In addition to fostering social interaction, urban green spaces will demonstrate how they contribute to the creation of strong and secure communities, "especially where neighbors participate in greening activities."

In his research in Kumasi, Ghana, Adjei seeks to demonstrate how ineffective governmental procedures lead to a quick decline of green areas (Adjei et al. 2017). Neighborhood parks serve as vital links between the built and unbuilt, the green and the grey, as cities increasingly become the primary living environment for the great majority of people on the planet. At the same time, parks and other publicly accessible urban neighborhood park are man-made structures that are planned, constructed, and maintained. Views of nature are always developing, which has an impact on how the city and nature interact.

Through the allocation management of space resources and the design of the site environment, urban planning has a significant impact on the urban material and social environment, which in turn affects people's health. Urban planning is a discipline that provides criteria-based rules and standards for the development and implementation of plans. Quality of life is critical for both individual and society development. Its components necessitate a variety of multidisciplinary developmental interventions at both the community and individual levels.

2.2 Conceptual Literature Review

The reality and practical experience demonstrate how important green space is for creating healthy, livable communities all around the world. According to a statement from the European Commission, the idea behind UGS (Urban Green Space) was that functional, appealing public spaces, along with an attractive environment, can serve as emblems of a city and of living together and may give the city's inhabitants a sense of ownership.

According to (Haq 2011; Krisdianto et al. 2012 and Senanayake et al. 2013), UGS are crucial and multifunctional city components because they contribute to environmental sustainability, ecological diversity, recreation, citizen health, economic benefits, and societal well-being in addition to providing the necessary structural and functional spaces. Parks, in addition to acting as a habitat for living things, offer the ideal backdrop for social interaction and leisure pursuits, claim Riaz et al. (2002). The

effects of urban pressures like odor, noise, heat, and air pollution are unquestionably lessened with the help of UGS.

International studies have turned their attention to the relationship between urban livability and green spaces, which was incorporated into overall urban green systems (Caspersen et al. 2006). A common method to illustrate the connection between the urban population and the size of the green spaces is the green space ratio-metric, which counts the number of UGS in a neighborhood (Xion et al. 2009). Le et al. (2018) define urban green space compactness as the amount (number or area) of UGS within a city or its sub-parts to provide an overall picture of provision to a certain number of persons. The urban green space density (UGSD) was calculated and reported as a percentage in accordance with Farfán (2021).

According to Gupta et al. (2012) the Urban Neighborhood Green Index (UNGI) evaluates the spatial distribution of UGS near urban built-up areas. The urban neighborhood green index paper attempts to expound on two features that describe the properties of urban vegetation: the amount of green and the type of green (basic form of urban vegetation, such as dense, low/grass vegetation, and so on). Neighborhood-level characteristics of urban built-up have been defined using metrics such as proximity to green, built-up density, and structure height. Figure 2-1. depicts the conceptual model for the Urban Neighborhood Green Index: Two criteria that characterize, characteristics of urban vegetation and characteristics of urban built-up link with neighborhood green quality via index.

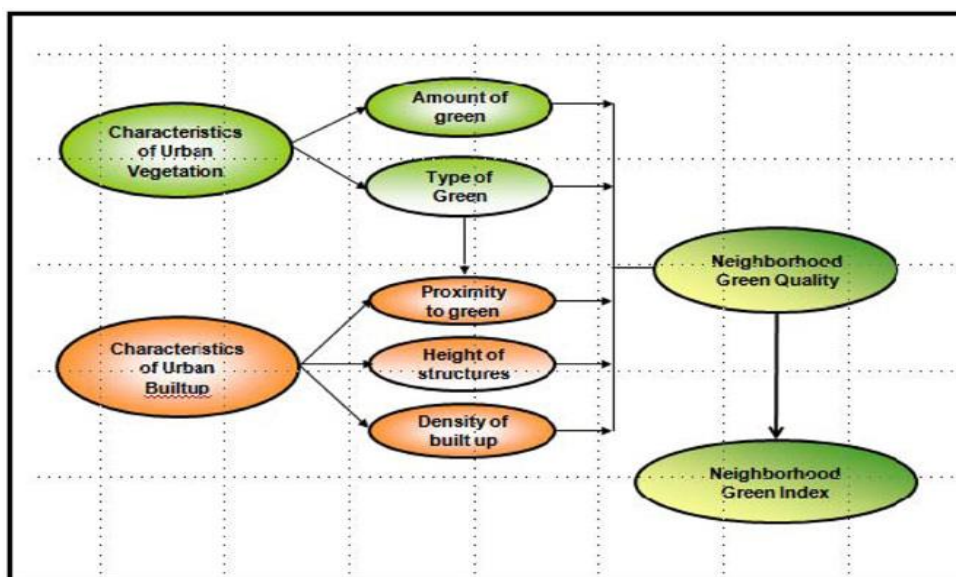


Figure 2.1. Conceptual Model for Urban Neighborhood Green Index
Conceptual Model for Urban Neighborhood Green Index

Source: Gupta et al. (2012)

Tan et al. (2013) claim that UGS refers to a variety of urban green spaces, including parks, rooftop gardens, wooded areas, green outdoor places, etc. It is widely acknowledged that these areas are necessary for the development of livable cities. The evaluation of urban green space accessibility (UGSA) was built on the idea presented by Gregory (1986). Le et al. (2018) assert that accessibility also describes how easy it is to access or receive a website or service. Thus, accessibility can be thought of as a metric for determining the relative chance for interaction or contact with a certain occurrence, such as a park.

2.3. Spatial Planning

Globally, a considerable increase in the proportion of people living in cities was predicted. Promoting equality, inclusion, and a fair distribution of opportunity such as work, housing, transportation, and social services are becoming increasingly important in today's cultures. Additionally, systems were needed to find and put into practice creative solutions to the environmental sustainability problems caused by earlier socioeconomic growth patterns.

A collection of governance instruments known as "spatial planning" is used to create and carry out strategies, plans, programs, and projects as well as manage the what, where, and how of development. The term "planning" has been used to describe a wide range of related activities since its inception, including "land use planning," "physical planning," "urban planning," "town and country planning," and "regional planning."

The main objectives of spatial planning were to reconcile conflicting policy objectives and encourage a more rational organization of activity. While the extent of spatial planning varies significantly amongst nations, the majority of them share some traits. According to Koresawa et al., land use and physical development are managed as distinct governmental functions in almost every country, and spatial planning involves coordinating sectoral policies such as those related to transportation, agriculture, and the environment (Koresawa and Konvitz 2001).

Urban planning embodies the original design and development control focus of the planning profession. The urban area, which encompasses the city-region, the city's dimensions, and the planning of specific sites, buildings, neighborhoods, and districts, is the main area of focus. Managing more than simply their physical locations is essential if housing, education, industry, retail, and agricultural activities are to coexist

peacefully. The volume, shape, distribution, and relationships among various land use activities are instead regulated by terms like "land use planning," "town planning," and "physical planning."

2.4. Perspectives: From Nature to Park to Urban Green Space

Before the industrial revolution, the city and the nearby countryside coexisted harmoniously and shared the same resources, claims Frey (2000). Although the contemporary metropolis was likewise dependent on outside natural resources, the complexity of the transition from nature to parks as well as to UGS flows and networks had substantially risen due to new forms of manufacture and transportation.

The experience of Ethiopia shows that the government's responsibility for maintaining green spaces included creating and preserving urban green spaces, planning and implementing environmentally friendly development projects, planting and maintaining institutional parks, providing green spaces, street trees, and unofficial green spaces, as well as ensuring that the government took a proactive and exemplary role in the preservation of these spaces. According to Abeje (2006), a city or town lacking enough green space might be compared to an organism lacking a respiratory system.

2.5. Approaches Valuation of Community Based Green Space

There are four main ways to valuing community-based green space, each with its own understanding of the various roles that community-based green space might provide. The economic approach, the creation approach, the ethical or moral approach, and the utilitarian approach are all summarized below.

2.5.1. The Economic Approach

When examined through an economic lens, green space based on a neighborhood delivers different forms of values to the commercial and public sectors. The train show that, most of green areas that are based in communities are frequently viewed as 'non-market' environmental tools and environmental instruments are now heavily taken into consideration for public investment, management, and regulatory decision-making because they have been valued in monetary terms since the 1970s. Fausold and Lilieholm (1996) assert that the full tenets of the community-based green space they offer are difficult to commercialize and that these programs do not take environmental,

social, cultural, and economic functioning into account when valuing them. The natural environment concepts of community-based neighborhood parks immediately benefit society. It encourages the natural system of open spaces for groundwater recharging, climate mitigation, flood control and storm water mitigation, and air and water pollution reduction. The monetary value of the assistance outlined by Fausold and Lilieholm (1996) can be determined using the cost harm produced by the accessibility of the natural system.

The economic approach centers on the value of community-based neighborhood parks that can be quantified in monetary terms. It is the most challenging component of the economic approach. There is a disconnect between what is valued and who owns these rooms. This method tends to provide 'poor sustainability' in the sustainability dimension. They would rather grow it than preserve it for future generations. The teaching here encourages intra and intergenerational growth.

2.5.2. Development Approach

The development strategy to value community-based green space is the protection of community-based green space for potential development. The most likely users of this technique associated to an economic approach are developers and public entrepreneurs. The price of growth is the phrase used to explain it by Maruani et al. (2007). There is a medium ground between the strong and weak ideas on sustainability. The preservation of community-based green space would serve as an incentive for future planning decisions.

2.5.3. Ethical/ Moral Approach

This method was the intangible advantage of community-based green space. It stems from the belief that nature can be manipulated, that nature can be skillfully used, and that nature had value independent of human utility. Fausold and Lilieholm (1996) assert that as ecological understanding and ethical reasoning advance, so will the value of open space. An approach also argues the existence of nonhuman living forms like plants, animals, and other elements of the environment. In conclusion, it is important to note that the ethical/moral value approach is centered on natural values. Even more scholars contend that it is unethical to try to quantify it. As previously stated, this concept poses a significant challenge to the economic and developmental value frameworks of community-based green space. While the ethical/moral approach to

urban planning and management is not widely employed from their perspective, many planners embrace many aspects of the method, and it is pertinent to how we approach community-based green space planning. The non-human life approach, which explicitly speaks for a strong sustainability outlook, should be appreciated in the subject of sustainability. Nature's tremendous biodiversity and beauty are essential to human dignity.

2.5.4. Utilitarian Approach

The utilitarian approach takes into account community-based green space service providers and highlights the necessity to maintain a fundamental level of community-based green space as outlined by Maruani and Amit-Cohen (2007) in order to continue providing these incentives and benefits to society. However, there is an issue with the strategy to sustaining places that are easily identified as having human use, which implies that other types of open space values and functions are ignored. By extension, community-based green space preservation is ecosystem preservation, which is protection.

Environmental benefits:

- During City planning it promoting revival and the suitable use of land, buildings and infrastructure;
- Helping the use of previously developed (“brownfield”) land and minimizing development on “greenfield” land;
- Conserving important environmental, historic and cultural assets;
- Addressing potential environmental risks (e.g. flooding, air quality);
- Protecting and enhancing areas for recreation and natural heritage;
- Endorsing access to developments by all modes of transport (e.g. walking, cycling and public transport), not just by car;
- Encouraging energy efficiency in the layout and design of development.

This is also the culturally influenced concept of sustainability in the green area.

2.6. Open Space Planning Models

According to Maruani and Amit-Cohen (2007), two common approaches for planning open spaces are the supply method and the demand approach. The demand approach, which is predominantly implemented by planners and geographers, is a response to societal demands for leisure, facilities, and environmental quality. The size of the

target population, demographic characteristics, attitudes and aspirations, and the distribution and density of residential regions are all aspects in the demand technique. In contrast to the demand strategy, the supply method promotes the preservation of community-based green space to conserve existing habitats and natural resources. Ecologists and conservationists are the primary users of this supply strategy. As stated by Maruani and Amit-Cohen (2007), the conceptual formulations of leisure and conservation functions, respectively, account for the major differences between demand and supply techniques.

2.6.1. Opportunistic Model

An opportunistic model refers to the open space that arises from chance rather than a structured planning method. It also includes the remaining area after planning, where there are assigned parcels of land left over after the various functions; such residual parcels are small, uneven, and sometimes inaccessible to users, making them unsuitable for open space use. One of the clearest examples of this method, according to Maruani and Amit-Cohen (2007), is one of the oldest known parks that the King of London donated to society.

This opportunistic approach can emerge both from demand-oriented planning of open spaces and from supply-oriented planning of open spaces, but it is not, on its own, a systematic model for ensuring the efficient use of open spaces or for use as a planning concept. Sustainability in open space creation is supposed to happen very spontaneously in this model. It is by chance that the social, environmental and economic dimensions of open spaces are being dealt with.

2.6.2. Park System Model

A park system is a collection of physically and functionally connected open spaces in a certain geographic area. It ranges in size from modest neighborhood vegetable gardens to big metropolitan parks that cater to vast populations. This planning model is important and frequently employed during the open space planning phase since it has to do with the spatial allocation of neighborhood units in open space plans. Beginning at the end of the 19th century, this tactic was used. According to Maruani and Amit-Cohen (2007), the park system model, which emphasizes the need for community in particular, is comparable to the traditional model of spaces in that it does not guarantee the environmental advantages of open spaces or preserve the natural ecology.

2.6.3. Garden city a comprehensive planning model

The well-known model of the garden city reflects a holistic approach to urban planning,

which considers open spaces as an integral part of development, connected to the configuration of built zones by their spatial array. Howard (1898) outlined his plan in a book titled "Tomorrow: a Peaceful Road to True Change," highlighting the importance of socioeconomic and social development.

2.7. Empirical Studies

The results of different research studies agreed on the effect of urbanization on urban ecosystems witnessed by pollution of air, noise and water. In order to enhance the environmental quality of cities, urban areas have to be incorporated into urban planning policies and other urban systems in order to find a solution. The goal of this study was to observe how urbanization and green areas are related by previous studies.

2.7.1. The Current State of Addis Ababa's Open Spaces

With its natural and artificial fauna, Addis Ababa is still regarded by many as the greenest city, despite the introduction of dense concrete buildings in several areas of the city. However, there aren't many planned public green spaces, both in terms of availability and distribution. The WHO recommends 9 m² per person as the standard, and 7 m² per person for Africa. Less than 1 m² of green space is currently available per person in Addis Ababa, which is one of the lowest in the world by international standards. With a total area of 113.7 ha, there are currently more than 18 active city parks for recreation. cited in 2017 by Addis Ababa City Planning Project Office.

- **Ambassador Park field survey photo as a sample to show quality**

Let's see field survey photo of Ambassador Park, which found in Kirkos Sub-City, as an example of good Parks that fulfill the condition declared by guidebook, which is under control of Addis Ababa Admin. Figure 2-2 represents a real-life photograph of Ambassador Park in Addis Ababa.

Ambassador Park

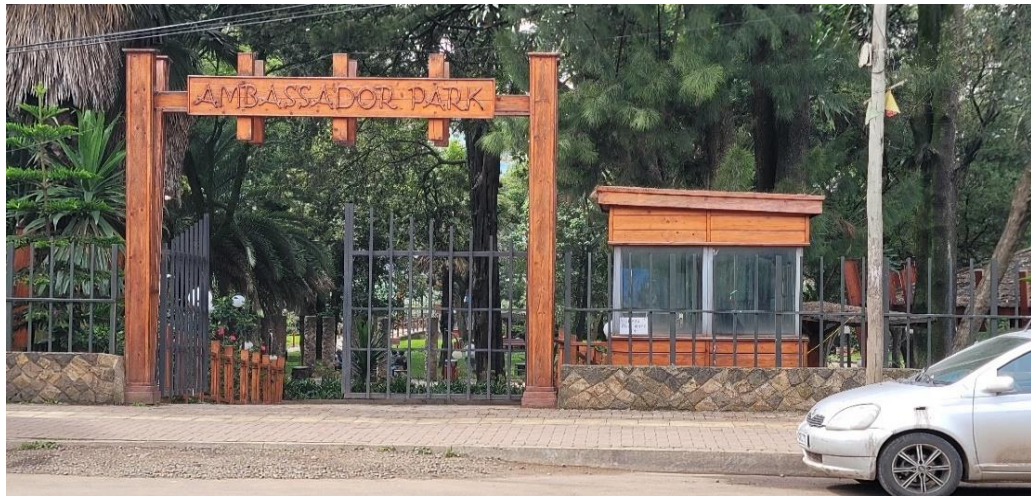


Figure 2.2. Ambassador Park (Addis Ababa City)

(Source: Site Observation)

Components which exists in Ambassador Park are stated as below: -

1. Benches
2. Lights
3. Trash Cans
4. Pavement
5. Fence
6. Children Playing Yard with full equipped
7. Toilet
8. Hand wash water tap.

According to the three classifications of "good," "poor," and "bad/worthless NPs," at least two of the five essential and required park features—lights, benches, trashcans, fences, and pavements—must be present in a park for it to be placed in the "good" category. Here, field survey photos that contained two or more components were selected as good examples.

2.7.2. Built up Area, Green area and Street Network Proportions

The standard for the proportion of the built up area, green area and street networks adopted by the Structure Plan for mixed residential land use are indicated in the following Table 2.1.

Table 2.1. Share of Built Up Area, Green Area and Street Network in Mixed Land Use of Research Area

Uses	Proportion	Remarks
Built up area	40%	All mix of uses are included here.
Green area, open space, plaza, etc.	30%	
Street network	30%	

Source: AACSP, 2017- 2027

2.7.3. Networked Multifunctional Green Spaces

Recreational parks are establishing with a view of providing recreational and other social services, 2730 ha recreational parks are proposed in Addis Ababa city, sub-city and woreda levels. Several neighborhood level parks to be located within 300m radius are also proposed and labeled below on Table 2.2.

Table 2.2. Public Park Hierarchy and Catchment Area Standard of Addis Ababa City Structure Plan (2017-2027)

Park	Size (ha)	Catchment (radius)	Catchment Area (ha)
City park	>10	10 km	2437
Sub-city park	1-10	5 km	237
Woreda	0.3-1	1.5 km	56
Neighborhoods park	<0.3	300 m	~90

Source: AACSP, 2017- 2027

Note: Public parks with an area of less than 0.3 ha and that do not appear/labeled/ on the Structure Plan map and it represented as woreda or community based neighborhood parks.

2.7.4. Open Space Provision Standard in Addis Ababa

The Addis Ababa Master Plan Evaluation Office lays out the requirements and criteria of the elements of the Addis Ababa Structure Plan. One plot, one tree, for an area of up to 150 m sq. and for every additional 100 m sq. per 1 tree. 12-25 percent of a plot area should be unsealed (for greenery and natural open space in order for rainwater to percolate to the land, minimize the discharge of water and reduce runoff). In accordance with the standards and standards established by the Social Facilities portion, green areas of different standards (Neighborhood-City level) should be established and developed. The standard is general with respect to open space. It does not explain explicitly the intent of the open spaces and the activities that have been carried out on them and under what conditions.

Every park had to fulfil coverage standard and amenity in order to give well organized services, look for detail on Table 2.3. under below.

Table 2.3. Main Amenities and Percent of Green Area Ratio for Woreda Park as per AACSP (2017- 2027) Standard

Functions	Descriptions
Landscape vegetation and planting	80 % of the total surface area of a park shall be cover in green. Significant proportion of the green will be drought resistant and shade plants.
Sport field	Open area (informal sport field) Sport filed (football, tennis courts, volleyball and others)
Access	Permeable walkways, access for the disable
Park furniture	• Dust bin • Water features • Monuments • Stands for public art • Seats (benches), picnic tables

Signs	• Information signage • Directional signage
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Source: AACSP, 2017- 2027

2.8. Conceptual framework of The Study

The three essential characteristics of UGS offering are quantity, quality, and accessibility. The term "quantity of UGS" refers to the amount or availability of UGS, which is frequently expressed in terms of the UGS's covering area, number, and size. According to Koohsari et al. (2015), **accessibility** to spatial proximity is often determined by the expense and distance that people must pay to access the green space. The quality of UGS improves in relation to features of UGS that may promote or deter usage, such as the attractiveness, safety, and aesthetics of the facilities as described by Fausold and Lilieholm in 1996. The research primarily focuses on the provision of Neighborhood parks and the concept established in accordance with Figure 2-3. which is described as the following conceptual framework below, which is adapted from best practices in community and stakeholder engagement in food, energy, and water systems science.

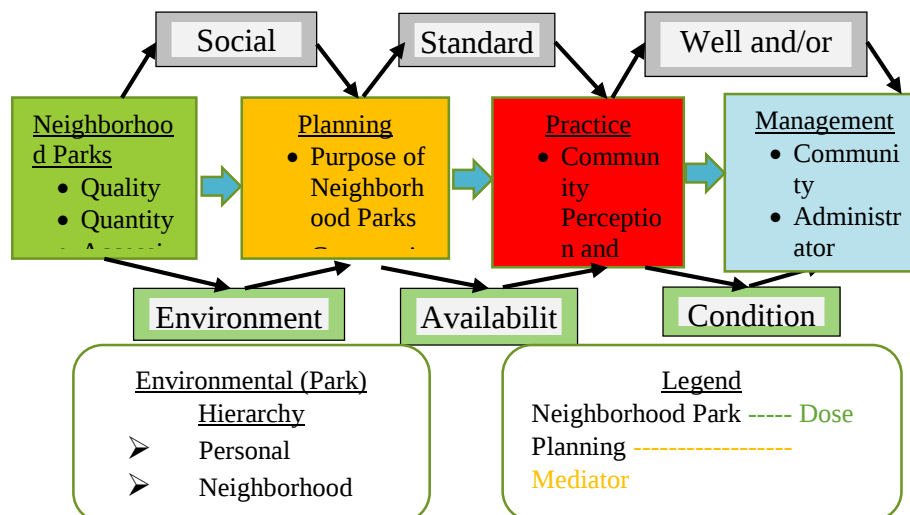


Figure 2.3. Conceptual Framework

2.9. The Worth of Open Space

Sharmin (2013), had explained in his discussion the worth of open space and the concern of planners, While the open space benefits described above are clearly of importance to people, their value may be difficult to quantify. As a result, urban designers and planners may overlook such benefits in their planning. The benefits of

open space and other environmental amenities, however, may be capitalized in the sales prices of homes in a community. If so, a comprehensive examination of property price trends can be used to determine the monetary value of these advantages. In fact, multiple studies have examined the impact of open space on residential property values over the past ten years, and they have all indicated that closer access to open space raises the price of homes for sale.

Scale affects how much UGS benefits a business. Due to the fact that people choose to frequent adjacent green spaces rather than those farther away, local-scale analysis should be employed. As a result, the health benefits of UGS should diminish with increasing distance from houses, as indicated by Zhang et al. in 2017.

2.10. Integral Component of Green Space

According to Hernandez et al. (2018), in order for green spaces to be beneficial to the populace, they must include elements like vegetation, water, accessibility, shelters, restrooms, benches, play areas, and sports fields, as well as activities and events, environmental quality conditions, and materials like lights, protection, litter bins, amiable workers, and artistic characteristics. Urban green spaces may also include sculptures and other architectural features.

The increase of open green space in the shared housing area is described in MUDH Urban Planning, Sanitation and Beautification Bureau Manual No. 14/2016 as having the following components.

Lighting- is an important element in green open spaces. It enhances safety, nighttime aesthetics, accessibility and security. Place appropriate type of lighting at suitable locations of amenity green spaces by giving due consideration to the costs.

Seat- Seating facilities, such as benches, should be integrate within amenity green spaces. They should be place at around corners of amenity green spaces in order to help the community members to socialize. They should be place close to the shaded areas as well as open sites in order to entertain needs of visitors at different times of the day or season.

Litterbin- an adequate number of litterbins should be keep in all places in the amenity green spaces in order to encourage the visitors to keep the area clean and tidy.

Fence- different kinds of fences constructed; the use of fences would make the green area more attractive and improve the aesthetic value of the site. The heights of such fence should be such that it improves sense of security without hindering view from around.

Pavements- in shared housing green area should be made of permeable materials that allow percolation of rainwater. The design of pavements should be such that rainwater from paved areas flows into the unsealed areas. The materials needed for preparing permeable pavements in walkways could be use of red ash and firm it with machines to make it comfortable to walk or drive. Alternatively, cobblestones will be use if financial resources allow.

The community-based green space principles of the natural environment directly support society. It promotes the natural system of open spaces for the recharge of groundwater, climate moderation, flood control and mitigation of storm water, and the reduction of air and water pollution. Fausold et al. (1996) claim that it is possible to determine the value of the monetary structure of these assistance by calculating the cost harm caused by the availability of the natural system.

Nevertheless, with the advent of dense concrete buildings in some parts of the city, Addis Ababa is still regarded by many as the greenest city with its natural and artificial fauna. However, in terms of its availability and distribution, the existence of planned public green areas is minimal. The norm for the World Health Organization (WHO) is 9 m² per person, and for Africa, 7 m² per person. According to AACPPPO (2017), the amount of green space in Addis Ababa is now available per capita at less than 1 m² per person, making it one of the lowest by worldwide standards.

The Addis Ababa 10th Master Plan Evaluation Office lays out the requirements and standards of the elements of the Addis Ababa Structure Plan. One plot, one tree, for an area of up to 150 m sq. and every additional 100 m sq., 1 tree. 12-25 percent of a plot area should be unsealed (for greenery and natural open space for rainwater to percolate to the land, minimize the discharge of water and reduce runoff). Green areas of various standards (neighborhood-city level) should be defined and built-in compliance with the standards and standards established by the Social Facilities section. In terms of open space, the norm is wide. It does not clarify the purpose of the

open spaces, as well as the events that have taken place there and under what conditions.

The population of the Kolfe Keraniyo sub-city, woreda 6, is used to test neighborhood park planning and management. The study will focus on the design and management of a community-based open green space that will benefit the community in terms of economic, social, and environmental benefits.

2.11. Operational Definition of Key Terms

A COMMUNITY OF PRACTICE (CoP) - is a collection of people who share a common concern, a set of difficulties, or a concern in a topic and who congregate to fulfill both individual and group goals.

COMMUNITY GREEN SPACE - is an outdoor space within a neighborhood accessible to all community members for sport and play as well as civic and political activities, festival places, walking, and enjoying the outdoors, it includes streets, squares, parks, and less defined common spaces?

ECOSYSTEM SERVICES - The components of nature that are directly and indirectly enjoyed consumed or used in order to maintain or enhance human well-being.

GREEN SPACE - Any previously vegetated area, whether urban or rural, that includes both public and private spaces like parks, gardens, playing fields, kid-friendly playgrounds, wooded areas, green corridors, abandoned railroad tracks, rivers, and canals, as well as derelict, vacant, and contaminated land that has the potential to be improved.

NATURE CONNECTION - refers to an individual's individual sense of their bond with the natural world. There is evolving indication that connection to nature is related with certain comfort, educational outcomes, and pro-environmental behaviors.

NEIGHBORHOOD PARK- is a place where diverse needs are met without having to travel a long distance, providing basic recreational amenities for all users and it is usually located within the center of a development.

OPEN SPACE- is often labelled as any piece of land that is developed and/or undeveloped space and generally, it has no building structure on it.

POCKET PARK - Pocket parks are small green areas of public space, mostly seen in urban settings.

SPECIAL AREA PLANS - are generally intended to allow communities to define the identity, function, organization, and character of their specific neighborhoods or significant corridors by the vision of the long-range Comprehensive Plan

URBAN SPACE- is the region surrounding a city. Urban areas are the composition of human and very developed structures, meaning human structures are dense such as houses, commercial buildings, roads, bridges, and railways.

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CHAPTER THREE

3. Research Methodology

The combined quantitative and qualitative research methodology is the preferred research method for the community-based neighborhood park situation analysis in Kolfe Keraniyo Sub-City, woreda 6, and it necessitates the first arrangement of the row data in order to facilitate result analysis and identify the findings based on theoretical frameworks and in light of the study's research questions. Through the woreda interpretation of primary data gathered through questionnaire and/or interview based written question, and secondary data, which were written documents, maps and other additional documented information. The analysis typically looks closely at the overall planning situation, community practice, and management aspect of the current parks. The results are presented in a variety of mechanisms.

The questionnaires with closed-ended and open-ended questions were completed by a total of 185 respondents, including 97 respondents from households, 68 members of the green park committee, and 15 staff members of the Kolfe Keraniyo sub-city plan and development commission branch office. The remaining 5 responders were from the Kolfe Keraniyo sub-city government employees' office of Urban Beatification and Green Development in woreda 6.

3.1. Research Design

The research design depends on conceptual model for urban neighborhood green index, figure 2.4 explained above for the study. Mainly the research design follows a descriptive research design for the paper. This type of research design is used to define the characteristics of a population or phenomenon studied. And also the study delivers the answer to “what”, which used to calculate frequencies and statistic of data.

Using both primary and secondary data sources, including questionnaires', direct observation, referring manuals, and standards for accurate result interpretation simultaneously, rich data and comprehensive information will be acquired for the research. The research process begins with the approach setting and concludes with a conclusion and recommendation. A flow chart of the full process is shown in Figure 3-4.

- Flow Chart

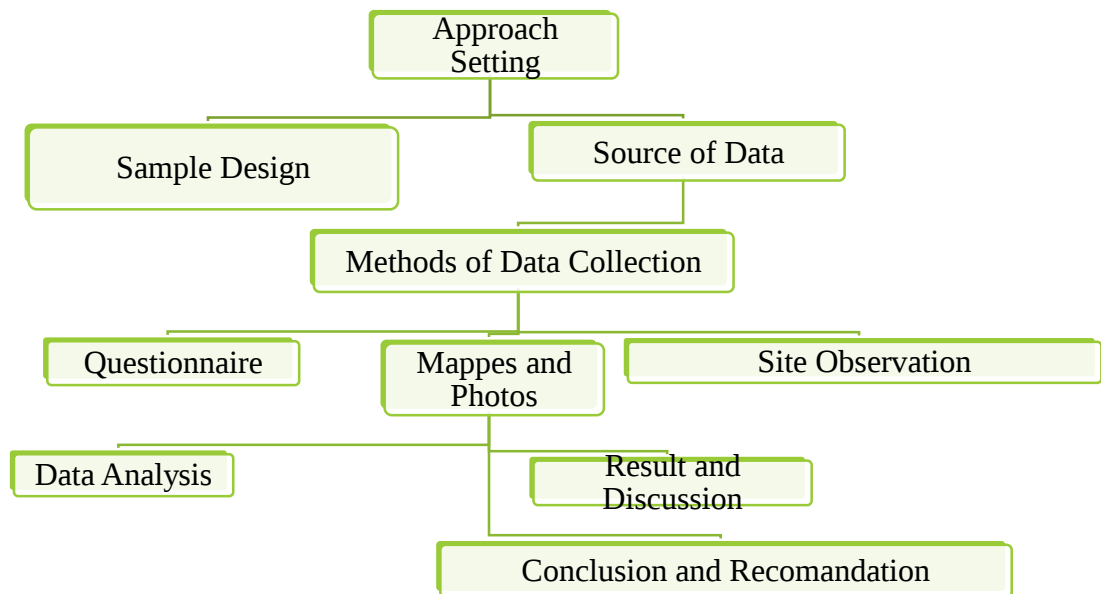


Figure 3.4. Research Flow Chart

3.2. Research Approach

The cross-sectional technique is used in this study to infer plan situation, population practice, and management exercises on community-based neighborhood parks. This usually refers to survey research, in which a sample of a population is researched (questioned and/or observed) to establish its features, and then the population as a whole is assumed to have the same qualities. It employs a mixed methodologies research strategy to better comprehend a research problem by combining quantitative and qualitative research approaches in a single study.

Quantitative includes methodical analysis of occurrences by means of collecting measureable data and then carrying out mathematical, statistical, or computing techniques. In other hand, qualitative research is scientific research used to collect non-numerical data through different qualitative research methods like observational methods, and question by face-to-face answering.

A mixed approach will include questioner and field observations in community-based neighborhood park. As a result, then the research study will yield more accurate results. Since the methodologies include descriptive research. Observation studies,

which involves observing and documenting behavior, characteristic, or attribute as it occurs in their natural environment.

3.3. Research Method

Survey research is the most fundamental tool used in all quantitative research approaches. Paper questionnaires preferred to ask a series of questions from a random sample of participants in a cross-sectional survey, also called an observational survey, on a target population over time. For qualitative research methods, I had also liked to use thorough paper questionnaire interviews with key informants. Secondary data sources, such as published and unpublished studies, would be used to gather further information.

The collecting of data, the establishment of a relationship between the predictor such as socio-demographic variables and ecological services and the outcome variable planning provision and knowledge, community practice using statistical techniques, and finally evaluating the accuracy of the conclusions produced are the primary components of research methodologies. The study has been utilizing the descriptive research method because it helps to observe, assess people's practice, and explain a wide range of issues, including community-based neighborhood park management and status for plan evaluation to solve the challenges.

The study method to determine the degree of community practice in Woreda 6 neighborhood park utilization, park conservation, and management (both well and poorly-managed) will be a comparative community-based cross-sectional study that is primarily descriptive in nature and cross-sectional in time. This research methodology facilitates the gathering of quantitative and qualitative data from primary and secondary sources for local parks managed and practiced by the community.

3.4. Population

The target population of this research includes households and park committee in woreda 6 from total dwelling, Stakeholders (green development and Sub-city plan and development officials and experts).

3.4.1. Sampling Frame

The Ketena population as a whole will serve as the source of the study's sampling frames, which include stakeholders (developing officials and experts involved in green

development and sub-city plans), as well as the primary selection list of homes close to neighborhood parks within 150-meter radius and the park committee.

3.4.2. Sampling Unit

The sampling unit or unit of study is the unit to be sampled, such as head of the household, woreda experts, community-based green space workers, community leaders, and woreda green area committee members who are in charge of community-based green space management and planning. Generally, it includes person, household, organization, and institution which possess a public park service.

3.5. Sample Size

It is challenging to incorporate all dwellers of the woreda in the research, the actual number of sample size were defined the households within the radius of 300-meters of community based neighborhood parks proximity, suitability and Addis Ababa city 2017 structure plan standard. Kothari (2004), developed the following equation to produce a representative sample for proportions of big sample for populations that are enormous, and particularly for populations where the total population is specifically unknown or infinite.

$$\text{Sample size } (n) = \frac{z^2 p(1-p)}{e^2}$$

Where: - “n” is the required sample size, “p” is degree of variability, “z” is the score value of z-table, “e” is the level of precision and “q” is 1-p. The purpose of sampling the community is to obtain representative respondents to investigate household perception concerning to community based neighborhood park. It is obvious all respondents have similar perception regarding to the issue. Thus, small number of residence can represent for large population. The researcher convinced at 93% confidence level and 50% degree of variability. Because it is difficult to manage large number of respondents from residence, greater than 93% confidence level may result large sample size.

The entire sample size will include households, the Park Council Committee, and key stakeholders.

$$\text{Sample size } (n) = \frac{z^2 p(1-p)}{e^2} = \frac{1.812^2 * 0.5(1-0.5)}{0.07^2} = 168$$

$$(n) = 168$$

(n) = 168+16.8 (Considering 10% dropout of study participant)

Total sample size (n) = 184.7 = 185

Respondent detail sample size

The formula developed by Kothari (2004), which is presented in Table 3.4, was used in detail calculations to determine the total number of respondents.

Table 3.4. Summary of Research Respondents

No.	Type of Respondents	Data Collection Tool		Total Respondents
		Number of Respondents		
		Questionnaires	Question based Interview	
1	Households, Parks Council Committee Sub City Plan and	—	165	165
2	Development Commission Official and experts Woreda six Urban	15	—	15
3	Beautification and Green development Official and experts	5	—	5
Total Number		20	165	185

3.6. Sampling Technique

Generally, as we know sampling is the process of selecting a group of individuals from a population to study them and characterize the population as a whole. Here for the study non-probability samples are preferred because accuracy in the results is not important, and the technique were inexpensive, easy to run and no frame is required. A non-probability sample is carried out carefully, then the bias in the results can be reduced. Cluster random sampling is one of a fundamental form of random sampling, was used in the research study. This method was accurate since it was successful in selecting a sample from a large population group. The research area, woreda six, was

divided into eight "ketena" for governing and other management purposes, and in each ketena, there was a large population from these many houses. Based on the population density of each Ketena. A total of 165 respondent dwellers participated, and a random sample of 97 household samples and 68 council committees from 33 parks, each with two committee chairmen, were selected. The results are shown in Table 3.5 below.

Table 3.5. Number of Simple Random Sample of Respondent Selected in each 'Ketena'

Ketena	Number of Community Based Neighborhood Parks in each Ketena	No. of House Hold	Sample size of Respondent in each Ketena	
			No. of H.H respondent	No. of Committee respondent
1	1	1127	15	2
2	0	1063	14	0
3	2	1134	15	4
4	9	1126	15	18
5	4	471	7	8
6	4	911	12	8
7	6	630	9	12
8	8	749	10	16
Sum	34	7211	97	68

3.7. Description of the Study Area

Ethiopia's capital, Addis Ababa, is a large city. The city is 540 square kilometers in size, with a latitude of 9 ° 1'48 'N and longitude of 38 ° 44' 24 'E location, its average altitude is 2,400 meter above sea level, with the highest elevations at Entoto Hill to the north reaching 3,200 meters. This makes Addis Ababa one of the high-altitude capital cities of the world. A time zone is listed in East African time (UTC+3), according to Addis Ababa city land administration, (2011/12).

3.7.1. Climate

Depending on elevation and dominant wind patterns, Addis Ababa city has a diverse combination of highland climate zones with average temperature changes of up to 15.7 °C and a mean annual rainfall of 100.83 mm. Because of the city's nearness to the equator and the city's high elevation, temperatures are moderated throughout the entire year. The temperature and rainfall chart were labeled in Figure 3-5 and 3-6.

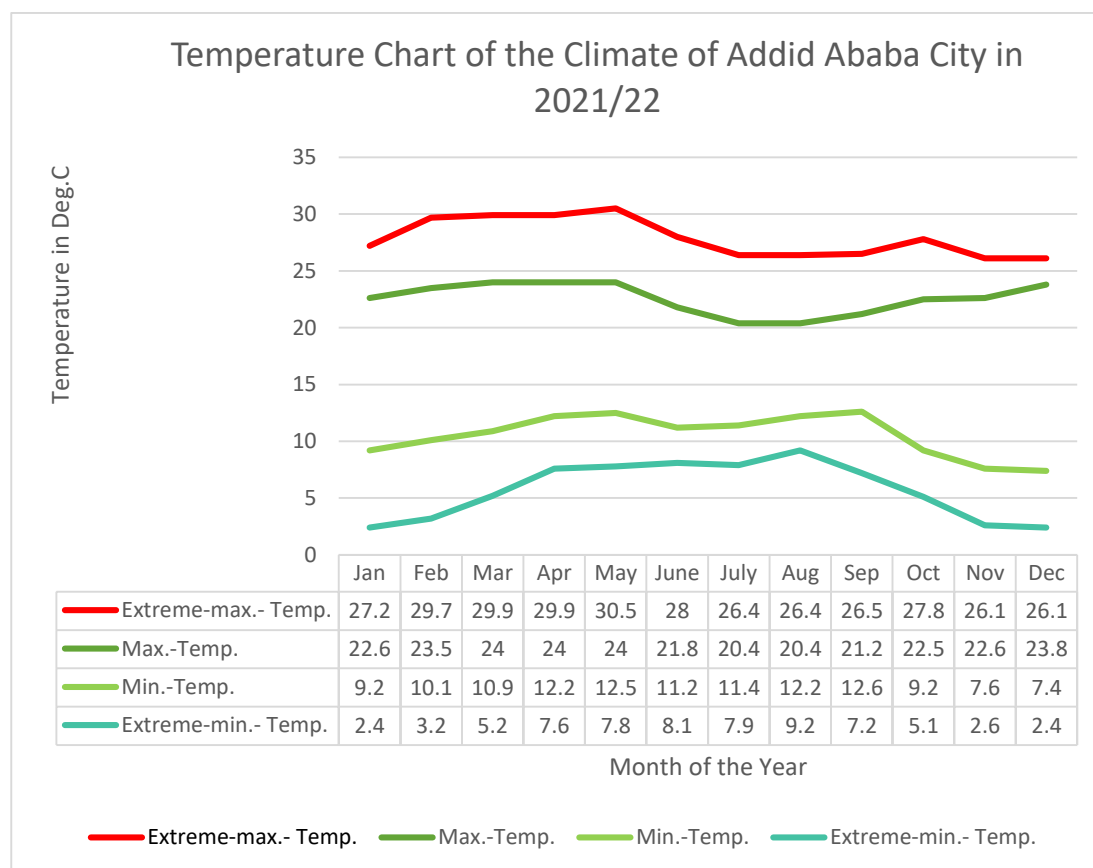


Figure 3.5. Addis Ababa City Temperature Chart

(Source: National Meteorological Agency, 2021/22)

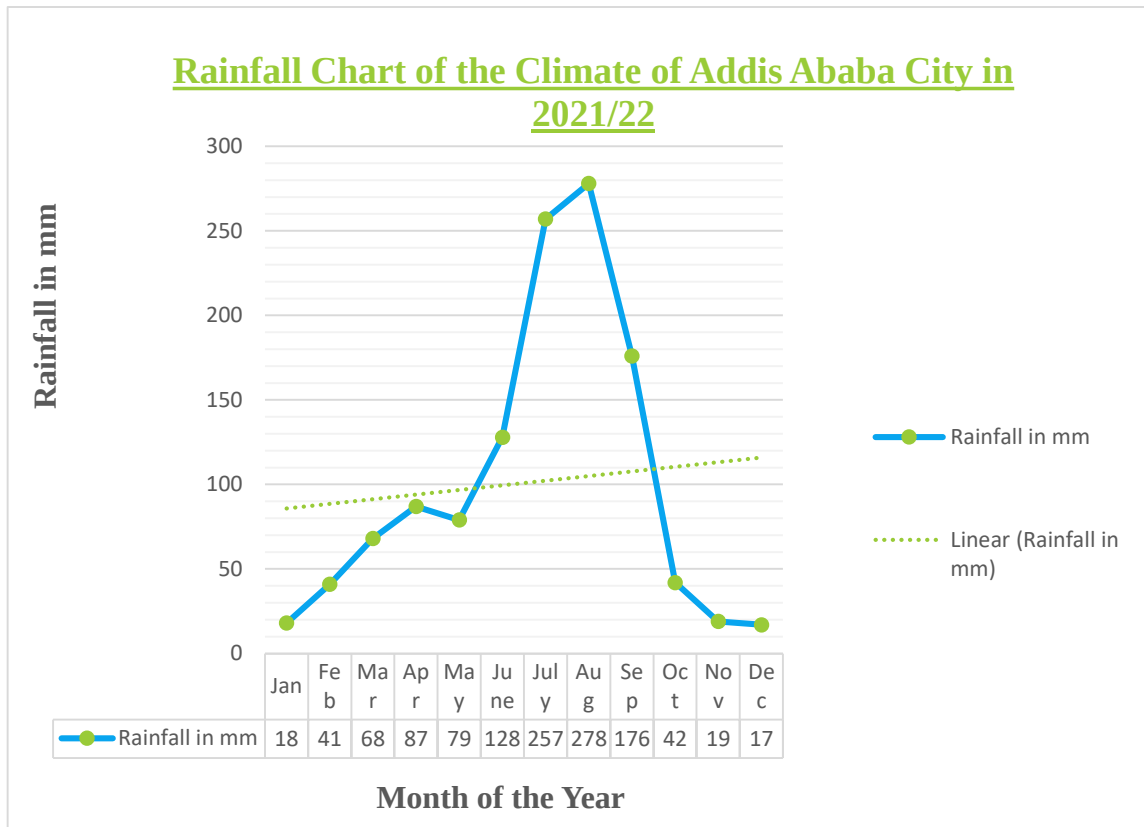


Figure3.6. Addis Ababa City Rainfall Chart
 (Source: National Meteorological Agency, 2021/22)

3.7.2. Map of the study area

The research area is located in the western suburbs of the Addis Ababa City, at 9.0'49.75'N latitude and 38.42'21.49' E longitude, bordering with sub-city of Addis Ketema, Lideta, and Nifas Silk-Lafto sub-city. The primary research area was Woreda 6, and the study area covers 304 hectar and it surrounded to the North woreda 8, to the East woreda 9, to the South woreda 5, and to the West woreda 7. Kolfe Keraniyo sub-city were separated into 11 Woreda with coverage area of 4953.7 Hectare. Figure 3.7 show the location map of the research area.

Location Map of the Research Area

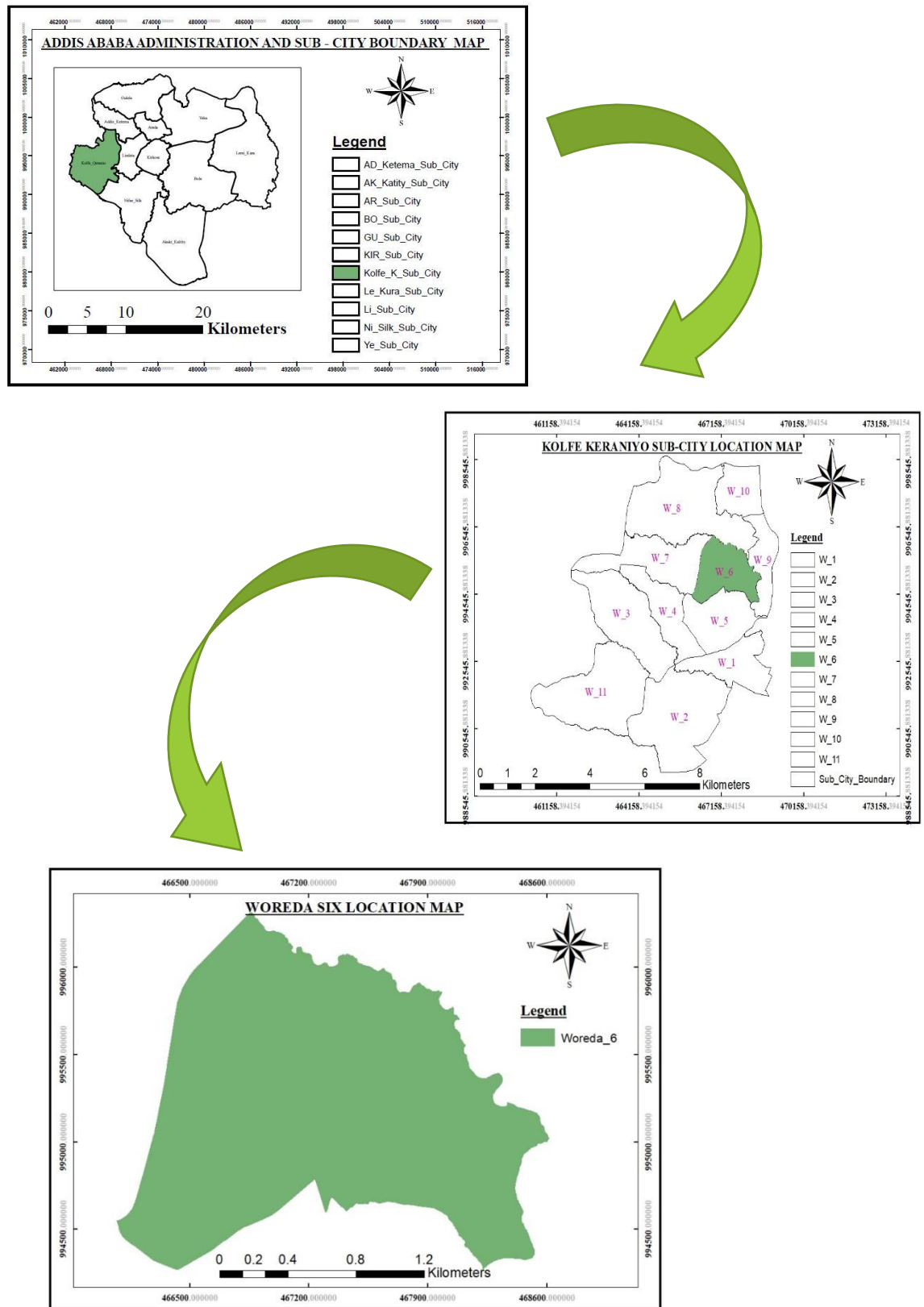


Figure3.7. Location Map of the Research Area
(Source: According to Existing AACPD Map)

3.8. Data Type and Source

Both mixtures of qualitative and quantitative data were used in the study due to the complex and dynamic nature of social and recreational services.

3.8.1. Primary Data Sources

The study examined the state of neighborhood parks in Wearda 6 with regard to neighborhood park design, practice, and management evaluation from a community perspective. Primary data was gathered from 165 House hold and dwellers NPs committee in woreda six using open and closed-end questionnaires, in simple random selection approaches. Along with these 15 qualified specialists from the Kolfe Keraniyo Sub-City Plan and Development Commission branch office and 5 woreda's officers were collected primary data. In order to learn more about how community-based green space management is currently carried out, information will also be gathered from sub-city and Woreda leaders, as well as the committees that oversee the management of green spaces. This will be done through semi-structured interviews, unofficial gatherings, and personal observation.

3.8.2. Secondary Data Sources

Different published papers, as well as unpublished documents, research studies, reports, different books in the field of community-based green area management and planning, journals, magazines, and the internet, are the key secondary data sources.

3.9. Data Analysis

For data analysis, the study employed SPSS, Microsoft Word, Excel, Arc GIS, Auto CAD, and some related tools. Arc GIS and Auto CAD tools has been use to analyze the spatial land use, location information and to investigate the realities. Latter all of the basic data would convert into bar graphs, charts, tables, and other descriptions.

3.10. Data Presentation

All the questionnaires, field survey results, graphical information, and documented results Would be systematically presented under the results and discussion section of the study. The data presentation will have made in line with the basic objectives of the study. The interviewed results, field survey data, pictures, operational maps, and related documents have been present in logical sequences in the form of tables, figures, and analysis as predefined objectives of the research.

CHAPTER FOUR

4. Results and Discussion

4.1. Planning

Planning technique, especially for the community-based neighborhood park in Kolfe Keraniyo Sub-city woreda 6, is crucial to consider community interest, gap assessment, and analyze current structure plan situation. By providing a place for children and seniors to play, socialize, celebrate holidays, and engage in other activities, neighborhood parks will accomplish their goals. Careful space planning is necessary in order to lead land use properly. It follows that the development approach, whose main model is the space standard model, must be the major strategy for providing local parks and/or green space in compliance with community desires, land budgeting. Taking into account the development strategy and the space standard model that were applied to create the open space in the neighborhood. The Addis Ababa city structure plan hardly includes neighborhood parks on the land use map. This can be the main cause for land use changes.

The goal of planning is to allocate land appropriately, budget for its usage, register the land, and then reserve it for development. The parks and green spaces that are already there were not properly reserved for the benefit of the local population and the preservation of the environment.

- ✦ In developed country urban green areas provide children with protected playing areas that contribute to the physical, mental and social growth of children and play a vital role in the basic education of school children with regard to the environment and nature.
- ✦ In Addis Ababa, the federal and municipal governments provide almost all of the inputs, such as, guidelines for implementing the city's green space plan and managing the city's existing green spaces are provided through policies and planning documents created at both the city and federal levels. In disparity, the policies and rules were not implemented and the distributions of recreational and open space (Urban Green Areas) did not meet the 30%, 30%, and 40% targets that are allocated respectively, to the environment, the road network, and construction land proportion standard.

- ✦ According to a disseminated question about the existence and sufficiency of neighborhood parks, the most of respondents think that there are parks, but when compared to the woreda entire population, they are not enough; it is probably best to state that there are none at all.
- ✦ The Addis Ababa structure plan was generic in nature, so the actual existence of some neighborhood parks was not taken into account when determining 10th structure plan land use. Instead, it was vital to create a municipal development plan to protect neighborhood parks that served as important community focal points.
- ✦ The distribution and availability of the neighborhood park that is currently part of the planned community are constrained. The research area falls below the World Health Organization (WHO) standard of less than 1 m² per person, which is among the lowest by international standards, whereas the WHO standard for Africa is 7 m² per person.
- ✦ Although the plan is intended for the citizens, this research analysis shows that there were neighborhood parks on 174.7 ha of community land, but nearly 129 ha were either inaccessible or lacked a community park.
- ✦ The professional response from the Kolfe Keraniyo sub-city plan and development commission office claims that during plan preparation, not given attention to user/dwellers satisfaction, but safety was prioritized during the spatial plan preparation process, and there was less emphasis placed on community participation or involvement.
- ✦ The outcomes show that the flaw in the structure design contributed to a problem with partial execution, which resulted in a partial or total failure of neighborhood park development.
- ✦ Numerous of the research participants replied that the neighborhood park was in poor shape and that there were many requirements that one park had to meet when asked about its status and condition related to its amenities problem, safety, and green area plantation. Here under, the result stated below.

4.1.1. Analysis on Planning and Related Collected Data

➤ Human Resource of Kolfe Keraniyo Sub-City Planning Staff

One of the commission's sub-branches, the Kolfe Keraniyo sub-city plan and development commission branch office, required a total of 32 professional staff to carry out its tasks in accordance with the Addis Ababa city structure plan. However,

a true investigation of the staff's current employment number of 15 professional employers and indicating that there was a professional shortage.

Analyzing their educational backgrounds further revealed that among males, four had a second degree or higher and two had a first degree, while among females, four had a second degree or higher and five had a first degree in urban planning and related field. Here under demonstrating the existence of experts on Table 4.6 below.

Table 4.6. Kolfe Keraniyo Sub-City Plan Commission Employment Gender Vs Level Education Status

Gender * Level of Education Cross tabulation				
		Level of Education		
		Second Degree and above	First Degree	Total
Gender	Male	4	2	6
	Female	4	5	9
Total		8	7	15

Professionals are necessary for professional work to succeed; in developed nations, professional labor is performed by full-time employees for each position; in the Kolfe Keraniyo sub-city, professionals have an excessive amount of luck.

4.1.2. Spatial Recreation and Open Space Location Information

Figure 4.8 represents the spatial land use promoted by the AACSP, from a total area of 304.56 hectares in woreda six boundary, 34.07 hectares are covered with environmental open space and green areas. This maps shows that the distributions of recreational and open space (Urban Green Areas) fouls less than the standard, which means that they did not meet the 30%, 30%, and 40% targets which allocate respectively environmental, road network and building of the Addis Ababa City Structure Plan.

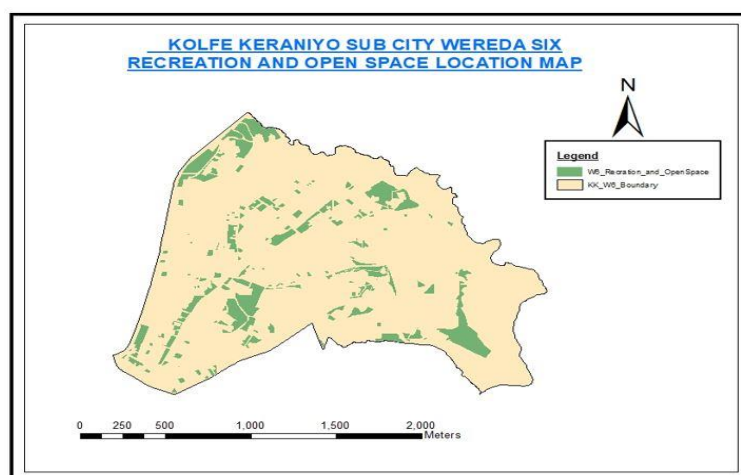


Figure4.8. Recreation and Open Space Location Map

(Source: AACSP, 2017- 2027).

Additionally, the land uses included in the structure plan of Addis Ababa City were general ones; there are 14 main land uses, but the structure plan hardly includes neighborhood parks on the land use map, according to the secondary data source and none of them are assigned to or thoroughly described in accordance with the current uses of the land for each individual piece of land, instead being categorized under general land use.

So, in order to increase the capability of a defined area to improve its economic future and the quality of life for residents, it requires specific land use assigning procedures to govern and manage purposeful complete land utilization, which is known as a local development plan (LDP).

Local development plans (LDPs) will be created under the direction of the branch office of the Addis Ababa Sub-City Plan Commission or the Addis Ababa City Plan Commission, without violating the tenth structure plan of the city. Nearly all of the former local development plans in this area were frozen out following the declaration of the tenth structure plan. The Kolfe Keraniyo sub-city plan commission branch office in progress to design local development plan for selected area in the future, additionally, the aim to register and reserve the existing green area and parks land use for the benefit of the inhabitants as well as environmental preservation. Kolfe Keraniyo sub-city plan and development commission branch office now days registered existing green environment areas in worda six, look to the data in Table 4.7 below. The area reported by AACPD and the sub-city plan and development

Commission branch office differ significantly, showing that land use has altered after the adoption of the 10th structural plan, which implied the presence of environmental deterioration.

Table 4.7. Registered Green Area by Kolfe Keraniyo Sub-City Plan and Development Commission Branch Office

Green Area known and Registered by Kolfe Keraniyo Sub-City Plan and Development Commission Branch Office Which is existed in Woreda Six								
No	Green Space Managed/ Directed by	Total Area (Sq. M)	X,Y Coordinate		Title Deed		Development Condition	
			X	Y	Yes, It has	No, It has not	Developed	Undeveloped
1	Associations	802	466389	994852	✓		✓	
2	Associations	1287	466916	995415	✓		✓	
3	Urban Beautification and Green Development Adm. Office	157314.83	467084	996047	✓		✓	
4	Urban Beautification and Green Development Adm. Office	1513	466503	995501	✓		✓	
5	Associations	1049.5	466546	995585	✓		✓	
6	Associations	1092	466625	995349	✓		✓	
7	Associations	1032	466700	995289	✓		✓	
8	Associations	1108	466510	995374	✓		✓	
9	Associations	579	467443	995686	✓		✓	
10	Associations	1107	466423	995014	✓		✓	
11	Associations	1519	466985	995473	✓		✓	
12	Associations	627	466490	995489	✓		✓	
13	Associations	1130	466482	995251	✓		✓	
14	Associations	1419.92	466464	995164	✓		✓	
15	Associations	802.65	466387	994854	✓		✓	
16	Associations	1092.92	466625	995349	✓		✓	
17	Associations	1424.7	466584	998160	✓		✓	

18	Associations	543.41	466490	995489	✓		✓	
19	Associations	1510.03	466503	995010	✓		✓	
Area managed under Urban Beautification and Green Development Adm. Office		158827.83						
Area managed under Association		18126.13						
Over all Total area (Sq.km)		176953.96						

Source: Kolfe Keraniyo Sub-City Plan and Development Commission Branch Office documentation.

In general, the study's questioner made inquiries to the employees of the Kolfe Keraniyo Sub-City Plan and Development Commission Branch Office in an effort to assess the availability of local parks that are based in the community.

➤ **Existing Community Based Neighborhood Parks and Distribution Status**

Here, the research attempted to ascertain the presence of neighborhood parks based on the local community by comparing the existing NPs with the response to the question of the Kolfe Keraniyo Sub-City Plan and Development commission branch office staff. The findings indicate that thirteen (86.7%) of the commission staff members agreed that neighborhood parks existed and were managed by the neighborhood, while only two (13.3%) disagreed, because they have no an information at all. The Pie-chart on Figure 4.9. shows the existence of NPs outcomes of the responses to the questions.

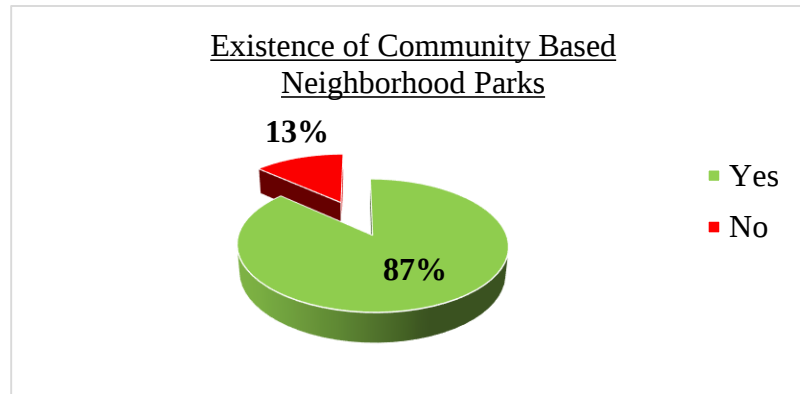


Figure4.9. Plan and Development Commission Expert Response on Availability Status on CBNP in the Research Area

The green space should be dispersed evenly throughout the area. Green Index (GI) is a percentage area of green measured using remote sensing pictures. Greening is not a result of government willingness; rather, the accessibility and quality of built environment elements within a community or neighborhood should be a fair distribution concept. This means that it should be incorporated into urban development designs so that diverse domains can have a substantial impact on physical activity behavior.

Comprehensive plans should incorporate innovative land use management strategies since they may contribute to the preservation of open space. As a result, detailed information regarding the open areas and related amenities in the park will be required.

In this case, an inventory and distribution identification were carried out utilizing an existing physical survey as well as a remote sensing image of the area. The Addis Ababa structure plan states that a neighborhood park's catchment radius should be 300 meters and its size should not exceed 0.3 hectares for hierarchical public parks. Here, 129.4 ha of the total woreda six coverage are unreachable and 174.7 ha of the existing neighborhood park area are within a 300-meter radius.

It also examined the proximity of existing community-based neighborhood park and coverage density with in the Addis Ababa city structure plan standard limit, as shown in Figure 4.10 and 4.11.

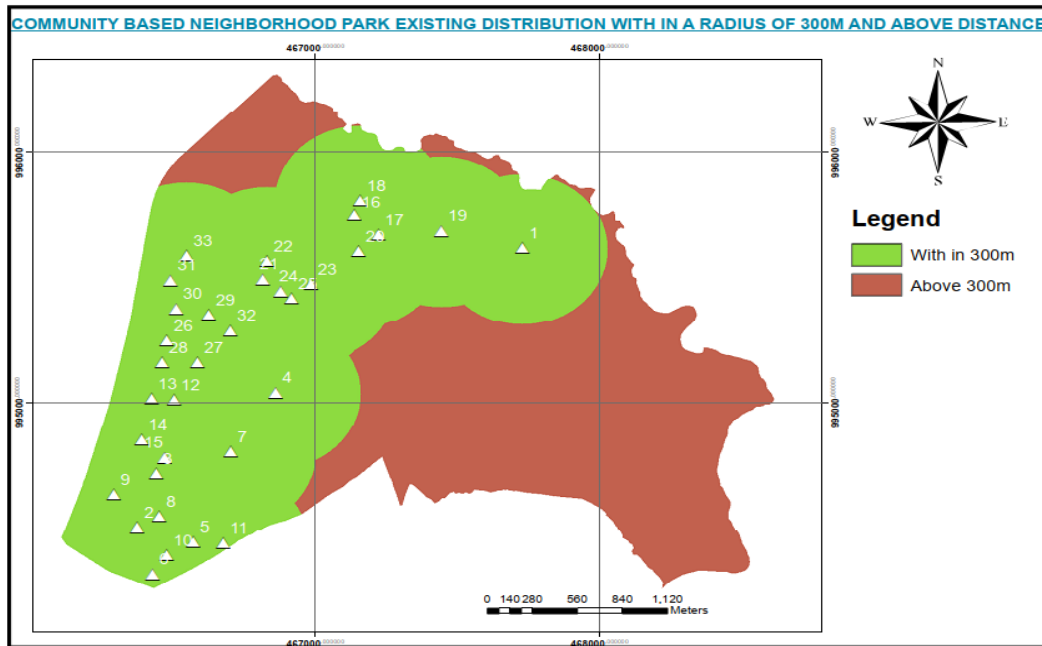


Figure4.10. Community Based Neighborhood Park Existing Distribution within a radius of 300m above Distance

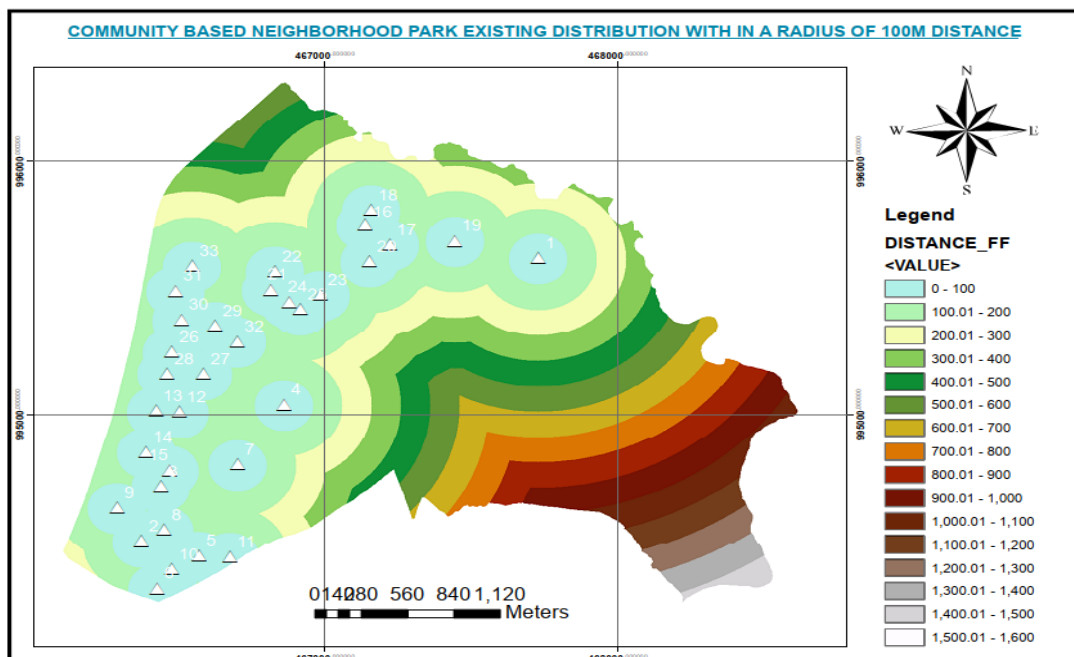


Figure4.11. Community Based Neighborhood Existing Distribution within a radius of 100m Distance

➤ Criteria and Factor for Spatial Plan Preparation

Generally speaking, the goal of spatial planning is to plan and assign a land use to each plot of land in order to preserve for sustainable living spaces, which implies

balancing the social needs of the population, the pressure for economic development, and the preservation of the natural environment. Hierarchical spatial planning is used, with the top structural plan implying broad land use for the entire city and the lower local development plan (LDP), detailed land use for a given tiny area of land use. Due to the generic nature of the Addis Ababa structure plan, the actual existence of community-based neighborhood parks was not taken into account in detail land use assign. Instead, a local development plan for neighborhood park development was required to protect community-based neighborhood parks. The study's questioner analysis aims to pinpoint which concept was given precedence in the preparation of the structural plan. As the whole here the questioner tries to indicate that the main criteria and factor for land proposition for community based neighborhood park were assessed as shown below.

The plan commission staff office of the study area was given questionnaires, and the results show that, of the four criteria stated as questions during local development preparation, two professionals (13.3%) said it is participatory planning and it has great community involvement, while seven (46.7%) said creation of equitable access during the preparation, three (20%) of them said that user satisfaction and safety were prioritized, one (6.7%) of the employees said it creates sufficient asset in land and one (6.7%) of the employees said it creates job opportunity for un employment. Summary labeled on Figure 4.12. shows the outcomes of the responses to the questions.

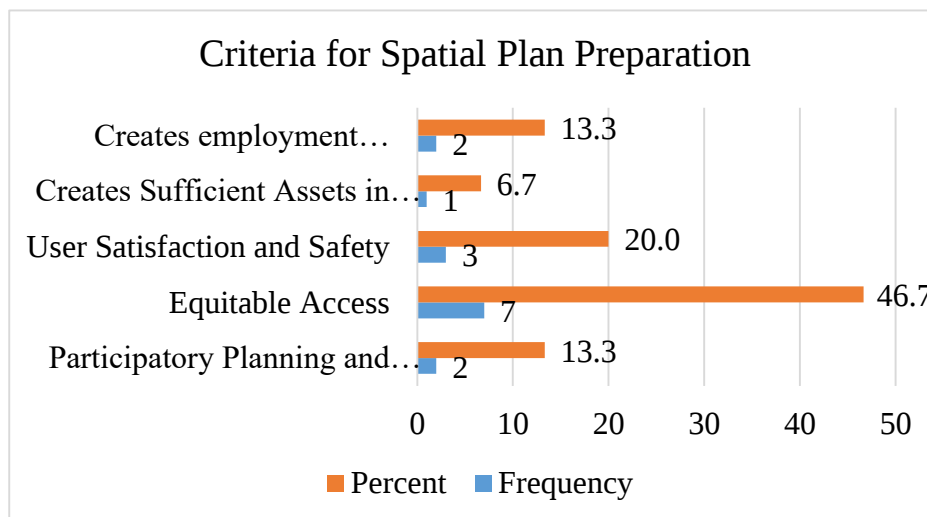


Figure4.12. Priority for Criteria Used by Employees Preparing Spatial Plan

➤ **Green Space Development Implementation and Status of Implementation**

Planning and regulating of the uses of space that focusing on the physical form, economic functions, and social impacts of the urban environment and on the location of various activities within is vital. Without execution, a plan is worthless. It is clear that, plan implementation problem cases lack of accountability, a lack of knowledge, a lack of dedication, a lack of transparency, and a lack of community awareness are the main reasons seen in the research.

Questionnaires were distributed to the study area's plan commission staff office, and the findings of the cross-tabulation show that there is a certainty in the implementation of green space development as well as assesses the cases for its fully implementation, partially implemented or fails altogether.

According to the results, a professional respondent (6.67%) thought that the plan had only been partially implemented because of a flaw in the structure plan itself, and four professionals (26.66%) respond that the plan had only been partially implemented because of a disconnect between sector plans for the planning of infrastructure and spatial planning, a problem with budgeting, and a lack of investment plan policy decision and initiation. In addition, one respondent (6.67%) stated that there is insufficient coordination among important agencies, despite the fact that it had been fully implemented, while the remaining two (13.33%) respondents stated that it has only been partially implemented. In addition to the aforementioned factors, one respondent (6.67%) also stated that there is insufficient or unsuccessful development control for implementation, despite the fact that it had been fully implemented, while the remaining four (26.66%) respondents stated that it has only been partially implemented.

The summary of the table indicates that two (13.33%) of the respondents believe the plan has been fully executed, while the remaining eleven (73.33%) believe it has been partially implemented, and the remaining two (13.33%) believe it has not been implemented at all. See Table 4.8 for a summary, which is provided below.

Table 4.8. Green Space Development Implementation and Status of Implementation
Implies

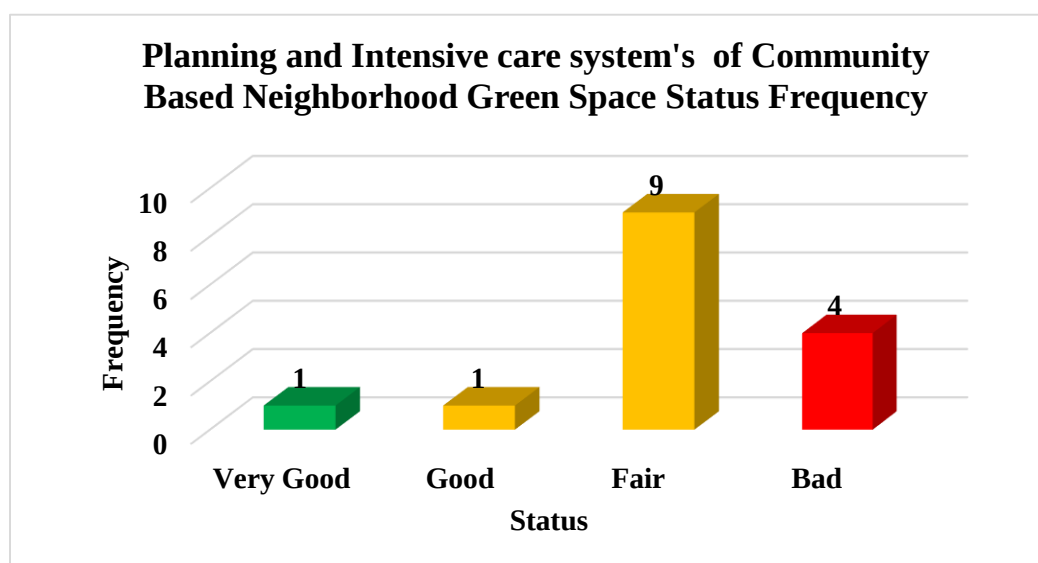
Case of Partial Implementation or totally Not Implemented * Green Space Development					
Implementation Cross tabulation					
		Green Space Development			Total
		Implementation			
		Yes, Fully Implemented	Yes, Partially Implemented	No, Not Implemented at all	
Case of Partial Implementation or totally Not Implemented	Inherent Weakness in the Master Plan Themselves	0	1	0	1
	Disconnect between Spatial Planning Sector or Infrastructure Plan, Budgeting and Investment Plan Decision	0	4	0	4
	The Lack of Coordination Among Key Agencies	1	4	0	5
	Lack of or Ineffective Development Control	1	1	2	4
	Limited Capacity and Resource for Enforcement	0	1	0	1
	Total	2	11	2	15

➤ **Rate of Planning and Intensive care of Community Based Neighborhood Green Space**

The outcome of the legal framework of the Addis Ababa Structure Plan's operational length is created to direct the development of the city for the ensuing ten years (2013–2023), in accordance with the Federal Urban Planning Proclamation No. 574/2008's provisions. The structure plan guidelines point that, open spaces in mixed residential area are not indicated on structure plan shall remain with green area status; Furtherly, the detail land-use indicated on local development plan which implemented step by step through the end date of the structure plan period which prepared by the lower concerned sub-city plan and development commission branch office staff or other concerned party consultants in order to implement the structure plan; whereas management of such spaces carried out by the community, woreda level beautification and greenery development office workers.

The findings of the rate of planning and monitoring of community-based neighborhood green space show that the condition of community-based neighborhood green space was classified as very good, good, fair, and bad. This is in accordance with the questions that were distributed for the study area's plan commission staff office.

According to the outcomes of the staff respondents, one person (6.67%) claimed that the planning and intensive care system's is very good, and another (6.67%) professional said that the rate is good. About nine respondents, or 60%, said it was fair because there was an issue with the plan revision rating and monitoring system. The



remaining four respondents, or 26.66%, said it was awful since there was no plan revision rating or monitoring at all. The results are shown on Figure 4.13. below.

Figure 4.13. *Rate of Planning and Intensive care of Community Based Neighborhood Green Space*

4.2. Practice

4.2.1 Community and Green Space Engagements

The concept of community has come to be realized as a grouping of people with a variety of characteristics who are bound together by social ties, share common values, and engage in cooperative activities in certain situations or environments. Those who "share a love or concern for something they do and learn how to do it better when they interact frequently" are said to belong to a community of practice.

Several sources indicate that when we talk about urban green spaces, we're talking about places like gardens, parks, greenways, and other places with grass, trees, and/or shrubs. They may serve as common gathering places for leisure, social gatherings, and recreational activities. Urban green spaces also give people the chance to venture outside and engage with humans and environment in ways that may not be possible in other situations.

Parks and open spaces can play a crucial role in fostering community involvement in cities. Since parks and playgrounds have the potential to become the social hubs of neighborhoods, community planners ought to give them top priority. Parks are more than just landscaped areas that enhance neighborhood beauty. The construction of a neighborhood park or play area benefits local governments, residents, and children alike. Furthermore, a key element of successful urban open spaces is community involvement.

- ✦ According to the findings, out of the 97 respondents, more than half said it was crucial, one-third of the respondents said it was highly crucial, and fewer than ten stated they were unaware of its advantages. It is clear that the most of respondents emphasized its importance based on the finding.

- ✦ Among the 97 respondents 44 of them enjoyed going to green spaces and/or natural areas, while the others stated they read, participated in social service initiatives, regularly exercised, and enjoyed drinking the least.
- ✦ The raw data demonstrates that very few dwellers have contributed less input to the creation of neighborhood parks. As a result, there is a decline in involvement, sense of ownership, and contributions to development.

It's crucial to consider parks and other green areas as gathering places for a variety of individuals, including young people, seniors, tourists, and recent movers. This wide range of individuals is what makes urban parks successful. Community participation is a significant function that parks and open spaces may serve for cities. Hence, parks encourage community involvement by giving locals a place to get involved in and feel a part of their neighborhoods. Moreover, community involvement is a crucial component of successful urban open spaces.

In general, the respondents' attitudes regarding the neighborhood parks' (NPs) quality and community engagement were reviewed and analyzed, with the greatest ratings going to the parks' safety, park usage exercise, different plant preference, and cleanliness and standard.

4.2.2 Analysis on Community Practice and Related Collected Data

➤ Respondent demographic and socio-economic characteristics

The total population of the woreda was estimated 29,649 people, of which 18,824 were over and equal to the age of 18 (63.5%) and 10,824 were under the age of 18 (36.5%), according to the Kolfe Keraniyo Sub-City Woreda Six Productive Safety Net Program (PSNP) Office, which was gathered for identifying the total population and those who need support for food security program achievement. As a source of research, the Table 4.9 shows a detailed explanation of the population numbers in each Ketena based on age groups.

Table 4.9. Total Population of Woreda Six Demography in Age Group

TOTAL POPULATION NUMBER OF WOREDA SIX BASED AGE GROUP

KETENA NO.	House Holed Number	Number of Population Based Age Group		Total Population Number of Woreda Six
		Age grater and/ or Equal 18	Age less than 18	
1	1127	3031	1277	4308
2	1063	2578	1579	4157
3	1134	2978	1433	4411
4	1126	2676	1722	4398
5	471	1299	845	2144
6	911	2488	1572	4060
7	630	1687	1120	2807
8	749	2088	1276	3364
TOTAL POPULATION	7211	18825	10824	29649

Source: Kolfe Keraniyo Sub-City, Woreda Six Safety Net Program Office (2021)

Participation and engagement in neighborhoods development are essential to the effectiveness of the duties that the populace does. Based on the information in the above table, community involvement and practice were evaluated. For the purpose of the analysis, woreda 6 in the research area out of 97 house-hold respondent's questionnaires dispatched for face-to-face interview, 97 HH were interested to respond to questions, resulting a 100% response rate those who were chosen at random from a database of 7211 house-holing populations. According to the analysis of the research study report, 65 (67%) of the 97 respondents who were residents were men, and 32 (33%) were women. Further analysis of their age groups showed that, among males, 7 were between 18–30 age range, 27 of them were between 31–40 age range, 15 of them were between 41–50 age range, and 16 of them were 50 years old and above. On the other hand, four of them, who are connected to women, are grouped in the age range of 18 to 30 years, eleven of them grouped between 31 to 40 years, ten of them grouped between 41 to 50 years, and seven of them grouped fifty years and above, demonstrate the respondent age categories as shown on the Table 4.10 below.

Table 4.10. Gender Vs Age Group Cross Tabulation of Neighborhood Respondent

Gender * Age in Group Cross tabulation						
		Age Group				Total
		From 18 - 30 Years	From 31 -40 Years	From 41 - 50 Years	Above 50 Years	
Gender	Male	7		27	15 16	65
	Female	4		11	10 7	32
Total		11		38	25 23	97

By evaluating respondents' marital status and educational attainment in this part, we may discover how diverse the community in the research area is. The analysis's findings indicate that, of the 97 respondents, 57 (68.8%) were married, 5 (5.2%) were divorced, 28 (28.9%) were single, and 7 (7.2%) fell into other categories.

Further analysis of their marital status and educational attainment revealed that, among the married, eight had degrees or higher, sixteen had first degrees, thirteen had college degrees, ten had less than a college degree, and the remaining ten were illiterate. The analysis result show as that the vast majority of respondents were married and educated. The Table 4.11 displays the education status of the remaining unmarried and other categories population.

Table 4.11. Marital Status Vs Level of Education Cross Tabulation of Neighborhood Respondent

Marital Status * Level of Education Cross tabulation							
		Level of Education					Total
		Second Degree and Above	First Degree	College Diploma	Below College Diploma	Reading and Writing only	
Marital	Married	8	16	13	10	10	57
Status	Divorced	0	2	2	1	0	5

Unmarried	3	17	3	3	2	28
Other	1	2	1	0	3	7
Total	12	37	19	14	15	97

Related to respondent occupation, majority of the respondent, 36.1% (35) were governmental workers and 23.7% (23) were private company workers, 18.6 % (18) were self-workers, 11.3% (11) of the were retired, and the rest 10.3% (10) person were job less. The Figure 4.14. below show that the full Occupation status of the respondents.

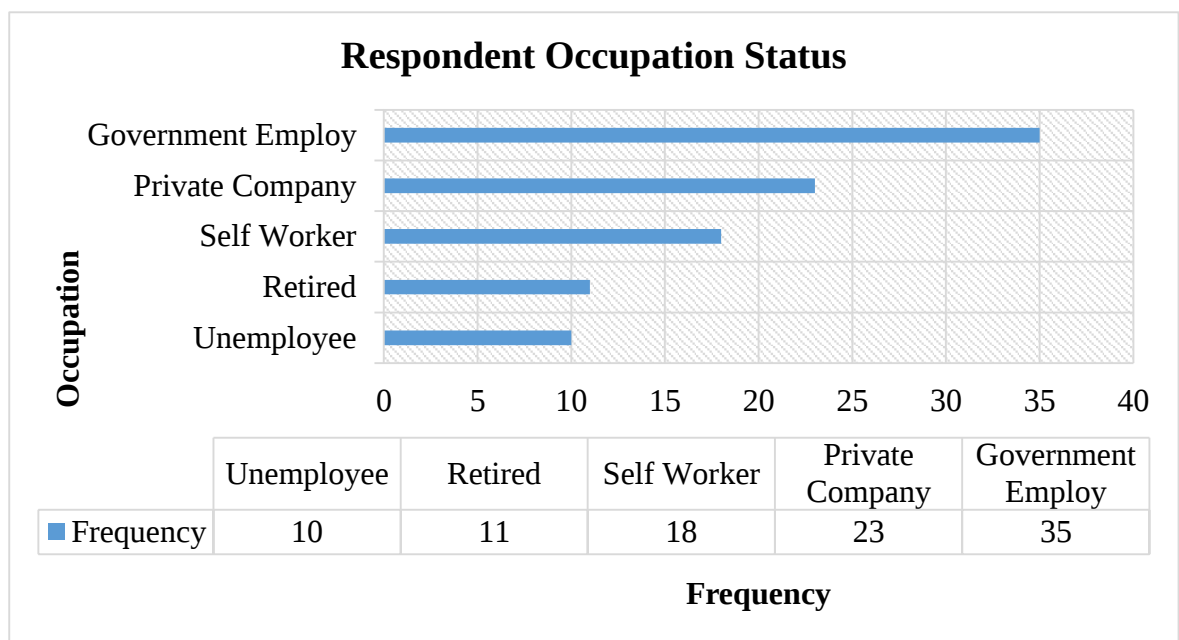


Figure 4.14. Community Based NPs Respondent Occupation Status

➤ General Knowledge and Awareness of Respondent on Neighborhood Parks

Increasing the availability of recreational space, as well as organizing cultural and social activities, stimulates community connection. Local parks must be protected and maintained. The community should understand its benefits, needs, and attitudes.

The questionnaires were presented during face-to-face interviews in order to conduct the analysis. The research of the study was to ascertain whether or not the community has the knowledge and/or visits NPs frequently described under.

The findings indicate that 35.1% (34) of respondents rated its importance as being extremely important, bringing to light the fact that 57.7% (56) of respondents said it was important, while the remaining 7.2% (7) of respondents had no idea of its advantages. When asked about the importance of visiting frequently, twelve of the respondents who said it was extremely important, twenty-two of the respondents who said it was important, and the other respondents never visited at all. See the analysis below on the Table 4.12.

Table 4.12. Respondent NPs General Knowledge and Awareness

Important of Green Park to Human Life * Frequency of Green Space or Parks							
Cross tabulation							
		Frequency of Visiting Green Space or Parks					Total
		Every Day	Every Week	Every Month	Every Year	No, I Never Visit	
Important of Green Park to Human Life	It is Very Important	8	12	9	2	3	34
	It is Important	3	16	22	7	8	56
	I don't have the Knowledg	1	0	0	0	6	7
	Total	12	28	31	9	17	97

This is a natural human ability, and most people spend their time in different ways. In this research study, selected interest questionnaires' were prepared and distributed, and the results were gathered as follows. People after hard work need rest and spend their time in appropriate and/or improper place in order to relax their stress and recover.

Most people who responded 83.5% said they enjoyed being entertained and spent their time appropriately, while the remaining 16.5% said they did not enjoy their leisure time at all. Among the 97 respondents, 44 (45.4%) said they enjoyed visiting green spaces

and/or natural areas, 11 (11.3%) that they exercised regularly, 20 (20.6%) that they entertained themselves by reading, 20 (20.6%) that they took part in social service projects, and 2 (2.1%) that they enjoy drinking alcohol. Table 4.13 provides a free time spending selection and entertainment interest indication of the survey's findings.

Table 4.13. Free Time Spending Selection and Entertainment Interest Indication Table

Spending Vacation at Entertainment * Free Time Spending Recommendation Cross tabulation							
Free Time Spending Recommendation Cross tabulation							
		Spending at green/park space	Doing physical exercise or sports	Reading a book	By doing other social participation	Drinking Alcohol	Total
Spending Vacation at Entertainment Venues	Yes, I like	42	10	14	14	1	81
	No, I don't like	2	1	6	6	1	16
Total		44	11	20	20	2	97

Today's people make sure that the location and accessibility, as well as the presence of parking spaces, the space's capacity, the layout, and the atmosphere of the events, are conducive before beginning event planning. In this research project, I'm attempting to determine the preferred locations for wedding ceremonies by creating questionnaires that ask respondents to indicate their preferences among four possible options. The list number 14 (14.4%) were select prepare their wedding event on hotel and majority 44 (45.4%) were select prepare in the park. Table 4.14 below shows the wedding venue preference.

Table 4.14. Wedding Venue Preference Indicator from Respondents

Wedding Place Selection Percent Indicators			
		Frequency	Percent
Place Preference	Hotel	14	14.4
	Park	44	45.4
	Hall	16	16.5
	House	23	23.7
Total		97	100

Written research suggests that disparities in who visits neighborhood parks tend to fall along gender and age lines in developed countries. Most of the time, younger male enjoyed with their adolescent children arrive. Most of the 97 participants in this study, 47 (48.5%) said they travel with friends, followed by 31 (32%) by family, 12 (12.4%) by spouses, 5 (5.2%) by groups, and the remaining 2 (2.1%) by themselves. Respondent selection of visitor accompany were shown on Table 4.15 below.

Table 4.15. Neighborhood park visitor accompanies

Green Space or Park Visiting Accompany Percent Indicators			
		Frequency	Percent
Visiting Accompany	With Lover	12	12.4
	With Family	31	32
	With Friends	47	48.5
	In Groups	5	5.2
	Alone	2	2.1
Total		97	100

4.2.3 Assessment of Neighborhood Parks' Availability, Sufficiency, Condition, and Use.

➤ Assessment of the Amount and Sufficiency of Neighborhood Parks

Most urban dwellers in the developed world reside adjacent to one or more neighborhood parks. Neighborhood parks that are supported by the community provide people a feeling of place and offer vital life-enriching features that promote

communal and individual well-being. People also utilize these parks for physical activity, such as sports and other types of exercise that don't require more than a 30-minute commute.

The land use allocated was divided into fourteen general land uses in the current 10th structural plan of the city municipal government, which was under development, but it was not specifically described for each and every land use. Due to these factors, it is essential to create a detailed land use plan, mostly known as a local development plan, that explains each and/or every distinct land use in order to implement the structure plan correctly. Although it was classified under generic categories, the actual land use and/or serving usage in this situation was different from and/or the same as the usage that the SPs defined. This section attempted to show deference in an effort to assess whether or not the amount of NPs was sufficient based on the neighbors' responses to the distributed questioners, an assessment of the existing land use and total land use difference, and the implementation or non-implementation of the city land proportion standard, which is 40% building, 30% environment, and 30% road network or circulation.

According to the responses provided by the distributed questioners, 14.4% of respondents believe that there are neighborhood parks and that they are adequate, 35.1% believe that there are parks, but that they are insufficient, 43.2% believe that there are parks, but that they are few in comparison to the woreda population as a whole, and the remaining 8.2% believe that it would be better to say that there are none at all. See Figure 4.15 for further information.

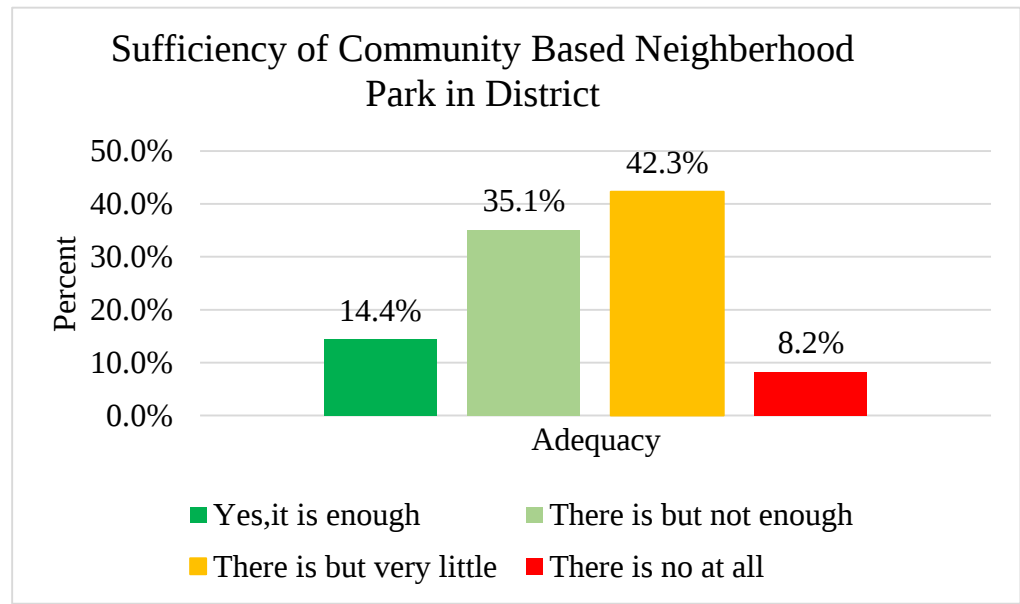


Figure 4.15. Assessment on the Presence of NPs and its Efficiency Indicator Responses

There are many individuals living in cities today. Due to this, there is now a greater need for land, which has an adverse effect on the environment and necessitates the erection of multiple structures for diverse uses in addition to the usage of additional land for road circulation. The movement and interaction of people played a significant role in the densification of the city.

The underlined map, which was produced for this research case to analyze land share proportion, organizes the land into three primary land-use categories according to city share standard: structures/buildings, road networks, and environment, which account for 49.6, 23.4, and 27% of the total area, respectively. The environmental component, which was based on detailed on-ground verification and was at this time neatly split into six subcategories, was covered in greenery. Figure 4.16. displays three categories of current general land usage.

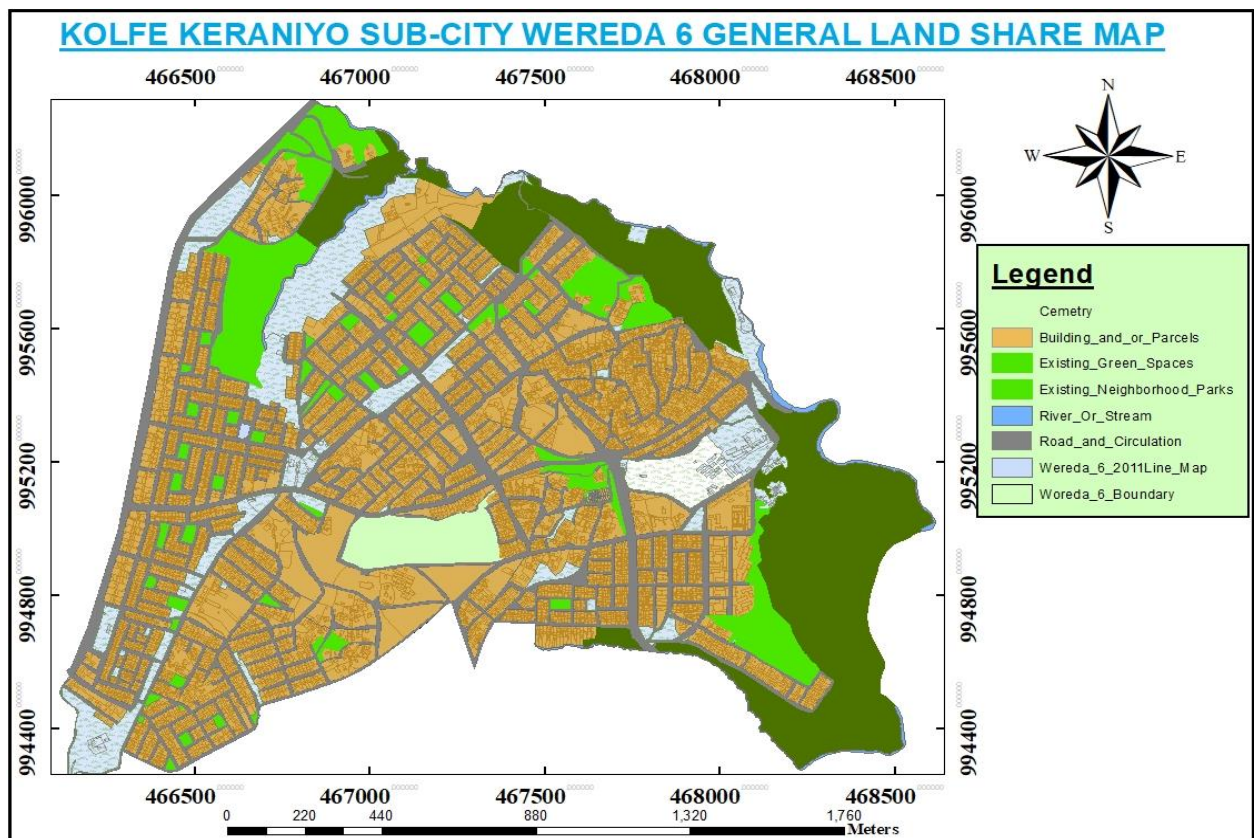


Figure 4.16. Kolfe Keraniyo Sub-City, Woreda six General Land Use Share Map

In order to determine whether the building, road, and environment standards of Addis Ababa City's 10th structure plan were met and/or whether the percentage of environment met from the general land area of the woreda, identification of the existing general land use was one of the research's main concerns. The analysis's findings are attempted to categorize into three key land use categories: structures, traffic flow, and environment. Table 4.16 provides a quick summary of the analysis of the field survey results for the existing general land use based on the existing land use map.

Table 4.16. Existing General Land-Use Field Survey Data Analysis

Kolfe Keraniyo Sub-City, Woreda 6 Existing General Land Use Field Survey Data and Analysis Result of GIS										
No.	General Land-Use Categories	Sub Land-Use Categories	Existing Area (Ha)	Existing Percent (%)	Total Area (Ha)	Total Percent (%)	AA City SP Land-Use Proportion	Result Comparison		
1	Building		151.03	49.60	151.03	49.60	40	The area that the Building affected exceeded the norm by 9.6 percent.		
2	Road/ Circulation		71.26	23.40	71.26	23.40	30	The area that was impacted by the Road Circulation was 6.6 percent less than the standard.		
3	Environ ment	Existing Green Space	33.37	10.96	82.21	27.00	30	The area that was impacted by the environment		
		Existing Neighborhood Parks	5.88	1.93						
		Open Properly	30.30	9.95						

Unidentified Purpose Use					was 3 percent less than the standard.
City Level	2.99	0.98			
Agriculture and River Basin Forest					
Cemetery	6.54	2.15			
River/Stream	3.13	1.03			
Total	304.5	100	304.5	100	100

The findings indicate that in the area the building exceed by 9.6% than the standard, while the areas that the road/circulation and the environment were both less by 6.6% and 3% than the land proportion standard, respectively. Based on the above table.

Modern views of the landscape in the city expand on its naturalistic, aesthetic, recreational, utilitarian, and ecological legacy. Urban greening has evolved into a competitive strategy for cities. As a result, Neighborhood Parkes, which are mostly developed and managed by locals, are a part of this greening completion. The status of NPs in woreda six differs from place to place based on aesthetics, services provided, and management style.

A neighborhood park's condition is primarily determined by its quality, which is defined as a successful and good public green open space within a residential neighborhood area that complies with people's needs and requirements and the general public's view of parks as places for outdoor leisure.

Among the 97 house hold respondents, 3 said the condition was excellent, 12 said it was generally good, 14 said it was in good condition, and 25 said it was somewhat good. The majority of the participants-around 35 said the condition was poor, and the remaining 8 said it was in bad condition. Table 4.17 describe the existing condition of neighborhood parks.

Table 4.17. Existing Condition of Neighborhood Parks

Existing Condition of Neighborhood Parks in Percent		
	Frequency	Percent
Excellent	3	3.1

Existing Condition	Very Good	12	12.4	Photos were gathered to show the
	Good	14	14.4	
	Average	25	25.8	
	Poor	35	36.1	
	Bad	8	8.2	
Total		97	100	

precise condition of NPs, which was separated into three main groups based on study field observations: good, poor/weak, and bad/worth-less condition. In this study, the circumstances of ten NPs from the overall category are evaluated. It must have been determined whether the parks meet the amenities stated in the guidebook that was produced as part of MUDH's reaction by proclamation 14/2016 in order to determine the status of existence. Some of NPs were fenced using wood, wire-mesh, or metal typically protect the majority of NPs in the examined research area from harm by people and domestic animals. Though some were fully unprotected with fence, the NPs are typically only accessible to locals, making park use secure. Figure 4.17 depicts the security situation in the parks in comparison to comparable well-kept parks.

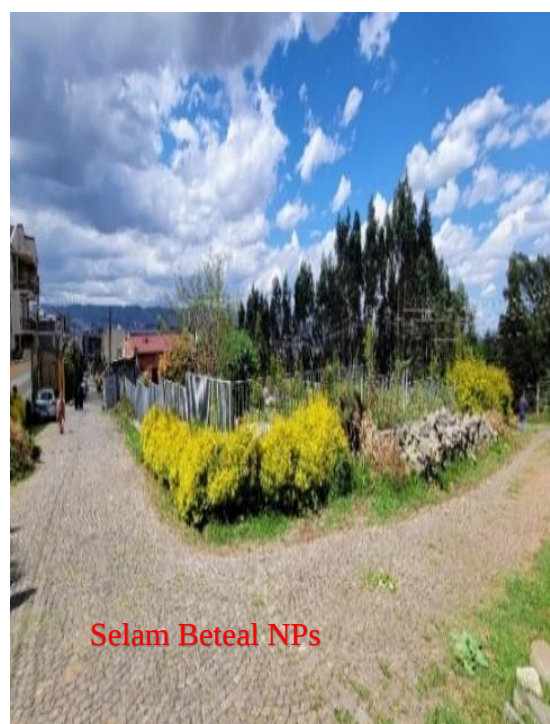




Figure 4.17. Sample of Fenced Neighborhood Park

➤ **Assessment of the Spatial Status of Community Based
Neighborhood parks and its current usage**

It is crucial for designs to always be inclusive, informed by the experiences of a diversity of people, and responsive to the needs and preferences of the locals while creating a community-based green space. A 2011 Addis Ababa city line map, a Google picture, a site survey photo, and a GIS were used to build the assessment framework. GIS is crucial for identifying geographical status because of its strong spatial data management capabilities and robust spatial analytical capabilities.

The research area woreda 6 cover 304.5 hectares; of this, 151 hectares are taken up by buildings and/or other structures, 71.3 hectares are used for traffic flow or transportation, and the remaining 82.2 hectares are used for vegetation and grassy plains. The distribution of green space does not follow the Addis Ababa Structure Plan's 30%, 30%, and 40% land allocations, as shown above on Table 2.1.

Based on the general conclusion stated above, the study tries to demonstrate the status of community-based parks. Among the total real existed 33community based neighborhood parks in Woreda Six, and all community based neighborhood parks

were well-known and legally registered. One-third of the registered NPs were chosen, with four, three, and three parks from each of the three condition categories (good, poor, and bad) and thoroughly analyzed. To assess the state of the neighborhood parks that already existed in the research region, a field survey, existing condition photographs and spatial maps, Google Earth imagery, 2011 line maps, and secondary data sources were used.

In order to help the Urban Planning, Sanitation and Beautification Bureau ensure communal housing includes open green space, the evaluation methods follow a guidebook that was made public as part of MUDH's reaction by proclamation 14/2016. According to the manual, parks must have a strong sense of community and at least fulfill the following: lights, benches, trash cans, fences, and pavements.

➤ **Relative to those local parks chosen as being in good condition and currently in existence**

In this context, "relatively good" denotes a state that is not endorsed by professionals but was shown to be superior to others in the research and to some extents suitable for recreational usage.

✚ Selam Beteal Neighborhood Park

Selam Betal, one of the good neighborhood parks in Ketena 8, includes more than two park-defining features, including seating, paving, and a fence around the green space. In comparison to other NP green spaces, its 1049.5 m² (0.10 hectares) in size, well-



greened, and clean; yet, it lacks lighting, garbage cans, appropriately equipped children's play equipment, and sufficient bench seating. An illustration on Figure 4.18. depicts a green space in a densely populated part of the city structural plan.

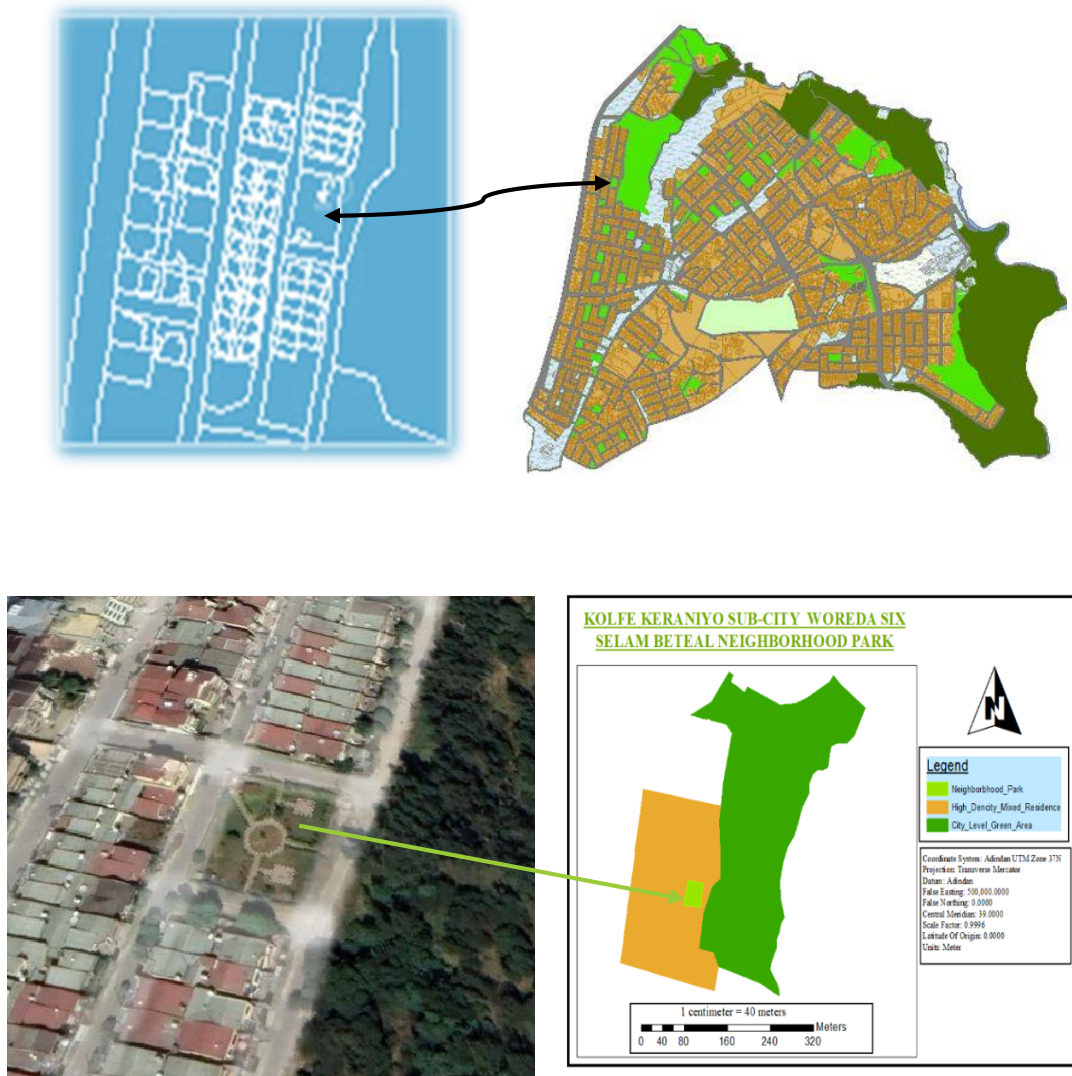


Figure 4.18. Selam Beteal Neighborhood Park

✚ Tsinat (1991) Neighborhood Park

Another nice neighborhood park, Tsinate, can be found in Ketena Eight. It features more than just a bench or a piece of tarmac; it also has a fence around the green space. Its 1032 m² (0.10 hectares) in size and well-kept reserve make it comparatively decent compared to other national parks' green spaces, although it lacks lights, garbage cans, well equipped play equipment for kids, and enough benches for seats. This green space

is located in a densely populated section of the city structural plan. Tsinat is one of good green area image indicated on Figure 4.19.



Figure 4.19. Tsinat (1991) Neighborhood Park

Estifanos Neighborhood Park

Estifanos is the third excellent neighborhood park in Ketena Seven, and it contains more than just one park-like feature, namely a fence enclosing the green space and gravel pavement. When compared to other national parks' green spaces, it has a size of 1519 m² (0.15 hectares), is somewhat clean, and is also greened and reserved. However, it lacks seats, lights, garbage cans, and other amenities like adequately equipped play equipment for kids. An illustration on Figure 4.20. depicts a green space in a densely populated part of the city structural plan.

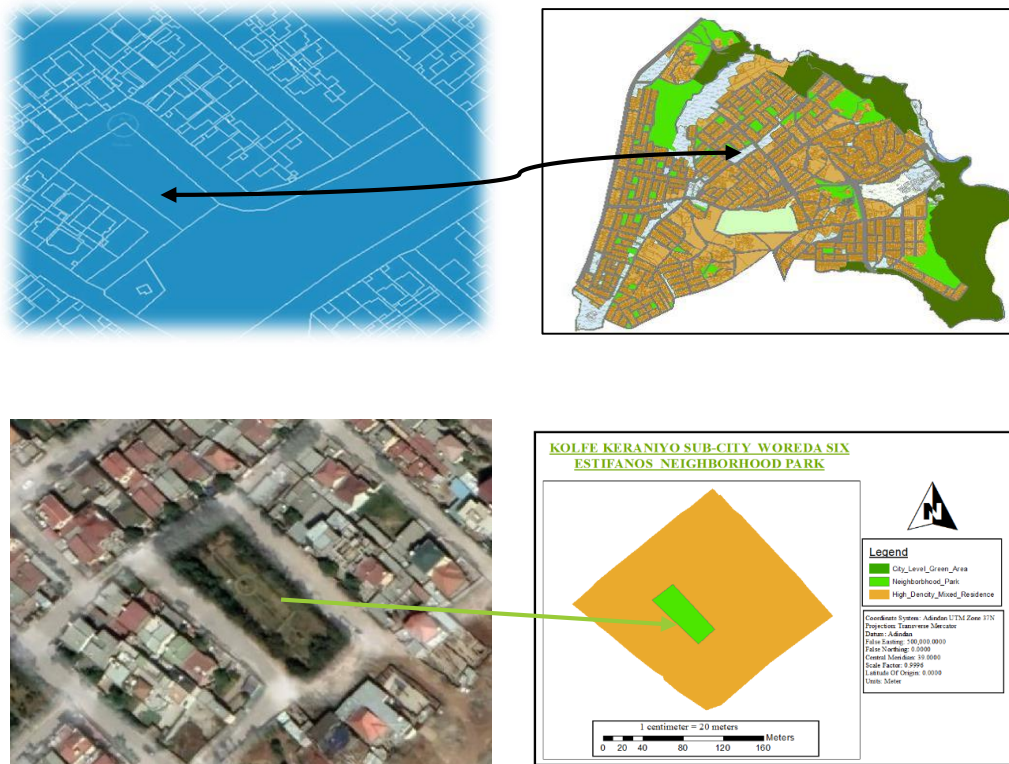


Figure 4.20. Estifanos Neighborhood Park

Dile Chorra Neighborhood Park

Dile Chorra, the fourth desirable local park in Ketena 4, contains more than just two park-defining features, namely a gravel pavement and a fence around the green space. Its area is 856 m² (0.085 hectares), and compared to other national parks' green spaces, it is fairly large and tidy. However, it lacks seats, lights, garbage cans, and well equipped play equipment for children. An illustration on Figure 4.21. depicts a green space in a densely populated part of the city structural plan.



Figure 4.21. Dile Chora Neighborhood Park

➤ **Those neighborhood parks chosen as in poor or weak condition currently**

Here, "relatively poor" or "weak" refers to anything that hasn't received professional approval, but at the time the research was being done, it was still inaccessible and inconvenient for recreational use. In comparison to the good parks described earlier, the parks at this time were completely unpaved, un-greened, and unclean. In addition to being used for illegal activities like chewing chat, smoking, playing cards, and gambling, the parks were also used for garden vegetation purposes such as growing lettuce, tomatoes, cabbage, and other vegetables.

✚ **Selam Zenbaba Neighborhood Park**

Selam Zenbaba is one of the weakest and poorest neighborhood parks in Ketena Five, and it lacks both a green space and a leisure place. With a surface area of 1513 m²

(0.15 hectares), the park is inconvenient and dirty compared to other neighborhood parks' or green spaces. It lacks amenities like seating, pavement, lighting, trash cans, appropriately equipped children's play equipment, and any kind of water source, making it largely unsuitable for recreational usage. Selam Zenbaba Park is used by young people for unlawful activities including chewing chat, smoking cigarettes, playing cards, and other unnecessary activities due of its weaknesses. Selam Zenbaba is one of poor green area image indicated on Figure 4.22. and this green space is located in a high-residential land use region of the municipal structural plan.



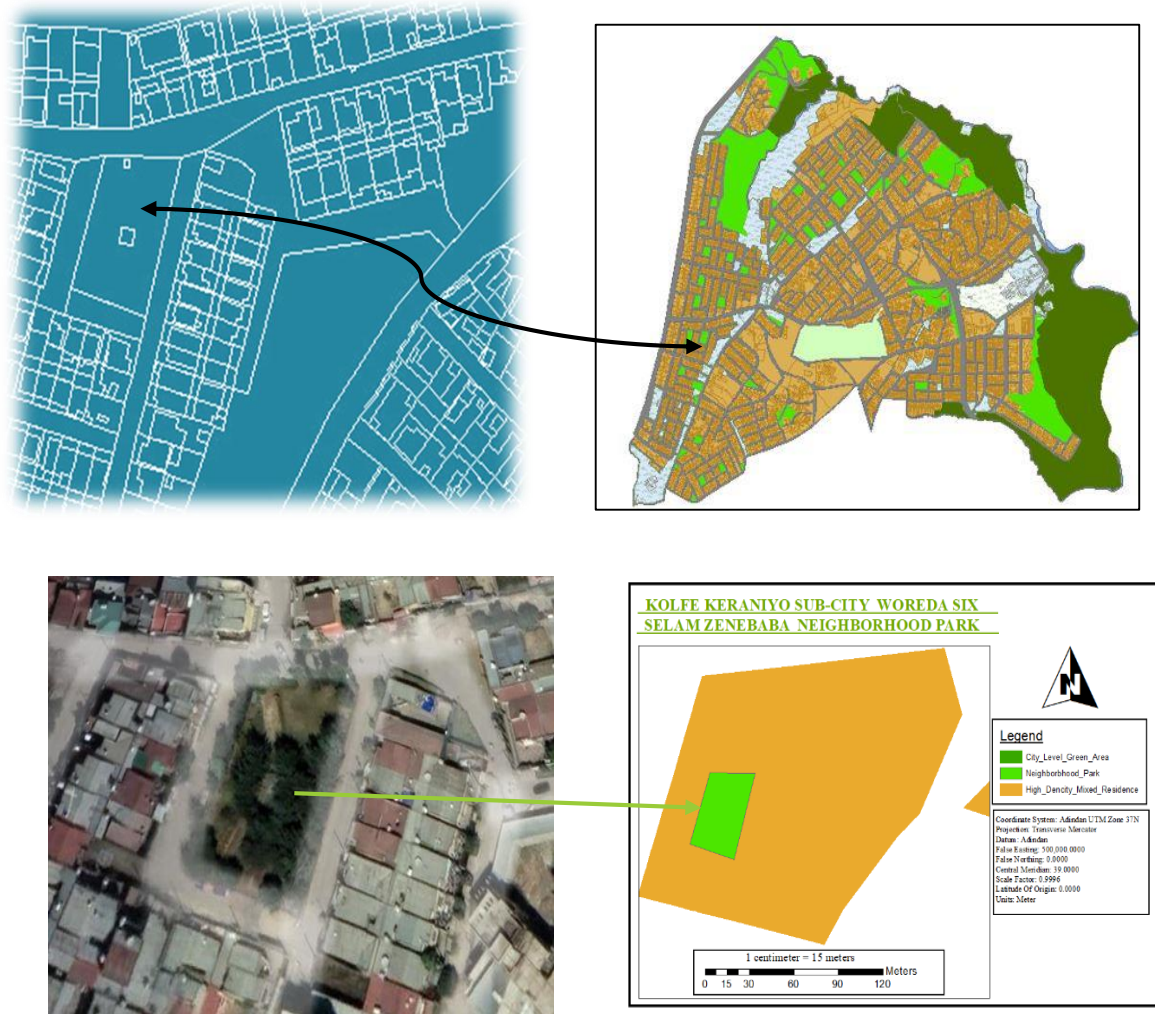


Figure 4.22. Selam Zenbaba Neighborhood Park

Sene Selasa Green Area Neighborhood Park

The Sene Selasa Green Area is another underdeveloped/weak neighborhood park in Ketena 4, and it lacks both a green space and a leisure area. With a surface area of 672 m² (0.067 hectares), the park was greened and kept clean compared to other national parks' green spaces, but it was weak/poor to use for recreation and lacked amenities like seating, pavement, lights, trash cans, appropriately equipped children's play equipment, and a water source. Sene Selasa Green Park is used for community gatherings, various festivals, and other social events despite its shortcomings. Sene selassa is the other relatively poor green area image indicated on Figure 4.23. and this green space is located in a high-residential land use region of the municipal structural plan.



Figure 4.23. Sene Selasa Neighborhood Park

Back of Showa Dabboo (Addis Hiwot) Neighborhood Park

The third weakest/poorest neighborhood park in Ketena Eight is located behind Showa Dabboo (Addis Hiwot), and it lacks both a green space and a leisure place. With a surface area of 1424 m² (0.14 hectares), the park is small and underdeveloped compared to other national parks' natural spaces. It lacks amenities like seating, pavement, lighting, trash cans, appropriately equipped children's play equipment, and any kind of water source, making it largely unsuitable for recreational usage. The Showa Dabboo Park's rear is used for various festivals and other social gatherings, as well as garden vegetation like growing lettuce, tomatoes, cabbage, and other

vegetables. Addis Hiwot is the third weakest green area image indicated on Figure 4.24. This green space is located in a high-residential land use region of the municipal structural plan.



Figure 4.24. Back of Showa Dabboo (Addis Hiwot) Neighborhood Park

➤ **Those neighborhood parks chosen as being in a bad state at the time were**

Here, "relatively bad" refers to a state that was not entirely employed for recreational purposes when the research on the existing condition was completed, but was nonetheless considered unfavorable by specialists. In comparison to the nice and/or poorest parks mentioned earlier, the parks were completely unpaved, un-greened, and unclean. They were also unfenced at the time, so they were being used for open waste accumulation.

✚ Tele Tawor Neighborhood Park

One of the worst neighborhood parks in Ketena Four is called Tele Tawor. Neither a green space nor a recreation place are present in the park. The park's 493 m² (0.049 hectares) area is little compared to other neighborhood parks' green spaces, and it is reserved dirty. It was in the worst possible shape to be used for recreation and lacked amenities like seating, paving, lighting, trash cans, well-equipped children's play equipment, and even fencing. Because of its wickedest feature, the park is used to store open waste. Tele Tawor is the other relatively poorest green area image indicated on Figure 4.25. and this green space is located in a high-residential land use region of the municipal structural plan.

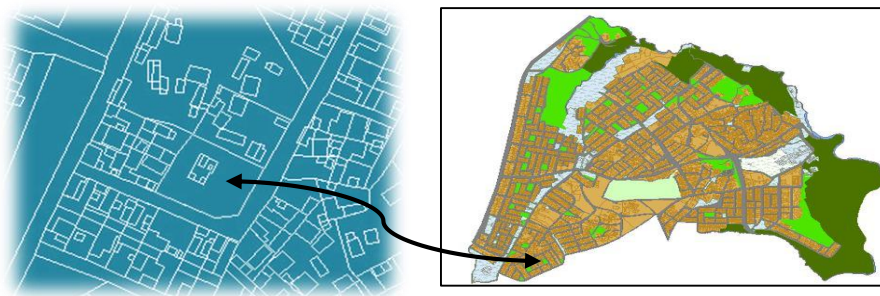




Figure 4.25. Tele Tawor Neighborhood Park

✚ Near to Selam Gulite Neighborhood Park

Selam Gulite is the other poorest neighborhood parks in Ketena five is called Selam Gulite, which the name given by the Gulite near to the park. Neither a green space nor a recreation place are present in the park. The park's 1018 m² (0.10 hectares) area is large compared to other neighborhood parks' green spaces, and it is reserved dirty. It was in the worst possible shape to be used for recreation and lacked amenities like seating, paving, lighting, trash cans, well-equipped children's play equipment, and even the fencing damaged. Because of its wickedest feature, the park is used to store open waste and homeless house. This green space is located in a high-residential land use region of the municipal structural plan and the image were indicated on Figure 4.26. below.



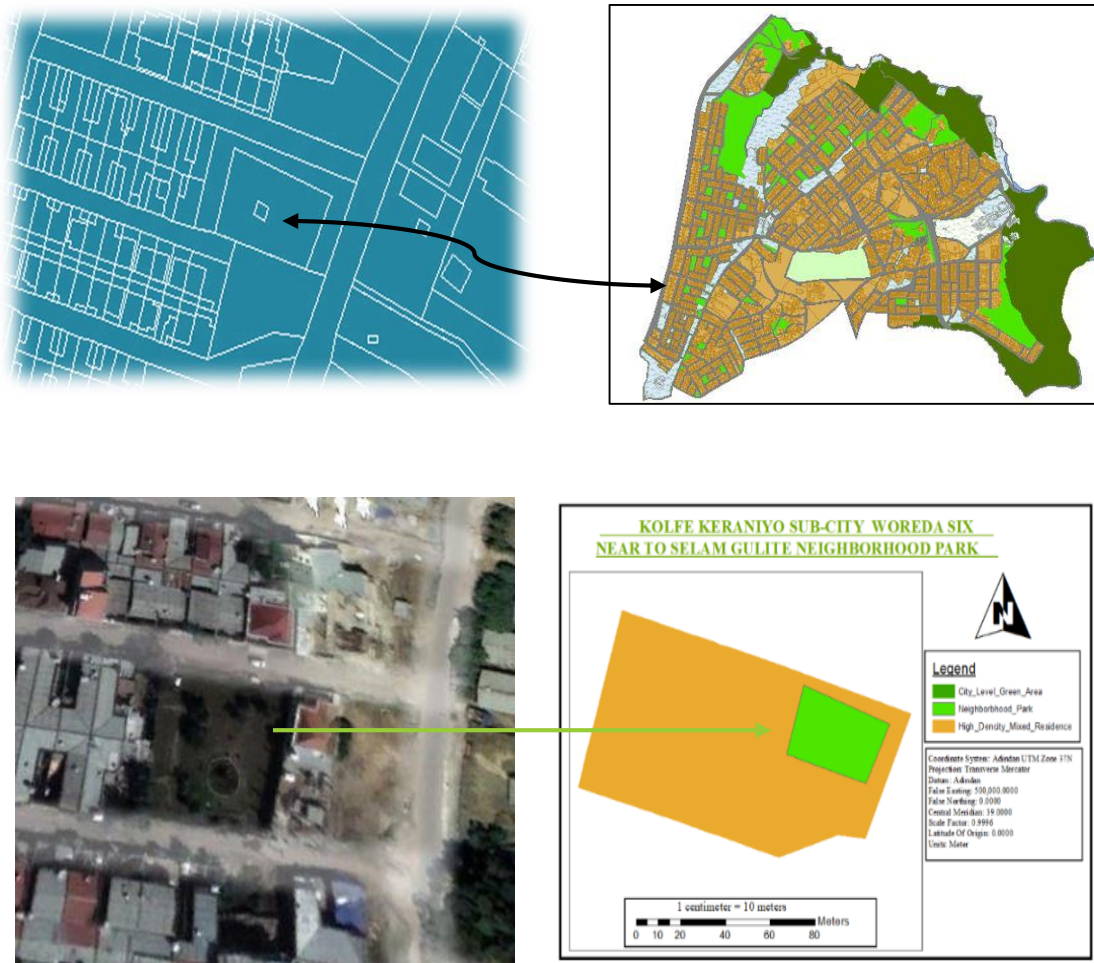


Figure 4.26. Near to Selam Gulite Neighborhood Park

✚ Back of Kolfe Keraniyo Sub-City Admin. Neighborhood Park

The park, which has no designated name, is located behind the Kolfe Keraniyo sub-city administration office and is the third indicator of worst neighborhood park in Ketena 6. There is only a park that is simply greened up. The park is a conserved dull space with a surface size of 965.75 m². It lacked facilities like seating, paving, lighting, trash cans, well-equipped children's play equipment, and even the fencing was dilapidated and in the worst condition conceivable for use as a recreational area.

The park is used as a place to deposit open rubbish deposit area due to its most repulsive aspect. In the Addis Ababa municipal structural plan, this green space is situated in an area with a high residential land use density and were indicated on Figure 4.27.

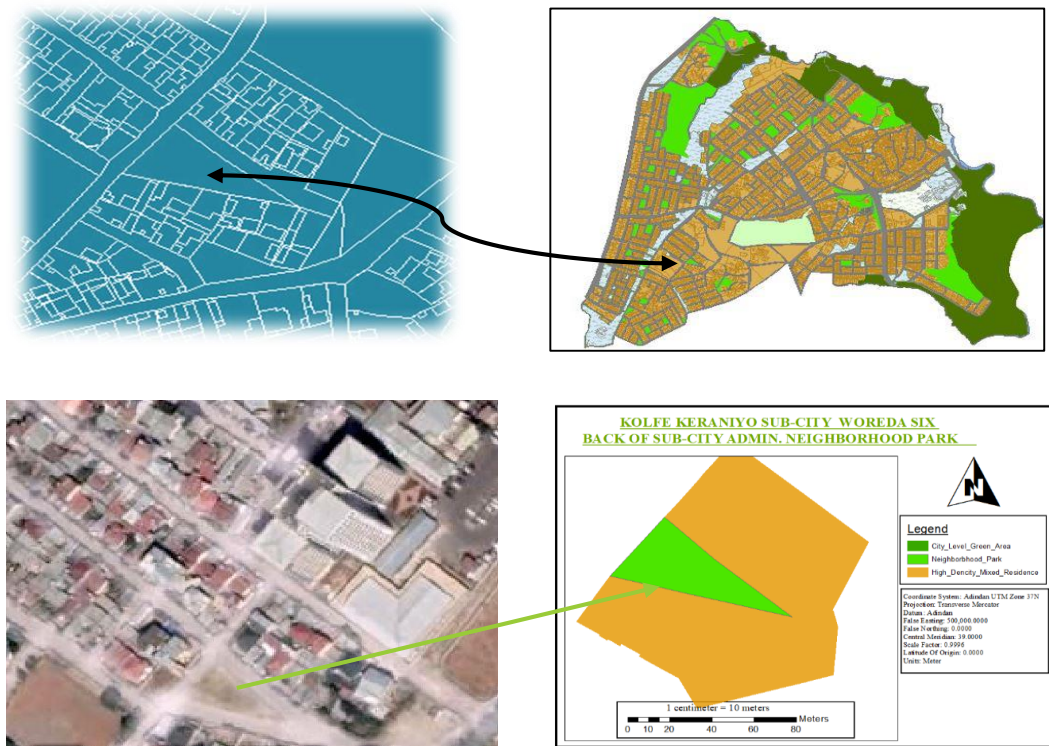


Figure 4.27. Back of Kolfe Keraniyo Sub-City Admin. Neighborhood Park

4.3. Management

The achievement of excellent management and its process is the outcome of planning, organizing, directing, and regulating the combined efforts of the people, physical, financial, and information resources. Every development in the world has its own opportunities for smooth development as well as its own problems during execution. Management is a process that is held by a person or collection of entities, and these studies attempt to look at the organizing, planning, leading, and controlling mechanisms of the studied area's physical, financial, human, and information

resources. The analysis in this case is to examine present management practices and any related development difficulties or opportunities.

- ✦ According to the woreda six urban beautification and green development administration office, there are 33 properly registered NPs, of which 30 have legally designated areas with title deed under their authority and three have no title deed. The government has provided and designated this as opportunity land.

- ✦ Several neighborhood parks that had no fences, were entirely undeveloped, and were in poor condition of development were listed as one of the poor management result in the research analysis. That's why the creation of neighborhood parks has not been effectively planned and coordinated. This is due to terrible financial luck, a lack of resident effort toward the development, and a failure to draw the attention of the relevant institutions.

- ✦ From the AACSP perspective a challenge arose when some neighborhood parks dependent on the accessibility, and some of neighborhood park took 15 minutes to get the park or in the greater than 300-meter catchment radius. Considering the distance, ketena two totally lacks any neighborhood park with having huge numbers of residences. From the viewpoint of the AACSP, any green area accessible with a catchment radius of 1.5 km or less than 15 minutes' walk is acceptable. They therefore travel much beyond what is necessary to use the park. Furthermore, the land value is high and is close to the community's green spaces, which causes blockages and land use change by misusing the land. Because of these the park became, very small in view, and reachable with a catchment area end to end.

- ✦ The other challenges were in plant provision and selection, most of the neighborhood parks get the plants by purchasing and the selection were conducted by random selection of the layman without help of professionals.

- ✦ The development of green areas has many challenges, including a lack of community involvement, awareness, coordination, funding, professional support and/or supervision, and the absence of rules and regulations. All of these factors are crucial and play a role in the development of green spaces.

- ✦ The woreda six urban beautification and green development office lacks experienced professionals.

Generally speaking, from a social standpoint, a certain kind of neighborhood park may offer a broader variety of land uses and chances for a wide range of activities that assist promote healthy lifestyles and can really be beneficial to health. Well-maintained neighborhood park supports social fairness by giving individuals of all ages chances to connect.

- Urban green spaces highlight the diversity of urban environments by catering to the demands of the various groups and meeting their varied needs.
- They promote cultural life by providing locations for festivals, community gatherings, and theater performances.

Urban green spaces give kids safe places to play that support their physical, mental, and social development and are crucial for schoolchildren's foundational environmental and natural science education.

With its insights on the relationships between natural history, actualized urban greenery projects, and conceptualizations of the functioning of nature in urban planning, community practice, and urban design management. Therefore, study adds to the growing amount of writing on neighborhood park situation and green development for the sustainability of cities.

4.3.1 Analysis on NPs Management and Related Collected Data

Here, the analysis is attempting to look at current management techniques and associated development issues. The most easily accessible public green space in Addis Ababa is found in neighborhood parks (NPs). With technical assistance from the local government, such parks are typically created by the local community. The design, construction, and maintenance of NPs, which are anticipated to be created on land granted without charge by the Addis Ababa city admin-authorities, are the responsibility of neighborhood communities. NPs are to be established and managed by the local community, while city, sub-city, and district parks are to be built and managed by the relevant city, sub-city, and district administrations.

According to Kolfe Keraniyo Sub-City's woreda six rough information, the woreda six urban beautification and green development administration office stated that there are 33 well-registered NPs, of which 3 have no title deed and the remaining 30 have legally designated areas with title deed under its control. According to the research

analysis, there were five neighborhood parks in the woreda that had no fences, were completely undeveloped, and were in poor condition, as opposed to the other parks that, even though they were not well preserved, had metal or wooden fences around them to indicate the beginning of development.

Most literatures indicate that, neighborhood parks are mostly under the supervision of offices of urban and green development, and work is done in collaboration with other stakeholders and locals committees. Related to our local context, the management was supervised by a group of residents who were chosen to serve on task-related committees that work on local park development and sustainability. According to the literature, some committees meet for a specific purpose and dissolve after it is over, while others continue to meet and are replaced by new committee members before their terms of service are up. See the full information on Table 4.18 below, which describes an existing neighborhood park that is well-known and under government management.

Table 4.18. show the existing neighborhood park well identified and under control of woreda Six Urban Beautification and Green Development Admin. Office.

Community Based Neighborhood Parks which is run under control of Kolfe Keraniyo Sub-City Admin. Woreda Six Urban Beautification and Green Development Admin. Office									
N o.	Community Based Neighborhood Park Name	Located	XY- Coordinate		Area (Sq.m)	Title dead	Resent Condition		Remarks
			X	Y			Developed	Undeveloped	
1	Ketena 1(Mekonnen)	1	467728	995617	2562	√	√		
2	Front of Yemmane School	3	466373	994501	545	—	√		
3	Near to Arkebe Shop	3	466440	994718	567	—	√		
4	Dile Chorra	4	466860	995040	856	√	√		
5	Sene Selasa Green Area	4	466570	994444	672	√	√		
6	From Ketena 4 Spure to Woreda 5(Mgenteya)	4	466427	994314	553	√	√		

7	Back of Kolfe Keraniyo Sub-City Admin. (Front of Weiyra School)	4	466702	994803	967.75	√	—	√	Open Space
8	Tele Tawore	4	466451	994544	493	√	√		
9	Near to Big Girrare	4	466290	994634	500	√	—	√	Garbage Disposal
10	Back of Mitku Tila House	4	466476	994390	967.2	√	√		
11	Front of Mesgid (Mosque)	4	466676	994440	78.99	√	—	√	Open Space
12	Selam Zenbaba	5	466503	995010	1513	√	√		
13	Tenna Lehullum	5	466423	995014	1107	√	√		
14	Selam Bereket	5	466389	994852	802	√	√		
15	Near to Selam Gulite	5	466470	994780	1018	√	√		
16	Back of Seven Buildings	6	467137	995749	122.60	√	√		
17	Hiberet Dinkuan	6	467221	995671	786	√	√		
18	Dadimose	6	467157	995808	192.40	—	√		
19	Arate Meazzen	6	467443	995686	579	√	√		
20	Webbay Zaggol	7	467152	995605	85.92	√	√		
21	Geion Mehaber	7	466815	995493	1126	√	√		
22	Nigatuwa	7	466829	995566	638	√	√		
23	Estifanos	7	466985	995473	1519	√	√		
24	Back of Yellow Building	7	466877	995444	245.70	√	√		
25	Fetan Kokobe Eider House	7	466916	995415	1287	√	—	√	
26	Hiwote	8	466477	995247	1130	√	√		
27	Back of Shewa Dabboo (Addis Hiwot)	8	466584	995160	1424	√	√		
28	Meto Aleka Bereket Selam	8	466460	995162	1419.92	√	√		
29	Pepsi	8	466625	995349	1092	√	√		
30	Gaddissa	8	466510	995374	1108	√	√		
31	Andenet	8	466490	995489	627	√	√		
32	Tsinate (1991)	8	466700	995289	1032	√	√		
33	Selam Beteal	8	466546	995585	1049.5	√	√		

Source: Kolfe Keraniyo Sub-City, Woreda Six Urban Beautification and Green Development Administration Office

➤ Community Based Neighborhood Parks Committee Formation and Their General Status

To ensure the growth and existence of the parks, Woreda Six Urban Beautification and Green Development Office organizes, coordinates, and sets up the conditions necessary to choose a representative committee among the neighbors. Table 4.19 below lists the responder gender and age range for the neighborhood representation committee.

Table 4.19. Neighborhood Park Committee Respondent Demography

Committee Respondent Gender * Age Demography Cross tabulation						
		Age Group				
		From 18 - 30 Year	From 31 -40 Year	From 41 - 50 Year	Above 51 Year	Total
Gender	Male	3	12	19	12	46
	Female	2	12	5	3	22
Total		5	24	24	15	68

• Neighborhood Park Respondent Committee Demography

The committee works voluntarily and without compensation during the period of selection. Two committee members from each NP were chosen for an interview with prepared questions, and a total of 68 leaders were chosen from the group as a whole. Here, the aforementioned table 19 attempts to display a cross-tabulation of the elected committees' gender and age by year. Two respondents were chosen at random from each park out of the total 68 respondents; there were 46 men and the remaining 22 women. The maximum number from the age groups between 31 and 40 and 41 to 50 years, respectively, is 24 from each. Age is divided into four categories. This shows that most of the committee leaders were adults and young people, showing their capacity to support growth.

• Marital Status of Neighborhood Park Respondent Committee

The committees' marital status is shown in table 20 below. Of the 68 members, 51 were married, 15 were single, and the remaining 2 were either widowed or divorced. The outcome demonstrates that the majority works for both themselves and their families. Table 4.20 below displays the responder's marital status for the neighborhood representation committee.

Table 4.20. Neighborhood Park Respondent Committee Marital Status

Marital Status of Neighborhood Park Respondent Committee			
		Frequency	Percent
Marital Status	Married	51	75
	Unmarried	15	22.1
	Other	2	2.9
Total		68	100

• Educational Status and Occupation of Neighborhood Park Respondent Committees

Here under stated table, there is an analysis of the elected committees' cross-tabulation of education and occupation. When we look at the educational backgrounds of the 68 respondents as a whole, we find that 15 of them have a second degree or higher, 27 have a first degree, 15 have a college diploma, and the remaining 11 are either uneducated or have educational backgrounds below a college diploma. That demonstrates that the most of committee leaders have first-degree or higher educational status. Of the 28 committee members who are government employees, 12 work for private companies, 18 are self-employed, and the other members are either unemployed or retired. The education and employment status of the respondents are listed in Table 4.21, which reveals a range of employment levels and educational backgrounds.

Table 4.21. Neighborhood Parks Committee Educational Vs Occupation Status of Respondents

Level of Education * Occupation Condition Cross tabulation of Neighborhood park Respondent Committee						
		Occupation Condition				
		Governmental Employee	Private Company	Self - Worker	Retired	Total
Level of Education	Second Degree and Above	11	0	4	0	15
	First Degree	15	5	5	2	27
						80

College					
Diploma	1	5	8	1	15
Below					
College					
Diploma	1	2	1	7	11
Total	28	12	18	10	68

• Selection and Sources of Plants

Plants were main components of green areas, and for special purpose like neighborhood park, and it needs to select and plant appropriately for the suitability of human healths and convenience of the recreation area. In our country, most of the garden area plantation not supported scientifically, but planted randomly based on the interest of individual person. So, the same story seen on neighborhood parks. Here the analysis tries to indicate the way plant selection and source of the plants by using cross tabulation on Table 4.22 below.

The analysis show that, 47% of plants selection where conducted by the preference of the community not supported by the professionals, while 23.5% were conducted by support of professionals, 11.8% of the plant selection conducted paying for gardeners, and the rest 17.6% selected randomly as found. According to selected 68 committee respondents, 48 committee leaders explain that the sources of plants were by purchasing from different suppliers, the rest 20 committee declare that they get by gift from woreda Urban Beautification and Green Development Office. By employing cross tabulation on Table 4.22 below, the study in this case seeks to show how the plants were chosen and where they came from.

Selection of Plants * Source of Plants Cross tabulation				
		Source of Plants		Total
		By Purchase	By Gift	
Selection of Plants	By Self-Professional	16	0	16
	By Community Preference	25	7	32

Paying for an outside Expert	2	6	8
Usually Use as Found	5	7	12
Total	48	20	68

Table 4.22. Neighborhood Park Plant Selection and Source Indication Table

- Support of government on community based neighborhood park development

Woreda six Urban Beautification and Green Development Office is an execution of the government works and the office established for the purpose of green environment protection and urban green area development. So, the office supports the neighborhood parks by giving technical advice, professional assist in giving training and plant provision.

From the questioner prepared for chosen committee, 29 of the selected committee leaders assure that they get technical support by earning training from woreda six urban beautification and green development office, 10 of committee replied that they get material support and plant donation, while the rest 29 of committee respondent claim that they did not get any support from woreda six urban beautification and green development office and any stake holders and/ or concerned government party. See Table 4.23 for the analysis' findings.

Table 4.23. Summary on Government Support of Community Based Green Space or Park Developments

How Government Support Community Based Green Space or Parks		
	Frequency	Percent
By Giving Training	29	42.6
By Donating Resource	10	14.7
No Support is Given	29	42.6
Total	68	100

4.3.2 Assessment on Community Based Green Space or Parks

Development and Management Problem

The government and the urban people themselves have given little thought to creating community-based green space since there is a lack of legislative direction. There were a variety of issues with the green space. They were and still are used as trash dumps in certain places, while they were transported, either knowingly or unknowingly, for various reasons in other sections of the city.

Community-based green space was created in this woreda via the goodwill of the locals. At the woreda level, there is neither a strategy nor a budget for the sector's creation of community-based green space. Therefore, based on the responses, the main issues with the current development plan include low levels of community participation, a lack of understanding, a lack of community and district coordination, a lack of guidelines and rules for the creation and administration of green spaces, a lack of sufficient funding, a lack of professionals, and other related issues. The challenges with park creation and management are covered in Table 4.24 below.

Table 4.24. Community Based Green Space or Parks Development and Management Problems

Problem of Community - Based Green Space or Park Development and Management		
	Frequency	Percent
Lack of Community		
Participation	41	42.3
Lack of Understanding	15	15.5
Lack of Community and		
District Coordination	24	24.7
Absence of Rules and Regulations	4	4.1
Lack of Money	9	9.3
Lack of Professional help		
and Supervision	4	4.1
Total	97	100

✦ **Lack of Community Participation**

Community involvement and collaboration play an important role in all population-centered projects; thus, involving people in community projects helps them solve their own problems and fosters a stronger sense of community; without community participation, the project will not be successful even if implemented. Ensure the active participation of grass-roots groups and technical support providers, which aids in the initiation of community participation.

Based on the aforementioned field data assessed in Table 4.23 above, 42.3% of respondents identified a significant lack of community participation NPs development in the research subject locations. According to the data presented above, very few woreda communities have participated in local park creation. As a result, there is a decrease in sense of ownership, development contributions, and involvement. According to information gathered from woreda officials interviewed in Kolfe Keraniyo Sub City Woreda 6, the woreda administration attempts to address the issue of low community participation by establishing committees at both the woreda and neighborhood levels to promote participation among the locals.

✦ **Lack of Understanding (Awareness)**

Neighborhood park users should be aware of the economic, ecological, social, and physical benefits of parks; yet, scholars state that the amount of community knowledge and awareness in developing country is unclear. It is critical for city dwellers to understand the impact of urban parks on environmental and human connections.

It is thought that assessing the urban population's awareness of the benefits of urban parks will help to protect these parks, improve the value placed on green spaces, and promote urban identity and a sense of belonging. It will also strengthen users' contributions to urban park planning, implementation, and management procedures based on their preferences.

According to the statistics in Table 4.24 above, 15.5% of respondents said that the community was informed of the significance of community-based green space, implying that 84.5% of inhabitants are unaware of the use of neighborhood parks. Numerous advantages of green spaces include those for the environment, the economy through increased employment prospects, and leisure and enjoyment. The majority of people in the woreda are reportedly uninformed of the ecological advantages of having well-maintained green spaces that support an ecosystem, according to an interview

with the green areas committee. People of all ages, from all cultures, and of both sexes are drawn to green areas because of their socio-cultural coherence, which also provides a venue for interaction and integration.

✦ **Lack of Community and District Coordination**

It is obvious that the development of green spaces was crucial for the aesthetic appeal, social objectives, and quality of community life; hence, cooperation is needed to develop the area and build a sense of ownership. Smith (2009), stated that collaboration can be either formal (mandated by the state) or informal; intra and inter-organizational; vertical or horizontal; and involve many organizations. Baycant-Levent et al. (2004), suggests that “a collaborative and enable partnership among local authorities, local business and voluntary groups should be formed” to improve the quality of urban green spaces.

According to the data analysis of Table 4.24 above, 15.5% of respondents said that the community does not work together to build community-based green spaces. The majority of the neighborhood's residents, according to the green areas committee's interview, preferred to take a stand against it and express their grievances rather than cooperate and foster growth.

✦ **Absence of Rules and Regulation**

Community privilege should have protected by laws and regulations; without regulation abasement and use change may aggravate. Based revealed by an analysis of the data, one prepared question inquired about a difficulty with community-based park or green space development and management in the Table of 4.24 data above. Out of the all respondents, 4 claimed that a lack of laws and regulations was the biggest obstacle inhibiting the growth of green areas and instances of poor management.

✦ **Lack of Finance**

The data survey revealed that every neighborhood park in the case locations was supported by the local population because the office for woreda city beautification and greenery development lacked cash or a budget for development assistance. The woreda six urban beautification and green development office head said during the interview that while the government does not have a direct budget allocation for community-based neighborhood park support, the office suffers from direct expenses, including allowance costs for the professionals who work in the woreda green spaces.

Professionals assist with development and management tasks and provide different plant species for the green spaces spread over the entire woreda.

A financial issue was one of the prepared questions in the Table of 4.24 data mentioned earlier. The response options included a status of finance analysis, which showed that, out of the 97 respondents overall, 9 said that a lack of funding for green area development and instances of poor management were the main issue, because locals weren't willing to keep paying towards growth on a regular basis. Because of this, the main challenges were a lack of funding and the requirement to maintain the desire and drive to engage with particular communities.

✦ Lack of Professionals on Green Area Beautification

At the Kolfe Keraniyo sub-city woreda 6 office for urban beautification and greenery development, five experts are working on the scheme and management of the green spaces, but up to eight professionals were required. Moreover, the workers' educational and professional backgrounds didn't match the position's requirements. More details can be found in Table 4.25.

Table 4.25. Existing woreda six urban beautification and green development staff human resource status

No.	Position	Existing Staff	Demand	Gap	Supply in%	Qualification	Required work Experience	Remark
1	River Basin Green Area Development Administration Team Leader	1	1	0	100	BSC in Horticultural , Plant Science and Environmental Science	Have 8 Years' Experience	Political assigned Qualified Female Leader
2	Office Administration Officer	1	1	0	100	College Diploma	Have 0 Years' Experience	Qualified Secretary
3	Green Area Development Intermediate Expert	2	3	1	66.7	BSC in Horticultural , Plant	Have 6 Years' Experience	Unexperienced Experts

						Science and Environmen tal Science		
4	Plant Protection Intermediate Expert	0	1	1	0	BSC in Horticultural , Plant Science and Environmen tal Science	Have 4 Years' Experienc e	No Expert
5	Community Participation and Awareness Creation Intermediate Expert	1	2	1	50	BSC in Horticultural , Plant Science, Natural Resource Administrati on and Environmen tal Science	Have 4 Years' Experienc e	Unexperienced Experts
	Total	5	8	3	62.5			

Source: Kolfe Keraniyo Sub-City, Woreda Six Urban Beautification and Green Development Administration Office

However, the office takes its collaboration with the community for the creation of the neighborhood park very seriously. The office can offer assistance in a sum of ways, including by assisting in selecting committee members, offering support with professional counsel, and consulting for further development and management. According to the prepared question, 4 of the 97 respondents said that the biggest issue preventing the creation and administration of local parks was a shortage of professionals.

➤ **Assessment on the use of community based green space or parks purpose**

- Benefit of community based green space or parks

Urban green areas are bare patches of land. Whether for the sake of social connection, aesthetic enjoyment, or ecological preservation, it significantly improves society and

quality of life. Additionally, the communities' green infrastructure asset contributes to the following advantages: -

- ✓ Environmental Protection,
- ✓ Health and Wellbeing,
- ✓ Economic Benefits,
- ✓ Social Benefits, and Planning Goal.

In Kolfe Keraniyo sub-city woreda 6, It was decided to create a neighborhood park based on the requirements of the inhabitants in many ways. The 97 respondents provided their thoughts on how frequently local residents utilize their neighborhood parks, which are summarized on Figure 4.28. below, in response to the prepared question.

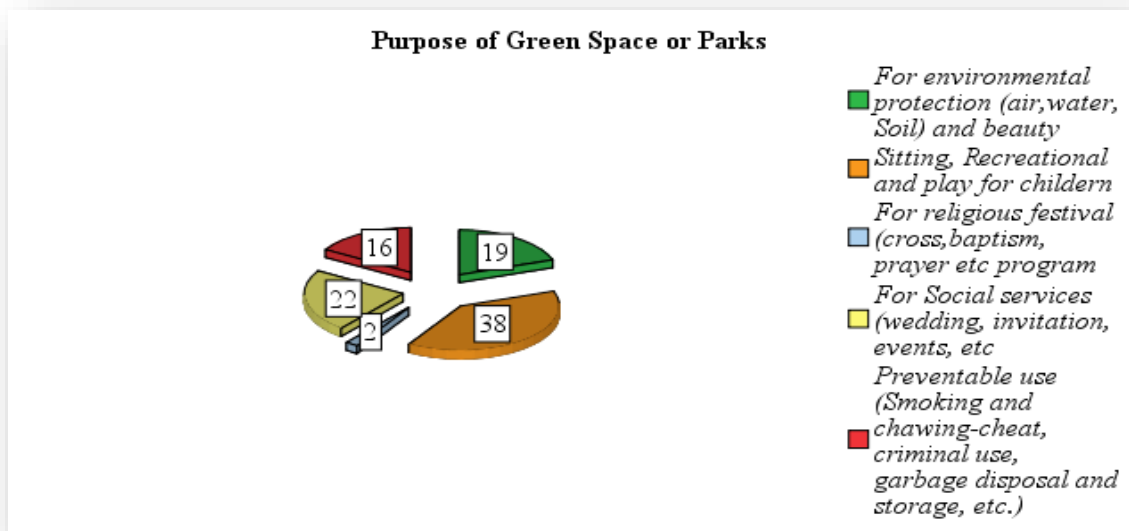


Figure 4.28. Purpose of Green Space or Parks of the Research Area

The results of the analysis show that 19 of the respondents believed that parks were primarily used for environmental protection, 38 believed they were used for recreation, two for religious celebrations, 22 for weddings and other events, and 16 believed they were used for illegal or preventable activities like drug use and trafficking.

CHAPTER FIVE

5. Conclusions and Recommendations

5.1. Conclusions

This research primary objective was to evaluate the status and challenges of community-based neighborhood park development plan, implementation, and management by paying particular emphasis to the provision of ecosystem services in spatial plan situation, organizational issues, and management issues. The research has three specific goals: to understand the status, the planning situation, how the public feel, and the opportunities and challenges associated with managing the development of community-based neighborhood parks in the city administration, Kolfe Keraniyo Sub-City, Woreda 6. Additionally, in partial fulfillment of the conditions for the award of a Master of Science degree in urban planning.

Organizing and administration of the neighborhood park are influenced by the local community committee members' ideas and enthusiasm. Due to the presence of an individual or group of committee members who were committed and could give their time, effort, money, and power for the development and management of community-based neighborhood parks in some areas have been developed to a good level.

In relation to plan status, most neighborhood parks with a strong sense of community lacked a legally enforceable park design. Some of the parks without having a site plan and land-scape design the residents created their park. Consequently, there are no specific design fulfillment for a component of a green area, the majority of neighborhood parks lack amenities like seating, lighting, fences, walkways, and areas for children to play that should be included in a green area. Every green space must stand by the proportionate norm of 80% green space and 20% company facilities. The survey sought to understand how people felt about community parks that are centered in local communities. The findings indicated that 50% of respondents were aware of how community-based green spaces serve to provide their basic environmental, social, and economic needs.

For recreational purposes, a community-run neighborhood park is invaluable because open space development is important for the development of the mind, body, economy, society, and environment. The difficulties that have prevented people from reaping the benefits were of great concern to the study. The neighborhood park, though, is intended for general opportunities yet faces a number of difficulties. The allocated free spaces for

the construction of a neighborhood park initially received little consideration from the relevant bodies. Additionally, the surrounding community was not doing as well as was anticipated.

Additionally, the difficulties have been dominating their extent in the neighborhood. Due to the structural plan's generality, each and every neighborhood park was not assigned through land use planning process, and when the revision was carried out, the neighborhood parks were allotted for other land use purposes.

Furthermore, the distributions of recreational and open space (Urban Green Areas) did not meet the 30%, 30%, and 40% targets that are assigned respectively to the environment, the road network, and construction of the Addis Ababa Structure Plan. As a result, its proportion per person is below the standards, which stated by the WHO was the norm for the World Health Organization (WHO) is stated to be 9 m² per person, and for Africa, 7 m² per person. According to international standards, Addis Ababa has one of the lowest per-person green space availability rates at less than 1m². These trends developed as a result of the top governing structure's shortcomings in plan preparation and regulation, woreda administration management, and other relevant bodies. The analysis's findings indicate that some area of woreda 6 were inaccessible. Additionally, some neighborhood parks that are part of the community but are not included in land use plans because their area is less than 0.3 hectares need to have controlling mechanisms in place to prevent incorrect land use changes and land use violations.

The study also revealed that the woreda administration had not allocated funds for the neighborhood park other than the fee intended to pay for professionals' monthly salaries. In addition, the lack of funding has led to a skill gap among professionals and elected volunteer committees.

The degree of community involvement has resulted in the neighborhood park being in various phases of status, depending on the villagers and their ideology engagement varies from place to place. This is also a result of locals' and committee members' lack of effort in creating and using neighborhood parks.

The woreda six urban beautification and green development office is in need of skilled professionals to fill positions, however the woreda's human resource pool is both undersized and of poor workmanship.

Numerous factors, including a lack of community involvement, knowledge, coordination, finances, professional support, and/or supervision, as well as the absence of rules and regulations, are known to contribute to a decline in development. The inhabitants and officials in the woreda paid the parks little regard and consideration. The officials' level of education and field of study may have an impact on how aware they are of green spaces. They held the opinion that green spaces are merely open areas utilized primarily as playgrounds for kids, for celebrations of cultural holidays, and for Eider.

5.2. Recommendations

The study's conclusions led to the following recommendations for fostering community interest in neighborhood parks and ensuring the continued growth of parks in the research region.

A community-based neighborhood and other parks will need systemic reforms to better link economic, environmental, and social policies and institutions. These changes must be politically and economically feasible while also discovering synergies and weighing trade-offs and unknowns.

Advocate for and promote the creation of a comprehensive, integrated neighborhood park management plan that addresses the pressing concern and opportunity posed by the existing NPs vacant lots. As a result, the woreda administration must play a leading role in integrating the community in order to sustain NPs development and fill the deficit of skilled personnel. Without integration and the absence of professionals, the set of goals or objectives would not be achieved or met.

For residents, having a neighborhood park of good quality within walking distance is crucial. Therefore, accessibility is unquestionably a key element while considering the needs of the community. In order to address the aforementioned challenges, the woreda administration must work very hard and also offer training to export personnel working in various institutions as well as devoted community members.

When the next structural design is being prepared, it might be important to include neighborhood parks for the protection of land use violation. Each community-based neighborhood park in the woreda should have a plan that was created by qualified specialists to allocate the many uses of the green space. This can help to increase the sustainability of the community-based green space.

The neighborhood's community-based green space is poorly planned. In order to improve the community's quality of life and create meaningful spaces. Planning should take into account the culture and values of the neighborhood. It is therefore imperative that the responsible party and stakeholders carry out the community-based green space strategy.

Integration between locals and other woreda stakeholders is necessary. Potential participants in the growth and administration of the subject sector include the Addis Ababa City Administration, Addis Ababa City Plan and Development Commission, private sector developers, and NGOS. As a result, the woreda administration should collaborate closely with neighborhood park stakeholders who are based in the local community and aggressively need other non-governmental organizations to promote and develop the parks, because they have the passion to invest their valuable time, money, and knowledge on the park development and management. The Woreda Six Urban Beautification and Green Development Office should exercise caution in selecting and proposing committee members, as low participation would result from members' lack of initiative in development.

In order to promote environmental sustainability, create effective plans, formulate strategies, and utilize synergies, it is vital to build on the financial support that the community has previously contributed for local parks.

The woreda administration might need to have an annual community day and recognize better performed neighborhood park developers on that day. This style of event encourages community interaction and problem-solving.

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Appendix I. Questioners

Date: - March, 14/2022 G.C



Addis Ababa University
Ethiopian Institute of Architect, Building Construction and
City Development (EiABC)
Department of Urban and Regional Planning

Dear Respondent,

My name is Mulatu Assefa Currently I am studying a Master of Science in Urban Planning at Addis Ababa University. I am here to collect data for my research entitle “Assessment of Community Based Neighborhood Parks Planning, Practice, and Management in Addis Ababa City: The Case of Kolfe Keraniyo Sub City woreda 6”.

The collected information will be used only for academic purposes and partially fulfill the requirement for the award of a Master’s Degree in Urban Planning from the Ethiopian Institute of Architect, Building Construction and City Development (EiABC) of the Addis Ababa University.

I assure you that your information will not be disclosed to anybody and can be confidential. Your participation is voluntary, feel free to express your views due to the short time you are asked to answer these Structured Interviews questions.

Thank you very much for enabling me to pursue my career.

May God bless you!

A. Questionnaires to be filled by officials and Experts workers

A- Question prepared for Kolfe Keraniyo sub-city Plan and Development Commission Branch Office, Team Leaders and Experts workers.

Please, put ✓ your appropriate response in the box.

I. Background Information: -

1. Gender - 1. Male ----- 2. Female -----
2. Age Range - 1. From 18 - 30 years ----- 2. From 31 – 40 years -----
3. From 41 - 50 years ----- 4. Above 51 years -----
3. Marital status- 1. Married ---- 2. Divorced ---- 3. Unmarried ---- 4. Others ----
4. Education – 1. Second degree and above --- 2. First degree ----
3. College diploma ---- 4. Below college diploma ----
5. Reading and writing only ----
5. Occupation – 1. Governmental employee ---- 2. Private company ----
3. Self-worker ---- 4. Retired ---- 5. Unemployed ----

II. Green Park Assessment Questions: -

1. Is there community-based neighborhood parks or green space spatial plan in the land use plan in the Kolfe Keraniyo Sub-city?

1. Yes ☐ 2. No ☐

1.1. If your answer is yes to question no.1, what criteria and factors do they follow for spatial planning?

1. Participatory planning and community involvement ☐
2. Equitable access ☐
3. User satisfaction and safety ☐
4. Creating sufficient assets inland ☐
5. Creates employment opportunity ☐

2. Is the prepared master plan implemented on the ground after the preparation with respect to green space development?

1. Yes, fully implemented ☐ 2. Yes, partially implemented ☐
3. No, not implemented at all ☐

2.1. If your answer is partially implemented or not implemented at all to question no.2, what makes an ineffective master plan in the sub-city/ or the city with respect to green space development?

1. Inherent weakness in the master plans themselves; ☐

2. Disconnect between spatial planning, sector or infrastructure plans, and budgeting and investment plan decisions; ☐
3. The lack of coordination among key agencies; ☐
4. Lack of or ineffective development controls; ☐
5. Unrealistic planning standards and regulations; ☐
6. Limited capacity and resources for enforcement; ☐

3. What solutions do you recommend for proper planning, development and management of green spaces?

.....

4. How do you rate the current planning and Monitoring situation of community-based neighborhood parks or green spaces in your Sub-City?

1. Excellent ☐ 2. Very good ☐ 3. Good ☐
4. Fair ☐ 5. Bad ☐

5. Are there national legislations and local regulations for community-based neighborhood parks or green spaces?

1. Yes, it has both national legislation and local regulation ☐
2. Yes, it has national legislation but no local regulation ☐
3. Yes, it has local regulation but no national legislation ☐
4. No, there is no national legislation and local regulation ☐

5.1. If there is national legislation and monitoring regulation, how is it implemented?

1. Properly implemented ☐ 2. Partial implemented ☐ 3. Not implemented ☐

6. Which institution/s is/are responsible for planning and management of the woreda community-based neighborhood parks or green space?

.....

Thank you,
 For Your Response!

B- Question prepared for Kolfe Keraniyo sub-city and woreda 6 Urban Beautification and Greenery Development Adm. Office, Team Leaders and Experts.

Please, put √ your appropriate response in the box.

I. Background Information: -

1. Gender - 1. Male ----- 2. Female -----
2. Age Range - 1. From 18 - 30 years ----- 2. From 31 – 40 years -----
3. From 41 - 50 years ----- 4. Above 51 years -----
3. Marital status- 1. Married ---- 2. Divorced ---- 3. Unmarried ---- 4. Others ----
4. Education – 1. Second degree and above --- 2. First degree ----
3. College diploma ---- 4. Below college diploma ----
5. Reading and writing only ----
5. Occupation – 1. Governmental employee ----- 2. Private company ----
3. Self-worker ---- 4. Retired ----- 5. Unemployed ----

II. Park Assessment Questions: -

1. How do you see the effective structure to operate the activity which the office stabilized or organized?

1. Fully structured ☐ 2. Poorly structured ☐ 3. Unstructured ☐

1.1. If your answer is fully structured to question no.1, how many workers/employees are needed according to the structure?

.....
.....

2. How Many experts/workers are there in the sub-city and/or woreda concerning Beautification and Greenery Development Office?

1. Full as structured ☐
2. More than half of the structured ☐
3. Less than half of the structured ☐
4. None at all ☐

3. Is there any budget allocated for community based neighborhood parks or green space development and management?

1. Yes ☐ 2. No ☐

4. How far are woreda community-based neighborhood parks or green space areas accessible for the community?

1. Less than and/or equal to 0.5 K.m ☐

2. 0.51 up to 2 K.m ☐

3. Greater than 2 K.m ☐

5. Is that affordable for the community in terms of price?

1. Yes ☐ 2. No ☐

6. What types of plant species were planted in the neighborhood parks nearest to the community?

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7. Would you specify the importance of community-based neighborhood parks or green space availability in the kolfe keraniyo sub-city woreda 6?

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8. What are the current real functions interrupted/reduced from community-based neighborhood parks or green space in the kolfe keraniyo sub city woreda 6 for the dwellers?

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.....

.....

Thank you,
For Your Response!

በአዲስ አበባ ዩኒቨርሲቲ

የኢትዮጵያ የኪነ ህንፃ ንድፍ ፣ ግንባታና ልማት ትምህርት ማሰልጠኛ ተቋም

የከተማና ክልል ፕላን ትምህርት ክፍል ዘርፍ

ክቡር መላሽ፣

ስሜ ሙላቱ አሰፋ ይባላል በአሁኑ ወቅት በአዲስ አበባ ዩኒቨርሲቲ የኢትዮጵያ የኪነ ህንፃ ንድፍ ፣ ግንባታና ልማት ትምህርት ማሰልጠኛ ተቋም በከተማ ፕላን ትምህርት ዘርፍ የሁለተኛ ዲግሪ ተማሪ ስሆን የመመረቂያ ጽሁፍ ጥናት እየሰራሁ እገኛለው። የጥናቴ አርዕስት < በአዲስ አበባ ከተማ ኮልፌ ቀራንዮ ክፍለ ከተማ ወረዳ ስድሶት ውስጥ ያሉ በማህበረሰብ አቀፍ የሚለሙ የመኖሪያ አካባቢ አረንጓዴ ፓርክ ልማትን በተመለከተ ከንድፍ ጥናት፣ ከባለድርሻ አካላት ተሳትፎ እና የአረንጓዴ ፓርክ ልማት አስተዳደርና አመራር አንፃር ጥናት ማካሄድ > የሚል ነው።

የተከበሩ የጥያቄው መላሽ በቅድሚያ እንዲያውቁት እና እርግጠኛ እንዲሆኑ የምፈልገው ማንኛውም የሚሰጡት መልስ የሚያገለግለው ለመመረቂያ ፅሁፍ ጥናት ብቻ መሆኑን እየገለፅኩ ለሌላ ማንኛውም ሦስተኛ ወገን የማይተላለፍ እና ለሌላ አገልግሎት የማይውል መሆኑን በታማኝነት አረጋግጥልዎታለሁ ስለሆነም ነፃ ሆነው ከታች ለተዘረዘሩት ጥያቄዎች ተገቢ የሆነ ምላሽ እንዲሰጡኝ በአክብሮት እጠይቃለሁ።

ለጥናቴ ስለሚሰጡት ምላሽ ከወዲሁ በእግዛብቴ ሥም ክልብ አመሰግናለሁ!!

ሀ. በማህበረሰብ አቅም የሚለማ የመኖሪያ አካባቢ አረንጓዴ ፓርክ ቦታ ለኮሚቴና ለአስተባባሪዎች የተዘጋጀ መጠይቅ

- እባክዎ ከታች በተቀመጠው ክፍት ቦታ ምላሽን በአጭሩ ይጻፉ፤ በምርጫ መልክ ለተቀመጡት ደግሞ $\surd$ ምልክት ያድርጉ

፩. የመላሽ የግል መረጃ፡ -

1. ፆታ - 1. ወንድ ----- 2. ሴት -----
2. ዕድሜ - 1. ከ18 - 30 ዓመት ----- 2. ከ31 – 40 ዓመት -----
3. ከ41 - 50 ዓመት ---- 4. ከ51 ዓመት በላይ ----
3. የጋብቻ ሁኔታ- 1. ያገባ ---- 2. ፈት ---- 3. ያላገባ ---- 4. ከምርጫዎቹ ሌላ ----
4. የትምህርት ሁኔታ – 1. ሁለተኛ ዲግሪ እና ከዚያ በላይ --- 2. የመጀመሪያ ድግሪ ----
3. የኮሌጅ ዲፕሎማ ---- 4. ከዲፕሎማ በታች ----
5. መፃፍና ማንበብ ----
5. የስራ ሁኔታ – 1. የመንግስት ተቀጣሪ ---- 2. በግል ድርጅት ተቀጣሪ ----
3. የግል ስራ ---- 4. ጡረተኛ ---- 5. ስራ አጥ ----

፪. የመኖሪያ አካባቢ የአረንጓዴ ልማትን በተመለከተ የቀረቡ ጥያቄዎች፡ -

1. በማህበረሰብ አቅም የሚለማ አረንጓዴ ቦታ ኮሚቴ ከአስተዳደር እና የንድፍ እቅድ ክትትል አኳያ ስራው ምንድን ነው?
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.....
2. ይህ በማህበረሰብ አቅም የሚለማ የመኖሪያ አካባቢ አረንጓዴ ቦታ የትኛውን ህግ ተከትሎ ይተዳደራል?
.....
.....
3. የመኖሪያ አካባቢ አረንጓዴ ቦታ ልማት ኮሚቴ ምን ያህል ቁጥር አባላት አለው?
.....
4. የ ኮሚቴው ሥራና ኃላፊነት ምን ምን ስራዎችን ታሳቢ ያደርጋል?
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5. የኮሚቴ ስብረትን በተመለከተ በእድሜ፣በፆታ፣በትምህርት ደረጃና በሥራ ልምድ ውዘተ በመሳሰሉት ቢያብራሩ?

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6. ኮሚቴው በሚያስተዳድረው አካባቢ ያለው በማህበረሰብ አቅም የሚለማ የአረንጓዴ ቦታ ከምን ያህል የመንግስት ተቋም ጋር የስራ ግንኙነት አለው? እነ ማን ናቸው በስም ቢጠቅሱልን?

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7. የትኛው የመንግስት አካል ነው ድጋፍ የሚያደርግላችሁ?

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.....

8. ድጋፍ የሚደረግላችሁ በምን መልኩ ነው?

- 1. በገንዘብ ☐
- 2. በስልጠና ☐
- 3. በመገልገያ ግብአቶች በመለገስ ☐
- 4. ምንም ድጋፍ አይደረግልንም ☐

9. ተክሎችን በምን መልኩ ነው የምታገኙት?

- 1. በግዢ ☐
- 2. በስጦታ ☐
- 3. በራስ ችግን ጣቢያ በማፍላት ☐

10. ተክሎችን እንዴት ነው የምትመርጧቸው?

- 1. በራስ ባለሙያ ☐
- 2. በማህበረሰቡ ☐
- 3. በውጪ ባለሙያ በክፍያ ☐
- 4. እንደ ተገኝ መጠቀም ☐

11. በማህበረሰብ አቅም የሚለማ የአካባቢ አረንጓዴ ልማት ቦታ አጠቃቀም፣ አያያዝና ጥበቃ እንዲሁም አስተዳደር አኳያ የማህበረሰቡ ተሳትፎ ምን ይመስላል?

- 1. በጣም ከፍተኛ ☐

- 2. ከፍተኛ ☐
- 3. ዝቅተኛ ☐
- 4. ጭራሽ ተሳትፎ የለም ☐

አመሠግናለሁ!!

ለ. በነዋሪዎች የሚመለ የተዘጋጀ መጠይቅ

እባክዎ ከታች በተቀመጠው ክፍት ቦታ ምላሽን በአጭሩ ይጻፉ፤ በምርጫ መልክ ለተቀመጡት ደግሞ ✓ ምልክት ያድርጉ

፩. የመላሽ የግል መረጃ፡ -

- 1. ፆታ - 1. ወንድ ----- 2. ሴት -----
- 2. ዕድሜ - 1. ከ18 - 30 ዓመት ----- 2. ከ31 – 40 ዓመት -----
3. ከ41 - 50 ዓመት ----- 4. ከ51 ዓመት በላይ
- 3. የጋብቻ ሁኔታ- 1. ያገበደ ----- 2. ፈት ----- 3. ያላገባ ----- 4. ከምርጫዎቹ ሌላ -

- 4. የትምህርት ሁኔታ – 1. ሁለተኛ ዲግሪ እና ከዚያ በላይ --- 2. የመጀመሪያ ድግሪ

3. የኮሌጅ ዲፕሎማ ----- 4. ከዲፕሎማ በታች -----
5. መፃፍና ማንበብ -----
- 5. የስራ ሁኔታ – 1. የመንግስት ተቀጣሪ ----- 2. በግል ድርጅት ተቀጣሪ -----
3. የግል ስራ ----- 4. ጡረተኛ ----- 5. ስራ አጥ -----

፪. የመኖሪያ አካባቢ የአረንጓዴ ልማትን በተመለከተ የቀረቡ ጥያቄዎች፡ -

1. የአረንጓዴ ቦታዎች ወይም መናፈሻዎች መኖር ለሰው ልጆች ህይወት ምን ያህል አስፈላጊ ነው ብለው ያምናሉ?

- 1. በጣም አስፈላጊ ነው ☐ 2. አስፈላጊ ነው ☐
- 3. እውቀቱ የለኝም ☐ 4. አያስፈልገኝም ☐

2. ለተራ ቁጥር 1 ጥያቄ መልሶ አያስፈልገኝም ከሆነ ለምን እንደሆነ ያብራሩ?

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3. በወረዳዎ ውስጥ በቂ የሆነ በማህበረሰብ አቅም የሚለማ የአረንጓዴ ቦታ ልማት አለብለው ያስባሉ?

1. አዎ አለ በቂ ነው ☐ 2. አለ ነገር ግን በቂ አይደለም ☐

3. አለ ነገር ግን በጣም ትንሽ ነው ☐ 4. የለም ☐

4. በእረፍት ጊዜዎች መዝናኛ ቦታዎች ማሳለፍ ይወዳሉ?

1. አዎ እወዳለሁ ☐ 2. አያይ አልወድም ☐

4.1. ለተራ ቁጥር 4 ጥያቄ መልሶ አያይ አልወድም ከሆነ የእረፍት ጊዜዎን በሌላ በምን ያሳልፋሉ ያብራሩ?

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5. ሰዎች በትርፍ ጊዜያቸው የት ቢዝናኑ ጥሩ ነው በማለት ይመክራሉ?

1. አረንጓዴ /መናፈሻ ቦታ ማሳለፍን ☐ 2. በስፖርት ☐ 3. መፅሐፍ በማንበብ ☐

4. በሌላ በማህበራዊ ተሳትፎ ☐ 5. አልኮል በመጠጣት ☐

6. አረንጓዴ ቦታ ወይም መናፈሻ ቦታዎች ክፍያ ቢኖራቸው ይስማማሉ?

1. እስማማለሁ ☐ 2. አልስማማም ☐

7. በማንኛውም አጋጣሚ የማግበት ዕድል ቢኖሮት፣ የሰርግዎ ቦታ የት ቢሆን ይመርጣሉ?

1. ሆቴል ☐ 2. ፓርክ/መናፈሻ ☐ 3. አዳራሽ ☐ 4. መኖሪያ ቤት ☐

8. አረንጓዴ ቦታ ወይም መናፈሻ ለማግኘት ከቤትዎ ምን ያህል ደቂቃ ይዳዘሉ?

1. ከ5-9 ደቂቃና ከዚያ በታች ☐ 2. ከ10 እስከ 35 ደቂ ☐ 3. ከ35 ደቂቃ ☐

በላይ

9. በምን ያህል ጊዜ አረንጓዴ ቦታ መናፈሻዎችን የጎበኛሉ?

1. በየቀኑ ☐ 2. በየሳምንቱ ☐ 3. በየወሩ ☐

4. በየአመቱ ☐ 5. ጭራሽ አልጎበኝም ☐

10. ከማን ጋር ፓርክ ወይም የአረንጓዴ መናፈሻ ቦታዎችን መጎብኘት ይወዳሉ?

1. ከቤተሰብዎ ጋር ☐ 2. ከገደኞችዎ ጋር ☐ 3. በማህበር ☐

4. ከፍቅረኛዎ ጋር ☐ 5. ለብቻዎት ☐

11. በአካባቢዎ የሚገኝ በማህበረሰብ አቅም የሚለማ ፓርክ/አረንጓዴ መናፈሻ ቦታ አለ?

1. አለ ☐ 2. የለም ☐

11.1. ለተራ ቁጥር 11 ጥያቄ መልሶ አለ ከሆነ የአያያዙ ሁኔታ ምን ይመስላል?

1. እጅግ በጣም ጥሩ ☐ 2. በጣም ጥሩ ☐ 3. ጥሩ ☐
 4. መካከለኛ ☐ 5. ዝቅተኛ ☐ 6. በመጥፎ ሁኔታ ☐

11.2. ለተራ ቁጥር 11 ጥያቄ መልሶ አለ ከሆነ ለምን ለምን አገልግሎት ይጠቀሙበታል?

1. ለአካባቢ ጥበቃ (አየር፤ ውሃ፤ አፈር) እና ለውበት ☐
 2. ቁጭ ብሎ ለመዝናናትና ለልጆች መጫወቻ ☐
 3. ለሃይማኖታዊ በአላት (መስቀል፤ ጥምቀት፤ ፀሎት የመሳሰሉት ፕሮግራም...) ☐
 4. ለማህበራዊ አገልግሎት (ሰርግ፤ ግብዣ፤ እድር፤ እቅብ የመሳሰሉት ፕሮግራም...) ☐
 5. ለማህበረሰብ ውይይት ☐

6. አላስፈላጊ ጥቅም (ጫት መቃሚያ፤ የወንጀል መጠቀሚያ፤ ቁሻሻ መጣያና ማጠራቀሚያ የመሳሰሉት ...) ☐

12. በማህበረሰብ አቅም የሚለማ ፓርክ/አረንጓዴ ቦታዎች የልማት እና አስተዳደር ችግሮች ምንድን ናቸው ብለው ያስባሉ?

1. የማህበረሰብ ተሳትፎ ማነስ ☐
 2. ግንዛቤ አለመኖር ☐
 3. በማህበረሰቡ እና በወረዳው ቅንጅት አለመኖር ☐
 4. ደንብ እና መመሪያ አለመኖር ☐
 5. የገንዘብ እጥረት ☐
 6. የባለሙያ እገዛና ክትትል አለመኖር ☐

አመሰግናለሁ!!

Appendix II. Additional Field Survey Photos and Google



Images







Gaddissa NPs



Appendix III. Publishable Manuscript

ASSESSMENT OF COMMUNITY BASED NEIGHBORHOOD PARKS' PLANNING, PRACTICE AND MANAGEMENT: THE CASE OF WOREDA SIX IN KOLFE KERANIYO SUB-CITY, ADDIS ABABA

Mulatu A. and Hayal D.

Abstract

The proportion of people living in major cities is rapidly growing. There was high movement of individuals from rural to urban areas. Built-space density is rising, housing is developing, infrastructure is being created, and industrial zones outside the city are being reorganized. Because of this, the green spaces in the capital have seen excessive exploitation and significant degradation as a result of a lack of meticulous management of green spaces and insufficient greening operations. One of the solutions would be to build and preserve community-based neighborhood parks and green spaces. The study area location where found in Addis Ababa city, Kolfe Keraniyo sub-city, woreda 6. The main objective of the research was to examine community-based neighborhood-park planning, practice, and management (PPM), with a focus on planning provision, community perception, organization, and administrative issues related to its ecosystem services. The most important issues of the research were assessing urban green area planning provision, and management of communities' knowledge of urban neighborhood park benefit, practice and problem identifying, as well as government involvement in human and funding resources, and stakeholders' contribution to green space development. The research study follows descriptive research approach to notice both quantitative and qualitative data, helps in assessing people's preferences, and including planning status, engagement practice, and management to solve challenges. The method used mainly field survey tactic across the study area through analyzing or investigating existing condition using primary as well as secondary data sources. The data was analyzed and findings were created using SPSS, Microsoft-word, Excel, Arc GIS, Auto CAD, and some related tools. The results were described as follows- A, The Addis Ababa Structure Plan's 30, 30, and 40 percent land use provisions were not intended to be followed in the planning of green space. The green area is smaller than 1 m² per person, it is less than World Health Organization (WHO) requirement; additionally, neighborhood park plan distribution

was improperly spread within a 300m radius; farther more, the planning process was not participatory in and of itself; and finally, there are implementation problem issues. The rate of plan change, grading, and monitoring for local parks and green areas received less attention. B, the respondents, had less awareness on neighborhood parks important and necessary. The majority of community parks lacked proper plants and had poorly designed features including lights, benches, trash cans, sidewalks, and safety obstacles. C, the neighborhood park committee was not given any official training or experience; members were elected and serve voluntarily. The results show that there was inadequate partner coordination, poor consultation, and a lack of teamwork. Every green space must abide by the proportionate norm of 80 percent green space and 20 percent amenity. The following recommendations were made based on the study's results. A community-based neighborhood and other parks will need systemic reforms to better link economic, environmental, and social policies and institutions. These changes must be politically and economically feasible while also discovering synergies, weighing and giving solution. Advocate for and promote the creation of a comprehensive, integrated neighborhood park management plan that addresses the pressing concern and opportunity posed by the existing NPs vacant lots. In order to address the aforementioned challenges, the woreda administration must work very hard and also offer training to export personnel working in various institutions as well as devoted community members. When the next structural design is being prepared, it might be important to include neighborhood parks for the protection of land use violation. In order to promote environmental sustainability, create effective plans, formulate strategies, and utilize synergies, it is vital to build on the financial support that the community has previously contributed for local parks.

Keywords: Community, Neighborhood Park, Plan, Practice, and Management.

I. Introduction

The proportion of people living in cities is going rapidly increasing. Feng (2018) discusses that there was high movement of individuals from rural to urban areas. Urbanization undoubtedly improves people's quality of life while also improving the political, social, and economic systems; but, it also has drawbacks, including pollution, injuries, the urban heat effect, and the effects of climate change. Zhongming et al. (2020) assert that smart urbanization creates economic, environmental, social, and intangible value that may be leveraged to enhance

people's lives based on the World Cities Report. Unchecked urbanization, long-term land use changes, biodiversity loss, patterns of resource and energy consumption, as well as high pollution and carbon emissions, all pose environmental threats.

On Earth now, there are more than 8 billion people. Urban areas will be home to 68 percent of the population by 2050, an increase from the current 64 percent. However, just 41 percent of Africans live in cities, according to Roser et al. (2013). By 2050, it's anticipated that over 64 percent of Africa would be urbanized. Ethiopia is one of Africa's least urbanized nations. Ethiopia has a total population of 107,334,000 people, according to the Ethiopian Statistics Agency's population prediction for 2023. Ethiopia's urban population in 2022 was 27,959,125. This figure was calculated using World Bank population forecasts and urban ratios from the United Nations World Urbanization Prospects.

The Ethiopian National Urban Green Infrastructure Standard was created in 2015 to create environmentally sound, aesthetically pleasing, and socially beneficial green spaces in cities, as well as providing enough, adequate, and biologically viable green spaces to meet the community's recreational, societal, financial, and conservational needs. And also, the to safeguard the environment and public health, the Ethiopian government set national urban green infrastructure standards (UGIS) for its citizens. The hierarchy of parks in Ethiopia, according to Molla et al. (2019), is made up of neighborhood parks, Woreda parks, sub-city parks, and city parks.

According to estimates from the national census published by the Central Statistical Agency (2013), Addis Ababa has a population of 3,273, 000 people, which constitutes 3.6 percent of the country's overall population and 18 percent of Ethiopia's urban population. Its population is growing at a yearly pace of 2.1 percent. Demographic factors play a role in the climate changes brought on by humid-gases in the atmosphere. Urbanization is one of the main factors influencing changes in global land use, land cover, and climate, according to Elmqvist et al. (2013). We receive a wide range of benefits from the natural environment that are challenging to value economically. Natural places aid in air and water purification, food and medication production, noise and chemical pollution reduction, flood prevention, and street cooling. So, Green Spaces and other creative methods focused on nature to progress the value of urban environments increase local sustainability, and

encourage healthy lifestyles, improving both the health and well-being of urban citizens.

Community-based green space facilities not only benefit from improving the quality of lifespan of residential neighborhoods but also offer opportunities for leisure activities, health enhancement, protection of the environment, and recreational purposes as well as for education. It also creates a sense of place while encouraging social and community inclusion and sustainable growth in residential developments.

It increasingly understands that the natural, social and economic benefits of community-based green spaces are an integral component of sustainable growth.

Specifically, the research seeks to achieve the following objectives: (i) Analyze the availability and state of community-based neighborhood-park planning in the research area; evaluate the study area's spatial plan practice in relation to Addis Ababa's master plan and the practical application of planning concepts; (ii) Examine the public's perception of the neighborhood park in the research region, as well as the community's practices regarding well- and poorly-managed green spaces; (iii) Analyze the research area's green space availability as well as the opportunities and problems associated with creating a neighborhood park with a strong community focus.

Statement of the problem

Its main justification for beginning the study in Kolfe Keraniyo sub-city, woreda six, was that a number of the neighborhood parks were underdeveloped and prone to inappropriate use. Main problem was poor plan recognition, less community awareness in use practice and poor management problem.

The goal of the study is to optimize the benefits of ecosystems and potentially enhance environmental conservation, community-based urban green space management, planning practice provision, management system performance, and stakeholder involvement in the sustainability of green spaces. Finally, by providing suggestions for development and management systems, the research can fill in some gaps.

Conceptual Literature Review

According to Gupta et al. (2012) the Urban Neighborhood Green Index (UNGI) evaluates the spatial distribution of UGS near urban built-up areas. The urban

neighborhood green index paper attempts to expound on two features that describe the properties of urban vegetation: the amount of green and the type of green (basic form of urban vegetation, such as dense, low/grass vegetation, and so on). Neighborhood-level characteristics of urban built-up have been defined using metrics such as proximity to green, built-up density, and structure height. Figure 1 show Conceptual Model.

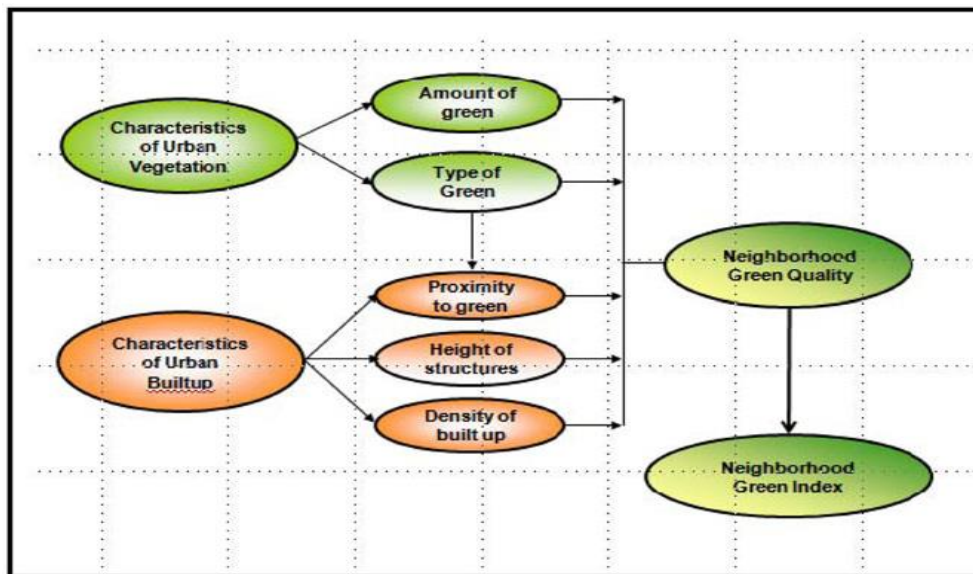


Figure 29. Conceptual Model

Conceptual framework

The three essential characteristics of UGS offering are quantity, quality, and accessibility. The term "quantity of UGS" refers to the amount or availability of UGS, which is frequently expressed in terms of the UGS's covering area, number, and size. According to Koohsari et al. (2015), accessibility to spatial proximity is often determined by the expense and distance that people must pay to access the green space. The quality of UGS improves in relation to features of UGS that may promote or deter usage, such as the attractiveness, safety, and aesthetics of the facilities as described by Fausold and Lilieholm in 1996. The research primarily focuses on the provision of Neighborhood parks and the concept established in accordance with Figure 2.

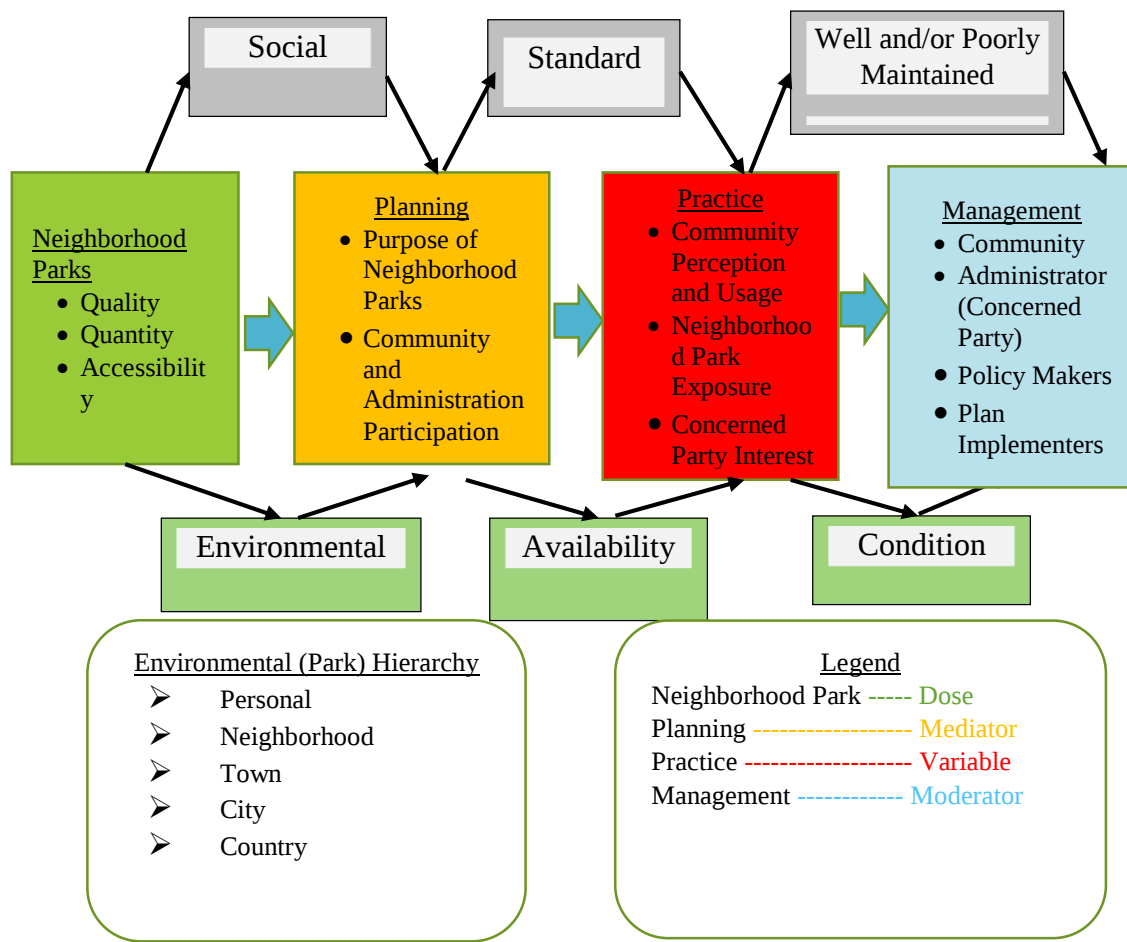


Fig. 2. Conceptual Framework

Research Methodology

The combined quantitative and qualitative research methodology is the preferred research method. Through the worded interpretation of primary data gathered through questionnaire and/or interview based written question, and secondary data, which were written documents, maps and other additional documented information. Survey research is the most fundamental tool used in all quantitative research approaches. Kothari (2004), developed the following equation to produce a representative sample for proportions of big sample for populations that are enormous, and particularly for populations where the total population is specifically unknown or infinite.

$$\text{Sample size } (n) = \frac{z^2 p(1 - p)}{e^2}$$

Where: - "n" is the required sample size, "p" is degree of variability, "z" is the score value of z-table, "e" is the level of precision and "q" is 1-p.

Map of the study area

The research area is located in the western suburbs of the Addis Ababa City, at 9.0°49.75'N latitude and 38.42°21.49' E longitude, bordering with sub-city of Addis Ketema, Lideta, and Nifas Silk-Lafto sub-city. The primary research area was Woreda 6, and the study area covers 304 hectar and it surrounded to the North woreda 8, to the East woreda 9, to the South woreda 5, and to the West woreda 7. Kolfe Keraniyo sub-city were separated into 11 Woreda with coverage area of 4953.7 Hectare. Figure 3. show the location map of the research area.

Location Map of the Research Area

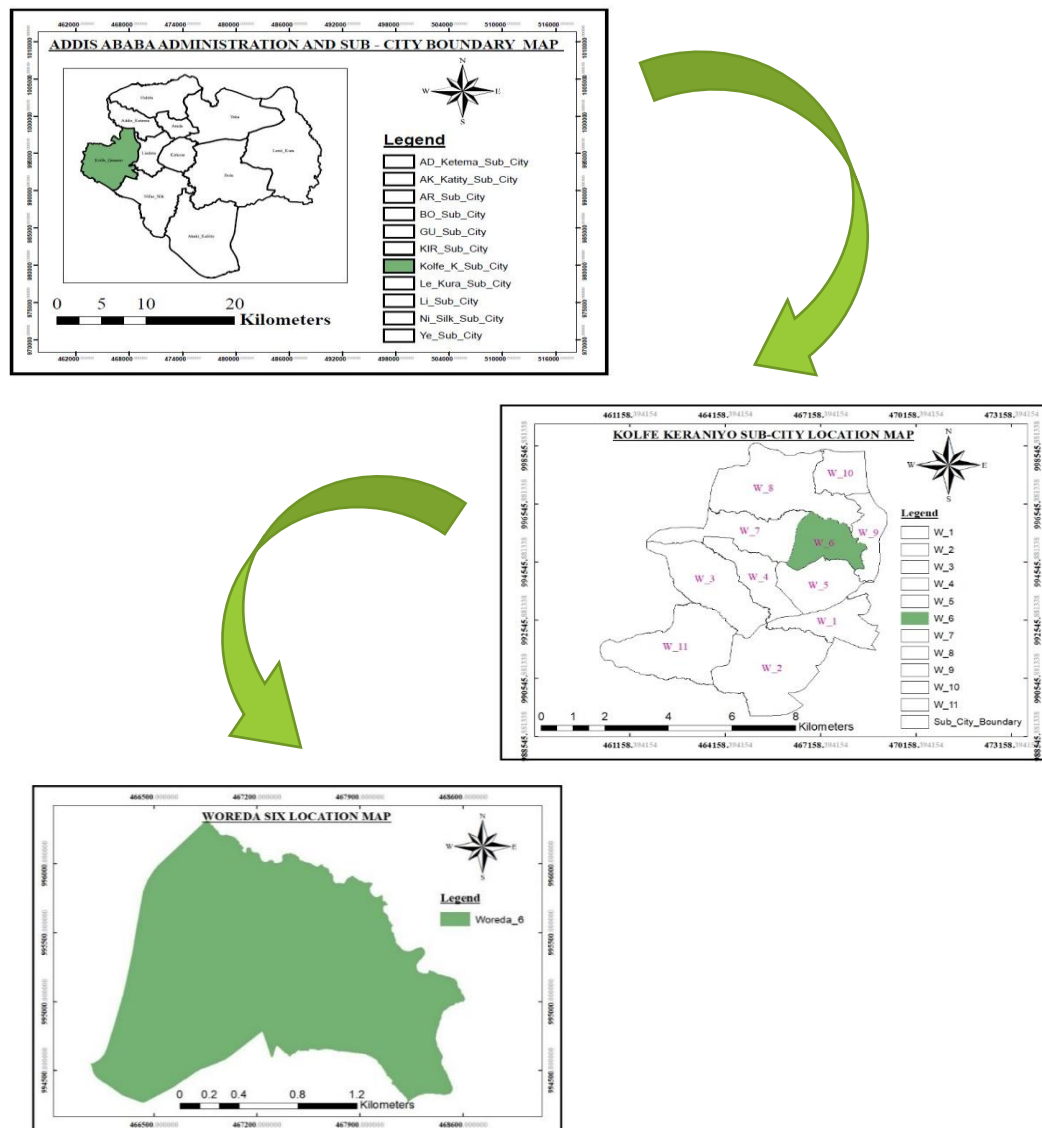


Figure 3. Location Map of the research area

II. Materials and methods

The research technique for identifying the level of community practice in using, and conserving parks, well and/or poorly managed neighborhood park of Woreda 6, a

comparative community-based cross-sectional study that will be predominantly descriptive in character and cross-sectional in time. This study method aids in the collection of data on quantitative and qualitative information of primary and secondary data. Structured and semi-structured questionnaires for chosen households, Stakeholders, key informants in the study area had been prepared to collect responses on the practice of neighborhood parks to examine the existing neighborhood park management and plan involvement.

Research Technique

The most basic instrument for all forms of quantitative research methodologies is survey research. I prefer to conduct a cross-sectional survey, also known as an observational survey, on a target population over time, using paper questionnaires to ask a series of questions from a random sample of participants, as well as for qualitative research method thorough interviews with key informants. However, both published and unpublished papers will be used as secondary data sources for further information.

Sampling Unit

The sampling unit or unit of study is the unit to be sampled, such as head of the household, woreda experts, community-based green space workers, community leaders, and woreda green area committee members who are in charge of community-based green space management and planning. Generally, it includes person, household, organization, and institution which possess a public park service.

Sample Size

It is challenging to determine the actual number of households that use the green space. Kothari (2004), developed the following equation to produce a representative sample for proportions of big sample for populations that are enormous, and particularly for populations where the total population is specifically unknown or infinite.

$$\text{Sample size } (n) = \frac{z^2 p(1 - p)}{e^2}$$

$$\text{Sample size } (n) = \frac{z^2 p(1 - p)}{e^2} = \frac{1.812^2 * 0.5(1 - 0.5)}{0.07^2} = 168$$

$$(n) = 168$$

$$(n) = 168 + 16.8 \text{ (Considering 10\% dropout of study participant)}$$

$$\text{Total sample size } (n) = 184.7 = \underline{185}$$

Respondent detail sample size

Table 1. Summary of Research Respondents

No.	Type of Respondents	Data Collection Tool		Total Respondents
		Number of Respondents		
		Questionnaires	Question based Interview	
1	Households, Parks Council Committee	–	165	165
2	Sub City Plan and Development Commission Official and experts	15	–	15
3	Woreda six Urban Beautification and Green development Official and experts	5	–	5
Total Number		20	165	185

Sampling Technique

Sampling technique was conducted in non-probability drawing, a fundamental form of random sampling. This method was accurate since it was successful in selecting a sample from a large population group. The research area, woreda six, was divided into eight "ketena" for governing and other management purposes, and in each ketena, there was a large population from these many houses. Based on the population density of each Ketena, a random sample of 97 household samples and 68 council committees from 34 parks, each with two committee leaders, were selected.

Data Type

Both mixtures of qualitative and quantitative data were used in the study due to the complex and dynamic nature of social and recreational services.

Data Analysis

For data analysis, the study employed SPSS, Microsoft Word, Excel, Arc GIS, Auto CAD, and some related tools. Data would convert into bar graphs, charts, tables, and other descriptions.

Data Presentation

All the questionnaires, field survey results, graphical information, and documented results and the interviewed results, field survey data, pictures, operational maps, and related documents have been present in logical sequences in the form of tables, figures, and analysis as predefined objectives of the research.

III. Results and Discussion

The analysis typically examines in-depth the overall Planning situation, Community Practice, and the Management aspect of the existing parks through the woreda interpretation of primary data collected through questionnaire, interview, and secondary data, and presents the results in various mechanisms.

- **Planning**

Planning is necessary in order to lead land use properly. It follows that the development approach, whose main model is the space standard model, must be the major strategy for providing local parks and/or green space in compliance with community desires, land budgeting. Taking into account the development strategy and the space standard model that were applied to create the open space in the neighborhood.

The goal of planning is to allocate land appropriately, budget for its usage, register the land, and then reserve it for development. The parks and green spaces that are already there were not properly reserved for the benefit of the local population and the preservation of the environment.

Spatial Recreation and Open Space Location Information

A map which is indicated on Figure 4. shows spatial land use promoted by the AACSP, from a total area of 304.56 hectares in woreda six boundary, 34.07 hectares are covered with environmental open space and green areas. This maps shows that the distributions of recreational and open space (Urban Green Areas) fouls less than the standard, which means that they did not meet the 30%, 30%, and 40% targets which allocate respectively environmental, road network and building of the Addis Ababa City Structure Plan.

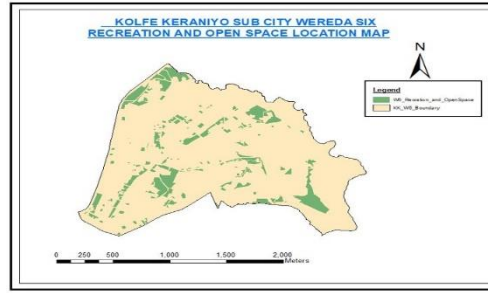


Figure 4. Recreation and Open Space Location Map
(Source: AACSP, 2017- 2027)

Additionally, the land uses included in the structure plan created for Addis Ababa City were general ones; there are 14 main land uses. So, in order to increase the capability of a defined area to improve its economic future and the quality of life for residents, it requires specific land use assigning procedures to govern and manage purposeful complete land utilization, which is known as a local development plan (LDP).

All of the former local development plans in this area were frozen out following the declaration of the tenth structure plan. The Kolfe Keraniyo sub-city plan commission branch office in progress to design local development plan for selected area in the future, but aim to register and reserve the existing green area and parks land use for the benefit of the inhabitants as well as environmental preservation. The data on Table 2. demonstrates that the Kolfe Keraniyo sub-city plan commission branch office registered green environment areas that were present in woreda six.

Table 2. Registered Green Area by Kolfe Keraniyo Sub-City Plan and Development Commission Branch Office

Green Area known and Registered by Kolfe Keraniyo Sub-City Plan and Development Commission Branch								
Office Which is existed in Woreda Six								
No	Green Space Managed/ Directed by	Total Area (Sq. M)	X,Y Coordinate		With or without Title		Development Condition	
			X	Y	Yes, It has	No, It has not	Developed	Undeveloped
1	Associations	802	466389	99485 2	✓		✓	
2	Associations	1287	466916	99541 5	✓		✓	
3	Urban Beautification and Green Development Adm. Office	157314.8 3	467084	99604 7	✓		✓	
4	Urban Beautification and Green Development Adm. Office	1513	466503	99550 1	✓		✓	
5	Associations	1049.5	466546	99558 5	✓		✓	

6	Associations	1092	466625	99534 9	✓		✓	
7	Associations	1032	466700	99528 9	✓		✓	
8	Associations	1108	466510	99537 4	✓		✓	
9	Associations	579	467443	99568 6	✓		✓	
10	Associations	1107	466423	99501 4	✓		✓	
11	Associations	1519	466985	99547 3	✓		✓	
12	Associations	627	466490	99548 9	✓		✓	
13	Associations	1130	466482	99525 1	✓		✓	
14	Associations	1419.92	466464	99516 4	✓		✓	
15	Associations	802.65	466387	99485 4	✓		✓	
16	Associations	1092.92	466625	99534 9	✓		✓	
17	Associations	1424.7	466584	99816 0	✓		✓	
18	Associations	543.41	466490	99548 9	✓		✓	
19	Associations	1510.03	466503	99501 0	✓		✓	
Area managed under Urban Beautification and Green Development Adm. Office		158827.8 3						
Area managed under Association		18126.13						
Over all Total area		176953.9 6						

Source: Kolfe Keraniyo Sub-City Plan and Development Commission Branch Office documentation

Existence of Community Based Neighborhood Parks

The findings indicate that thirteen (86.7%) of the commission staff members agreed that neighborhood parks existed and were managed by the neighborhood, while only two (13.3%) disagreed. The Pie-chart on Figure 5. shows the outcomes of the responses to the questions.

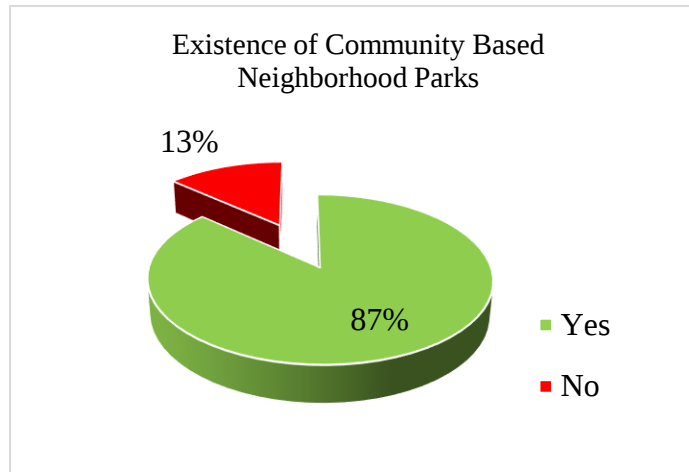


Fig. 5. Commission Expert Response on Availability of CBNP in Local

Comprehensive plans should incorporate innovative land use management strategies since they may contribute to the preservation of open space. As a result, detailed information regarding the open areas and related amenities in the park will be required. The Addis Ababa structure plan states that a neighborhood park's catchment radius should be 300 meters and its size should not exceed 0.3 hectares for hierarchical public parks. Here, 129.4 ha of the total woreda six coverage are unreachable and 174.7 ha of the existing neighborhood park area are within a 300-meter radius.

It also examined the proximity of existing community-based neighborhood park and coverage density with in the Addis Ababa city structure plan standard limit, as shown in Figure 6.1 and 6.2.

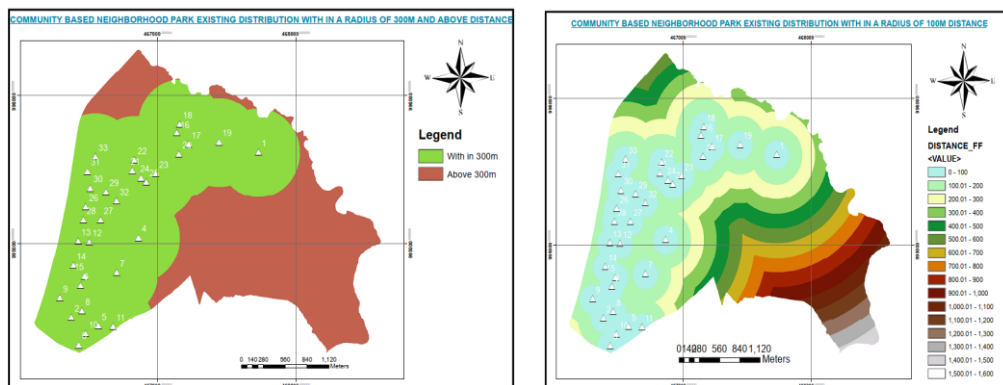


Figure 6.1 and 6.2. Community Based Neighborhood Existing Distribution within a radius of 300m and 100m Distance

Criteria and Factor for Spatial Plan Preparation

The plan commission staff office of the study area was given questionnaires, and the results show that, of the four criteria stated as questions during local development preparation, two professionals (13.3%) said it is participatory planning and it has great community involvement, while seven (46.7%) said creation of equitable access during the preparation, three (20%) of them said that user satisfaction and safety were prioritized, one (6.7%) of the employees said it creates sufficient asset in land and one (6.7%) of the employees said it creates job opportunity for un employment. Summary labeled on Figure /. shows the outcomes of the responses to the questions.

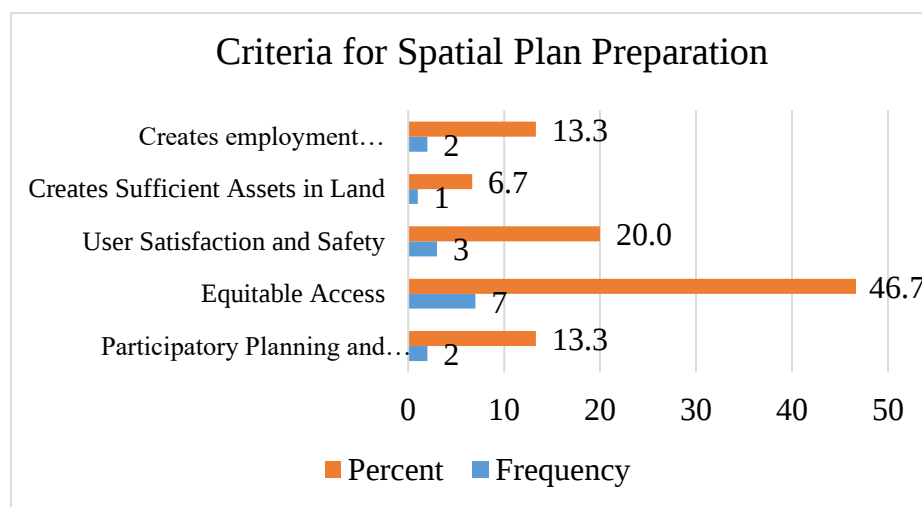


Figure 7. Priority for Criteria Used by Employees Preparing Spatial Plan

Green Space Development Implementation and Status of Implementation

In poor nations like Ethiopia, urban planning implementation is at a low degree of development.

The findings of the cross-tabulation show that there is a certainty in the implementation of green space development as well as assesses the cases for its fully implementation, partially implemented or fails altogether.

According to the results, one professional respondent (6.67%) thought that the plan had only been partially implemented because of a flaw in the structure plan itself, and four professionals (26.66%) said that the plan had only been partially implemented because of a disconnect between sector plans for the planning of infrastructure and spatial planning, a problem with budgeting, and a lack of investment plan policy decision and initiation. In addition, one respondent (6.67%) stated that there is insufficient coordination among important agencies, despite the

fact that it had been fully implemented, while the remaining two (13.33%) respondents stated that it has only been partially implemented. In addition to the aforementioned factors, one respondent (6.67%) also stated that there is insufficient or unsuccessful development control for implementation, despite the fact that it had been fully implemented, while the remaining four (26.66%) respondents stated that it has only been partially implemented.

The summary indicates that two (13.33%) of the respondents believe the plan has been fully executed, while the remaining eleven (73.33%) believe it has been partially implemented, and the remaining two (13.33%) believe it has not been implemented at all.

Rate of Planning and Monitoring of Community Based Neighborhood Green Space

The structure plan guidelines point that, open spaces in mixed residential area are not indicated on structure plan shall remain with green area status; whereas management of such spaces carried out by the community, woreda level beautification and greenery development office workers.

The findings of the rate of planning and monitoring of community-based neighborhood green space show that the condition of community-based neighborhood green space. The results are shown on Figure 8. below.

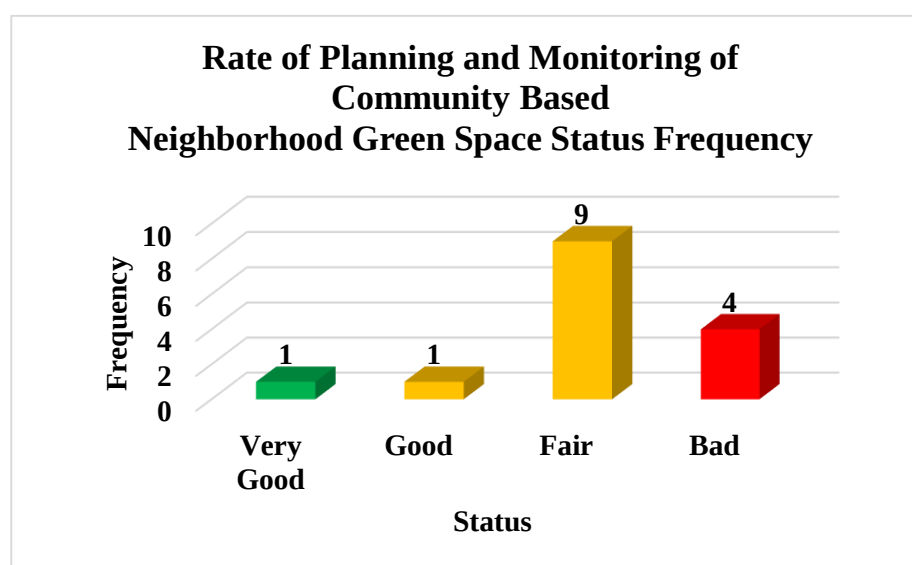


Figure 8. Rate of Planning and Monitoring of Community Based Neighborhood Green Space

- **Practice**
Community and Green Space Engagements

The concept of community has come to be realized as a grouping of people with a variety of characteristics who are bound together by social ties, share common values, and engage in cooperative activities in certain situations or environments. Those who "share a love or concern for something they do and learn how to do it better when they interact frequently" are said to belong to a community of practice.

Community participation is a significant function that parks and open spaces may serve for cities. Hence, parks encourage community involvement by giving locals a place to get involved in and feel a part of their neighborhoods. Moreover, community involvement is a crucial component of successful urban open spaces.

Respondent demographic and socio-economic characteristics

For the purpose of the analysis, woreda 6 in the research area out of 97 house-hold respondent's questionnaires dispatched for face-to-face interview, 97 HH were interested to respond to questions, resulting a 100% response rate those who were chosen at random from a database of 7211 house-holding populations. According to the analysis of the research study report, 65 (67%) of the 97 respondents who were residents were men, and 32 (33%) were women. Further analysis of their age groups showed that, among men, 7 were between 18–30 age range, 27 of them were between 31–40 age range, 15 of them were between 41–50 age range, and 16 of them were 50 years old and above. On the other hand, four of them, who are connected to women, are grouped in the age range of 18 to 30 years, eleven of them grouped between 31 to 40 years, ten of them grouped between 41 to 50 years, and seven of them grouped fifty years and above, demonstrate the respondent age categories as shown on the Table 3. below.

Table 3. Gender Vs Age Group Cross Tabulation of Neighborhood Respondent

Gender * Age in Group Cross tabulation				
Age Group				Total
From 18 - 30 Years	From 31 - 40 Years	From 41 - 50 Years	Above 50 Years	

Gender	Male	7	27	15	16	65
	Female	4	11	10	7	32
Total		11	38	25	23	97

Related to respondent occupation, majority of the respondent, 36.1% (35) were governmental workers and 23.7% (23) were private company workers, 18.6 % (18) were self-workers, 11.3% (11) of the were retired, and the rest 10.3% (10) person were job less. The Figure 9. below show that the full Occupation status of the respondents.

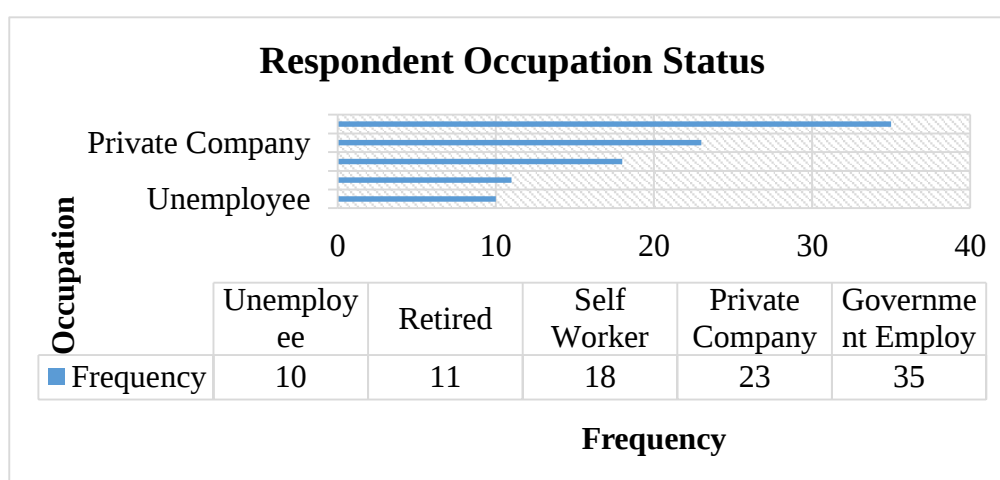


Fig. 9. Community Based NPs Respondent Occupation Status

General Knowledge and Awareness of Respondent on Neighborhood Parks

The community must be aware of their benefits, necessity, usage, and attitude. The research of the study was to ascertain whether the community has the knowledge and/or visits NPs frequently described under.

The findings indicate that 35.1% (34) of respondents rated its importance as being extremely important, bringing to light the fact that 57.7% (56) of respondents said it was important, while the remaining 7.2% (7) of respondents had no idea of its advantages. When asked about the importance of visiting frequently, twelve of the respondents who said it was extremely important, twenty-two of the respondents who said it was important, and the other respondents never visited at all. See the analysis below on the Table 4.

Table 4. Respondent NPs General Knowledge and Awareness

Important of Green Park to Human Life * Frequency of Green Space or Parks

Cross tabulation							
Frequency of Visiting Green Space or Parks							
		Every Day	Every Week	Every Month	Every Year	No, I Never Visit	Total
Important of Green Park to Human Life	It is Very Important	8	12	9	2	3	34
	It is Important	3	16	22	7	8	56
	I don't have the Knowledge	1	0	0	0	6	7
	Total	12	28	31	9	17	97

Today's people make sure that the location and accessibility, as well as the presence of parking spaces, the space's capacity, the layout, and the atmosphere of the events, are conducive before beginning event planning. In this research project, I'm attempting to determine the preferred locations for wedding ceremonies by creating questionnaires that ask respondents to indicate their preferences among four possible options. The list number 14 (14.4%) were select prepare their wedding event on hotel and majority 44 (45.4%) were select prepare in the park.

Assessment of Neighborhood Parks' Availability, Sufficiency, Condition, and Use.

➤ Assessment of the Amount and Sufficiency of Local Parks

People utilize these parks for physical activity, such as sports and other types of exercise that don't require more than a 30-minute commute.

The land use allocated was divided into fourteen general land uses in the current 10th structural plan of the city municipal government, which was under development, but it was not specifically described for each and every land use. Due to these factors, it is essential to create a detailed land use plan, mostly known as a local development plan, that explains each and/or every distinct land use in order to implement the structure plan correctly. This section attempted to show deference in an effort to

assess whether or not the amount of NPs was sufficient based on the neighbors' responses to the distributed questioners, an assessment of the existing land use and total land use difference, and the implementation or non-implementation of the city land proportion standard, which is 40% building, 30% environment, and 30% road network or circulation.

According to the responses provided by the distributed questioners, 14.4% of respondents believe that there are neighborhood parks and that they are adequate, 35.1% believe that there are parks, but that they are insufficient, 43.2% believe that there are parks, but that they are few in comparison to the woreda population as a whole, and the remaining 8.2% believe that it would be better to say that there are none at all.

See Figure 10. for further information,

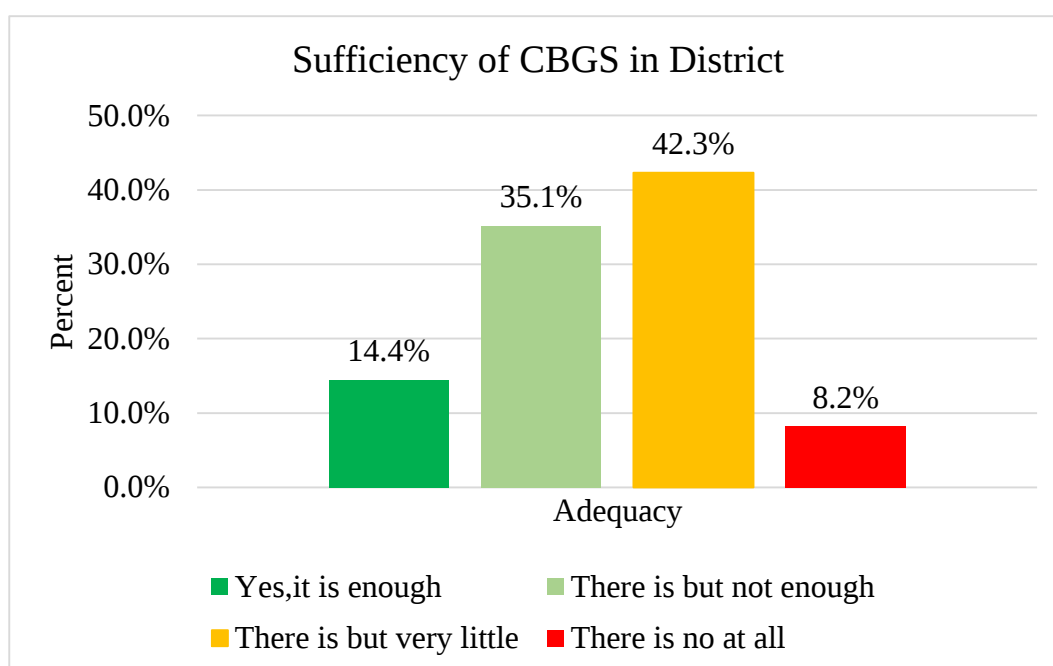


Fig. 10. Assessment on the presence of NPs and its efficiency indicator responses

There are many individuals living in cities today. Due to this, there is now a greater need for land, which has an adverse effect on the environment and necessitates the erection of multiple structures for diverse uses in addition to the usage of additional land for road circulation. The movement and interaction of people played a significant role in the densification of the city.

The underlined map, which was produced for this research case to analyze land share proportion, organizes the land into three primary land-use categories according to

city share norms: structures/buildings, road networks, and environment, which account for 49.6, 23.4, and 27% of the total area, respectively. The environmental component, which was based on detailed on-ground verification and was at this time neatly split into six subcategories, was covered in greenery. Figure 11. displays three categories of current general land usage.

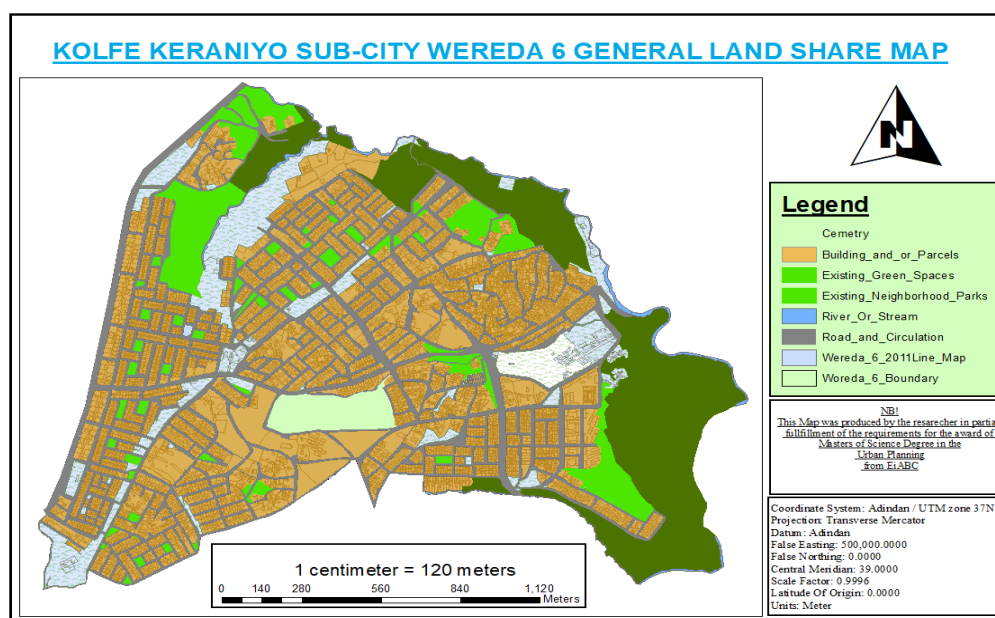


Fig. 11. Kolfe Keraniyo, Woreda six General Land Use Share Map

In order to determine whether the building, road, and environment standards of Addis Ababa City's 10th structure plan were met and/or whether the percentage of environment met from the general land area of the woreda, identification of the existing general land use was one of the research's main concerns. The analysis's findings are attempted to categorize into three key land use categories: structures, traffic flow, and environment. Table 5. provides a quick summary of the analysis of the field survey results for the existing general land use based on the existing land use map.

Table 5. Existing General Land-Use Field Survey Data Analysis

Kolfe Keraniyo Sub-City, Woreda 6 Existing General Land Use Field Survey Data and Analysis Result of GIS

No.	General Land-Use Categories	Sub Land-Use Categories	Existing Area (Ha)	Existing Percent (%)	Total Area (Ha)	Total Percent (%)	AA City SP Land-Use Proportion Standard in Percent (%)	Result Comparison
1	Building		151.03	49.60	151.03	49.60	40	The area that the Building affected exceeded the norm by 9.6 percent.
2	Road/Circulation		71.26	23.40	71.26	23.40	30	The area that was impacted by the Road Circulation was 6.6 percent less than the standard.
3	Environment	Existing Green Space	33.37	10.96	82.21	27.00	30	The area that was impacted by the environment was 3 percent less than the standard.
		Existing Neighborhood Parks	5.88	1.93				
		Open Properly Unidentified Purpose Use	30.30	9.95				
		City Level Agriculture and River Basin Forest Cemetery	2.99	0.98				
		River/Stream	6.54	2.15				
			3.13	1.03				
Total			304.5	100	304.5	100	100	

The findings indicate that in the area the building exceed by 9.6% than the standard, while the areas that the road/circulation and the environment were both less by 6.6% and 3% than the land proportion standard, respectively. Based on the above table.

The status of NPs in woreda six differs from place to place based on aesthetics, services provided, and management style. A neighborhood park's condition is primarily determined by its quality, which is defined as a successful and good public green open space within a residential neighborhood area that complies with people's needs and requirements and the general public's view of parks as places for outdoor leisure.

Among the 97 respondents, 3 said the condition was excellent, 12 said it was generally good, 14 said it was in good condition, and 25 said it was somewhat good. The majority of the participants-around 35 said the condition was poor, and the remaining 8 said it was in bad condition. Table 6. describe the existing condition of neighborhood parks.

Table 6. Existing Condition of Neighborhood Parks

Existing Condition of Neighborhood Parks in Percent			
		Frequency	Percent
Existing Condition	Excellent	3	3.1
	Very Good	12	12.4
	Good	14	14.4
	Average	25	25.8
	Poor	35	36.1
	Bad	8	8.2
Total		97	100

➤ **Assessment of the Spatial Status of Community Based Neighborhood Parks and its purpose**

A 2011 Addis Ababa city line map, a Google picture, a site survey photo, and a GIS were used to build the assessment framework. GIS is crucial for identifying geographical status because of its strong spatial data management capabilities and robust spatial analytical capabilities.

The study woreda 6 area spans 304.5 hectares; of this, 151 hectares are taken up by buildings and/or other structures, 71.3 hectares are used for traffic flow or transportation, and the remaining 82.2 hectares are used for vegetation and grassy plains. The distribution of green space does not follow the Addis Ababa Structure Plan's 30%, 30%, and 40% land allocations.

Based on the overall conclusion indicated above, the study seeks to show the status of local parks that are based in the community. About thirty-three community-based parks were well-known and from this group, one park from each of the three condition categories—good, poor/weak, and bad/wickedest—were chosen, respectively. A field survey, existing condition photographs and spatial maps, Google Earth images, 2011 line maps, and secondary data sources were used to assess the state of the neighborhood parks that were already extant in the research region. According to the three classifications of "good," "poor," and "bad/worthless NPs," at least two of the five essential and required park features—lights, benches, trashcans, fences, and pavements—must be present in a park for it to be placed in the "good" category. Here, field survey photos that contained two or more components were selected as good examples.

➤ **Relative to those local parks chosen as being in good condition and currently in existence**

In this context, "relatively good" denotes a state that is not endorsed by professionals but was shown to be superior to others in the research and to some extents suitable for recreational usage.

✚ Selam Beteal Neighborhood Park

Selam Betal, one of the good neighborhood parks in Ketena 8, includes more than two park-defining features, including seating, paving, and a fence around the green space. In comparison to other NP green spaces, its 1049.5 m² (0.10 hectares) in size, well-greened, and clean; yet, it lacks lighting, garbage cans, appropriately equipped children's play equipment, and sufficient bench seating. An illustration on Figure 12. depicts a green space in a densely populated part of the city structural plan.

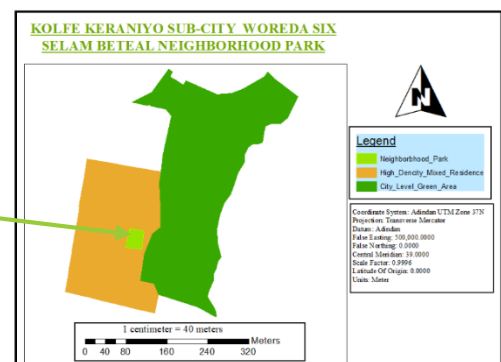
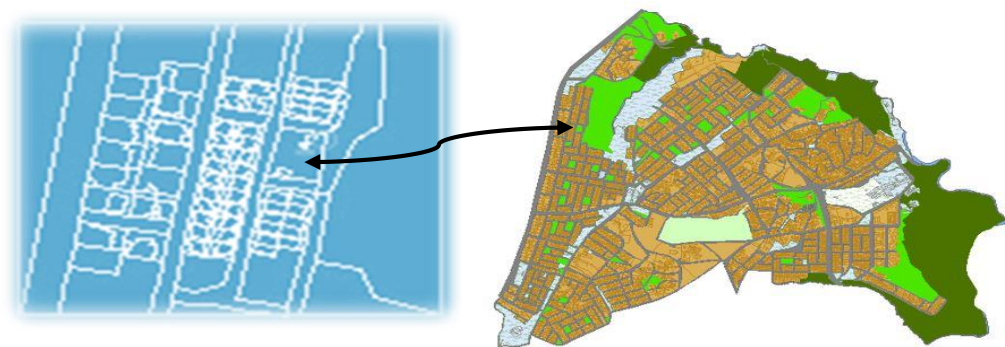


Fig. 12. Selam Beteal Neighborhood Park

➤ **Those neighborhood parks chosen as in poor or weak condition currently**

Here, "relatively poor" or "weak" refers to anything that hasn't received professional approval, but at the time the research was being done, it was still inaccessible and inconvenient for recreational use. In comparison to the good parks described earlier, the parks at this time were completely unpaved, un-greened, and unclean. In addition to being used for illegal activities like chewing chat, smoking, playing cards, and gambling, the parks were also used for garden vegetation purposes such as growing lettuce, tomatoes, cabbage, and other vegetables.

🌍 **Selam Zenbaba Neighborhood Park**

Selam Zenbaba is one of the weakest and poorest neighborhood parks in Ketena Five, and it lacks both a green space and a leisure place. With a surface area of 1513 m² (0.15 hectares), the park is inconvenient and dirty compared to other neighborhood parks' or green spaces. It lacks amenities like seating, pavement, lighting, trash cans, appropriately equipped children's play equipment, and any kind of water source, making it largely unsuitable for recreational usage. Selam Zenbaba Park is used by young people for unlawful activities including chewing chat, smoking cigarettes, playing cards, and other unnecessary activities due of its weaknesses. Selam Zenbaba is one of poor green area image indicated on Figure 13. and this green space is located in a high-residential land use region of the municipal structural plan.



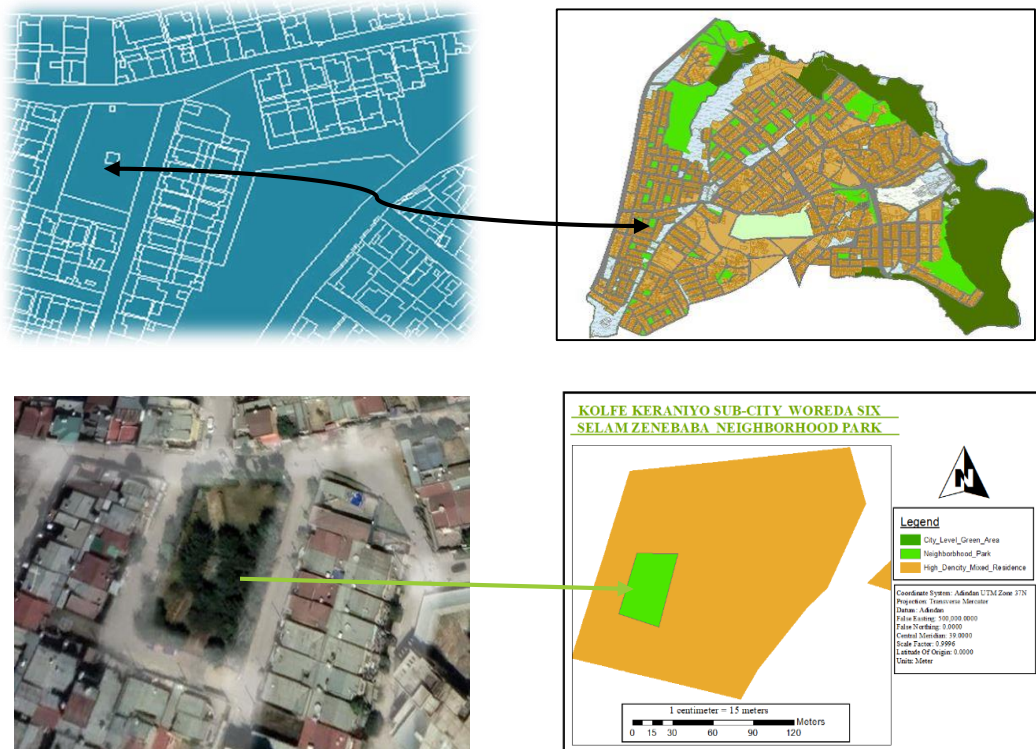


Fig. 13. Selam Zenbaba Neighborhood Park

- **Those neighborhood parks chosen as being in a bad state at the time were**
Here, "relatively bad" refers to a state that was not entirely employed for recreational purposes when the research on the existing condition was completed, but was nonetheless considered unfavorable by specialists. In comparison to the nice and/or poorest parks mentioned earlier, the parks were completely unpaved, un-greened, and unclean. They were also unfenced at the time, so they were being used for open waste accumulation.

✚ Near to Selam Gulite Neighborhood Park

Selam Gulite is the other poorest neighborhood parks in Ketena five is called Selam Gulite, which the name given by the Gulite near to the park. Neither a green space nor a recreation place are present in the park. The park's 1018 m² (0.10 hectares) area is large compared to other neighborhood parks' green spaces, and it is reserved dirty. It was in the worst possible shape to be used for recreation and lacked amenities like seating, paving, lighting, trash cans, well-equipped children's play equipment, and even the fencing damaged. Because of its wickedest feature, the park is used to store open waste and homeless house. This green space is located in a

high-residential land use region of the municipal structural plan and the image were indicated on Figure 14. below.



Fig. 14. Near to Selam Gulite Neighborhood Park

- **Management**

Organizing, planning, leading, and controlling the combined efforts of the physical, financial, human, and information resources are all parts of the management process. The most easily accessible public green space in Addis Ababa is found in neighborhood parks (NPs). NPs are to be established and managed by the local community, while city, sub-city, and district parks are to be built and managed by the relevant city, sub-city, and district administrations.

There are 34 neighborhood parks, according to Kolfe Keraniyo Sub-City's woreda six basic information. However, the woreda six urban beautification and green development administration office stated that there are 33 well-registered NPs, of which three have no title dead and the remaining 30 have legally designated areas with title dead under its control. See the full information on Table 7. below, which describes an existing neighborhood park that is well-known and under government management.

Table 7. show the existing neighborhood park well identified and under control of woreda Six Urban Beautification and Green Development Admin. Office.

Community Based Neighborhood Parks which is run under control of Kolfe Keraniyo Sub-City Admin. Woreda Six Urban Beautification and Green Development Admin. Office									
No .	Community Based Neighborhood Park Name	Located Ketena	XY- Coordinate		Area (Sq.m)	Title dead	Resent Condition		Remarks
			X	Y			Developed	Undeveloped	
1	Ketena 1(Mekonnen)	1	467728	995617	2562	✓	✓		
2	Front of Yemmane School	3	466373	994501	545	—	✓		
3	Near to Arkebe Shop	3	466440	994718	567	—	✓		
4	Dile Chorra	4	466860	995040	856	✓	✓		
5	Sene Selasa Green Area	4	466570	994444	672	✓	✓		
6	From Ketena 4 Spure to Woreda 5(Mgentea)	4	466427	994314	553	✓	✓		
7	Back of Kolfe Keraniyo Sub- City Admin. (Front of Weiyra School)	4	466702	994803	967.75	✓	—	✓	Open Space
8	Tele Tawore	4	466451	994544	493	✓	✓		
9	Near to Big Girrare	4	466290	994634	500	✓	—	✓	Garbage Disposal area
10	Back of Mitku Tila House	4	466476	994390	967.2	✓	✓		
11	Front of Mesgid (Mosque)	4	466676	994440	74	✓	—	✓	Open Space
12	Selam Zenbaba	5	466503	995010	1513	✓	✓		
13	Tenna Lehullum	5	466423	995014	1107	✓	✓		
14	Selam Bereket	5	466389	994852	802	✓	✓		
15	Near to Selam Gulite	5	466470	994780	1018	✓	✓		
16	Back of Seven Buildings	6	467147	995760	296.9	✓	✓		

17	Hiberet Dinkuan	6	467221	995671	786	✓	✓		
18	Dadimose	6	467157	995808	596	—	✓		
19	Arate Meazzen	6	467443	995686	579	✓	✓		
20	Webbay Zaggol	7	467152	995605	818	✓	✓		
21	Geion Mehaber	7	466815	995493	1126	✓	✓		
22	Nigatuwa	7	466829	995566	638	✓	✓		
23	Estifanos	7	466985	995473	1519	✓	✓		
24	Back of Yellow Building	7	466877	995444	245	✓	✓		
25	Fetan Kokobe Eider House	7	466916	995415	1287	✓	—	✓	
26	Hiwote	8	466477	995247	1130	✓	✓		
27	Back of Shewa Dabboo (Addis Hiwot)	8	466584	995160	1424	✓	✓		
28	Meto Aleka Bereket Selam	8	466460	995162	1419.9 2	✓	✓		
29	Pepsi	8	466625	995349	1092	✓	✓		
30	Gaddissa	8	466510	995374	1108	✓	✓		
31	Andenet	8	466490	995489	627	✓	✓		
32	Tsinate (1991)	8	466700	995289	1032	✓	✓		
33	Selam Beteal	8	466546	995585	1049.5	✓	✓		

Source: Kolfe Keraniyo Sub-City, Woreda Six Urban Beautification and Green Development Administration Office

➤ **Community Based Neighborhood Parks Committee Formation and Their General Status**

- **Neighborhood Park Respondent Committee Demography**

Two committee members from each NP were chosen for an interview with prepared questions, and a total of 68 leaders were chosen from the group as a whole. Two respondents were chosen at random from each park out of the total 68 respondents; there were 46 men and the remaining 22 women. The maximum number from the age groups between 31 and 40 and 41 to 50 years, respectively, is 24 from each. Age is divided into four categories. This shows that most of the committee leaders were adults and young people, showing their capacity to support growth.

- **Educational Status and Occupation of Neighborhood Park Respondent Committees**

When we look at the educational backgrounds of the 68 respondents as a whole, we find that 15 of them have a second degree or higher, 27 have a first degree, 15 have a college diploma, and the remaining 11 are either uneducated or have educational backgrounds below a college diploma. That demonstrates that the most of committee leaders have first-degree or higher educational status. Of the 28 committee members who are

government employees, 12 work for private companies, 18 are self-employed, and the other members are either unemployed or retired.

- **Selection and Sources of Plants**

Plants were main components of green areas, and for special purpose like neighborhood park, and it needs to select and plant appropriately for the suitability of human healths and convenience of the recreation area. In our country, most of the garden area plantation not supported scientifically, but planted randomly based on the interest of individual person. So, the same story seen on neighborhood parks. Here the analysis tries to indicate the way plant selection and source of the plants. The analysis show that, 47% of plants selection where conducted by the preference of the community not supported by the professionals, while 23.5% were conducted by support of professionals, 11.8% of the plant selection conducted paying for gardeners, and the rest 17.6% selected randomly as found. According to selected 68 committee respondents, 48 committee leaders explain that the sources of plants were by purchasing from different suppliers, the rest 20 committee declare that they get by gift from woreda Urban Beautification and Green Development Office. By employing cross tabulation, the study in this case seeks to show how the plants were chosen and where they came from.

- **Support of government on community based neighborhood park development**
Woreda six Urban Beautification and Green Development Office is an execution of the government works and the office established for the purpose of green environment protection and urban green area development. So, the office supports the neighborhood parks in different ways. Thus, 29 of the selected committee leaders assure that they get technical support by earning training from woreda six urban beautification and green development office, 10 of committee replied that they get material support and plant donation, while the rest 29 of committee respondent claim that they did not get any support from woreda six urban beautification and green development office and any stake holders and/ or concerned government party.

Assessment on Community Based Green Space or Parks Development and Management Problem

The main issues with the current development plan include low levels of community participation, a lack of understanding, a lack of community and district coordination, a lack of guidelines and rules for the creation and administration of green spaces, a lack of sufficient funding, a lack of professionals, and other related issues. The challenges with park creation and management were described below.

✦ **Lack of Community Participation**

In the case sites from the aforementioned field data studied, 42.3 percent of respondents identified a significant lack of community participation-based open space development. As a result, there is a reduction in sense of ownership, contributions to development, and involvement.

✦ **Lack of Understanding (Awareness)**

15.5% of respondents indicated that the community was informed of the value of community-based green space, which indicates that 84.5% of residents are oblivious of the usefulness of neighborhood park, according to the data assessed.

✦ **Lack of Community and District Coordination**

According to the data analysis, 15.5% of respondents said that the community does not work together to build community-based green spaces. The majority of the neighborhood's residents, according to the green areas committee's interview, preferred to take a stand against it and express their grievances rather than cooperate and foster growth.

✦ **Absence of Rules and Regulation**

Regulating norms and laws to assure compliance, accountability, and responsibility. One prepared question inquired about a difficulty with community-based park or green space development and management examination, out of the 97 respondents who made a choice, 4 claimed that a lack of laws and regulations was the biggest obstacle inhibiting the growth of green areas and instances of poor management.

✦ **Lack of Finance**

A financial issue was one of the prepared questions. The response options included a status of finance analysis, which showed that, out of the 97 respondents overall, 9 said that a lack of funding for green area development and instances of poor management were the main issue, because locals weren't willing to keep paying towards growth on a regular basis. Because of this, the main challenges were a lack of funding and the requirement to maintain the desire and drive to engage with particular communities.

✦ **Lack of Professionals on Green Area Beautification**

At the Kolfe Keraniyo sub-city woreda 6 office for urban beautification and greenery development, five experts are working on the design and management of the green spaces, but up to eight professionals were required. Moreover, the workers'

educational and professional backgrounds didn't match the position's requirements.

More details can be found in Table 8.

Table 8. Existing woreda six urban beautification and green development staff human resource status

No.	Position	Existing Staff	Demand	Gap	Supply in %	Qualification	Required work Experience	Remark
1	River Basin Green Area Development Administration Team Leader	1	1	0	100	BSC in Horticultural, Plant Science and Environmental Science	Have 8 Years' Experience	Qualified Female Leader
2	Office Administration Officer	1	1	0	100	College Diploma	Have 0 Years' Experience	Qualified Secretary
3	Green Area Development Intermediate Expert	2	3	1	66.7	BSC in Horticultural, Plant Science and Environmental Science	Have 6 Years' Experience	Unexperienced Experts
4	Plant Protection Intermediate Expert	0	1	1	0	BSC in Horticultural, Plant Science and Environmental Science	Have 4 Years' Experience	No Expert
5	Community Participation and Awareness Creation Intermediate Expert	1	2	1	50	BSC in Horticultural, Plant Science, Natural Resource Administration and Environmental Science	Have 4 Years' Experience	Unexperienced Experts
	Total	5	8	3	62.5			

Source: Kolfe Keraniyo Sub-City, Woreda Six Urban Beautification and Green Development Administration Office

The office can offer assistance in a sum of ways, including by assisting in selecting committee members, offering support with professional counsel, and consulting for further development and management. According to the prepared question, 4 of the 97 respondents said that the biggest issue preventing the creation and administration of local parks was a shortage of professionals.

Assessment on the use of community based green space or parks purpose

- Benefit of community based green space or parks
Urban green areas are bare patches of land. Whether for the sake of social connection, aesthetic enjoyment, or ecological preservation, it significantly improves society and quality of life. Additionally, the communities' green infrastructure asset contributes

to the following advantages: - environmental Protection, health and wellbeing, economic Benefits, social benefits, and planning goal.

In Kolfe Keraniyo sub-city woreda 6, It was decided to create a neighborhood park based on the requirements of the inhabitants in many ways. The 97 respondents provided their thoughts on how frequently local residents utilize their neighborhood parks, which are summarized on Figure 15. below, in response to the prepared question.

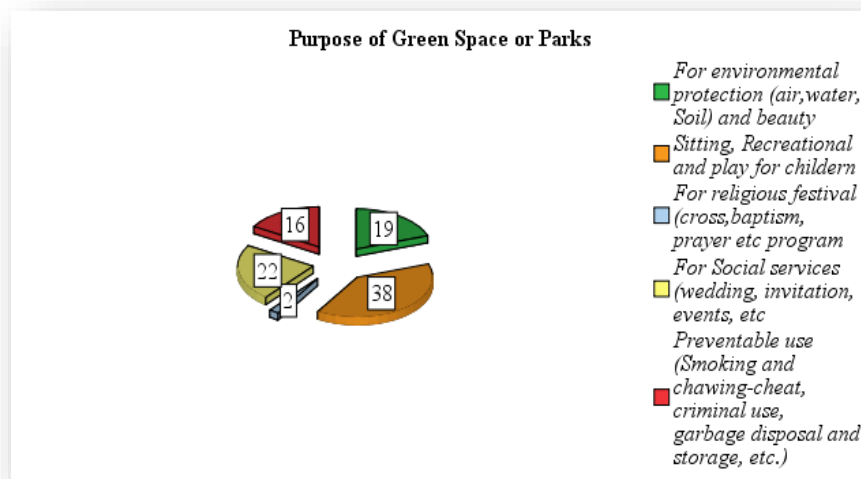


Fig. 15. Purpose of Green Space or Parks of the Study Area

IV. Conclusions and Recommendations

Conclusions

This research primary objective was to evaluate the status and challenges of community-based neighborhood park development plan, implementation, and management by paying particular emphasis to the provision of ecosystem services in spatial plan situation, organizational issues, and management issues. The research has three specific goals: to understand the status, the planning situation, how the public feel, and the opportunities and challenges associated with managing the development of community-based neighborhood parks in the city administration, Kolfe Keraniyo Sub-City, Woreda 6. Additionally, in partial fulfillment of the conditions for the award of a Master of Science degree in urban planning.

Organizing and administration of the neighborhood park are influenced by the local community committee members' ideas and enthusiasm. Due to the presence of an individual or group of committee members who were committed and could give their

time, effort, money, and power for the development and management of community-based neighborhood parks in some areas have been developed to a good level.

In relation to plan status, most neighborhood parks with a strong sense of community lacked a legally enforceable park design. Some of the parks without having a site plan and land-scape design the residents created their park. Consequently, there are no specific design fulfillment for a component of a green area, the majority of neighborhood parks lack amenities like seating, lighting, fences, walkways, and areas for children to play that should be included in a green area. Every green space must stand by the proportionate norm of 80% green space and 20% company facilities. The survey sought to understand how people felt about community parks that are centered in local communities. The findings indicated that 50% of respondents were aware of how community-based green spaces serve to provide their basic environmental, social, and economic needs.

For recreational purposes, a community-run neighborhood park is invaluable because open space development is important for the development of the mind, body, economy, society, and environment. The difficulties that have prevented people from reaping the benefits were of great concern to the study. The neighborhood park, though, is intended for general opportunities yet faces a number of difficulties. The allocated free spaces for the construction of a neighborhood park initially received little consideration from the relevant bodies. Additionally, the surrounding community was not doing as well as was anticipated.

Additionally, the difficulties have been dominating their extent in the neighborhood. Due to the structural plan's generality, each and every neighborhood park was not assigned through land use planning process, and when the revision was carried out, the neighborhood parks were allotted for other land use purposes.

Furthermore, the distributions of recreational and open space (Urban Green Areas) did not meet the 30%, 30%, and 40% targets that are assigned respectively to the environment, the road network, and construction of the Addis Ababa Structure Plan. As a result, its proportion per person is below the standards, which stated by the WHO was the norm for the World Health Organization (WHO) is stated to be 9 m² per person, and for Africa, 7 m² per person. According to international standards, Addis Ababa has one of the lowest per-person green space availability rates at less than 1m². These trends developed as a result of the top governing structure's shortcomings in plan preparation and regulation, woreda administration management, and other

relevant bodies. The analysis's findings indicate that some area of woreda 6 were inaccessible. Additionally, some neighborhood parks that are part of the community but are not included in land use plans because their area is less than 0.3 hectares need to have controlling mechanisms in place to prevent incorrect land use changes and land use violations.

The study also revealed that the woreda administration had not allocated funds for the neighborhood park other than the fee intended to pay for professionals' monthly salaries. In addition, the lack of funding has led to a skill gap among professionals and elected volunteer committees.

The degree of community involvement has resulted in the neighborhood park being in various phases of status, depending on the villagers and their ideology engagement varies from place to place. This is also a result of locals' and committee members' lack of effort in creating and using neighborhood parks.

The woreda six urban beautification and green development office is in need of skilled professionals to fill positions, however the woreda's human resource pool is both undersized and of poor workmanship.

Numerous factors, including a lack of community involvement, knowledge, coordination, finances, professional support, and/or supervision, as well as the absence of rules and regulations, are known to contribute to a decline in development. The inhabitants and officials in the woreda paid the parks little regard and consideration. The officials' level of education and field of study may have an impact on how aware they are of green spaces. They held the opinion that green spaces are merely open areas utilized primarily as playgrounds for kids, for celebrations of cultural holidays, and for Eider.

Recommendations

The study's conclusions led to the following recommendations for fostering community interest in neighborhood parks and ensuring the continued growth of parks in the research region.

A community-based neighborhood and other parks will need systemic reforms to better link economic, environmental, and social policies and institutions. These changes must be politically and economically feasible while also discovering synergies and weighing trade-offs and unknowns.

Advocate for and promote the creation of a comprehensive, integrated neighborhood park management plan that addresses the pressing concern and opportunity posed by the existing NPs vacant lots. As a result, the woreda administration must play a leading role in integrating the community in order to sustain NPs development and fill the deficit of skilled personnel. Without integration and the absence of professionals, the set of goals or objectives would not be achieved or met.

For residents, having a neighborhood park of good quality within walking distance is crucial. Therefore, accessibility is unquestionably a key element while considering the needs of the community. In order to address the aforementioned challenges, the woreda administration must work very hard and also offer training to export personnel working in various institutions as well as devoted community members.

When the next structural design is being prepared, it might be important to include neighborhood parks for the protection of land use violation. Each community-based neighborhood park in the woreda should have a plan that was created by qualified specialists to allocate the many uses of the green space. This can help to increase the sustainability of the community-based green space.

The neighborhood's community-based green space is poorly planned. In order to improve the community's quality of life and create meaningful spaces. Planning should take into account the culture and values of the neighborhood. It is therefore imperative that the responsible party and stakeholders carry out the community-based green space strategy.

Integration between locals and other woreda stakeholders is necessary. Potential participants in the growth and administration of the subject sector include the Addis Ababa City Administration, Addis Ababa City Plan and Development Commission, private sector developers, and NGOS. As a result, the woreda administration should collaborate closely with neighborhood park stakeholders who are based in the local community and aggressively need other non-governmental organizations to promote and develop the parks, because they have the passion to invest their valuable time, money, and knowledge on the park development and management. The Woreda Six Urban Beautification and Green Development Office should exercise caution in selecting and proposing committee members, as low participation would result from members' lack of initiative in development.

In order to promote environmental sustainability, create effective plans, formulate strategies, and utilize synergies, it is vital to build on the financial support that the community has previously contributed for local parks.

The woreda administration might need to have an annual community day and recognize better performed neighborhood park developers on that day. This style of event encourages community interaction and problem-solving.

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