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COLLEGE OF SOCIAL SCIENCES

DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES

ASSESSING CHALLENGES AND OPPORTUNITIES OF INTEGRATED MANAGEMENT OF URBAN GREEN SPACE IN ADDIS ABABA: THE CASE OF JEMO I CONDOMINIUM SITE IN NIFAS SILK LAFTO, ADDIS ABABA

BY

ASFAW GIRMA JEMBERU

ADVISOR: SOLOMON M(Professor)

A THESIS SUBMITTED TO THE DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES
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DECLARATION

I, the undersigned, declare that this Thesis is my original work, prepared under the guidance of Professor Solomon Mulugeta. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of caring any degree.

AsfawGirma _____ _____

Name of Student Signature Date

This Thesis has been submitted for examination with my approval as College advisor.

Name of Advisor: Signature Date

Professor Solomon Mulugeta _____ _____

APPROVAL

The undersigned certify that they have read and recommend to the Addis Ababa University to accept the thesis submitted by AsfawGirmaJemberu, and entitled

"Challenges and Opportunities of Integrated Management of Urban green Space in Addis Ababa: The Case of Nifas Silk Lafto Sub-City, Jemo I Condominium"

In Partial Fulfillment of the Requirements for the Award of a Master's Degree in Geography and Environmental Studies

Approved By Board Examiners

_____	_____	_____
Name of Advisor	Signature	Date
_____	_____	_____
Name of External Examiner	Signature	Date
_____	_____	_____
Name of Internal Examiner	Signature	Date
_____	_____	_____
Name of Head of Department	Signature	Date

DEDICATION

This work is dedicated to Almighty God who laid the foundations of my academic background

ABSTRACT

The importance of managing green spaces has to be given special consideration in rapidly growing urban areas like Nifas Silk Lafto Sub cites. However, creating and preserving urban green space is extremely difficult for a variety of reasons. This thesis specifically looks at the challenges and opportunities associated with integrated management of urban green areas in Addis Ababa, particularly in Jemo One condominiums inNifas Silk Lafto. The study used data collected through questionnaires, interviews, and observation and analyzed it using mixed approachesThe key finding of the study are there are several primary constraints affecting integrated management of urban green spaces.Some of these include low awareness of the society lack of coordination, skilled labor shortage, and budget constraints are taken as the major challenges.Despite the challenges, the study found notable opportunities such as existing rules and regulations, government policies and presence of different stakeholders.The study concluded lack of qualified labor, limited availability of green space, low budget and low priority given to green spaces, low awareness among the locals, and little coordination amongst stakeholders as a major challenges. In order to ensure successful implementation, the study proposes the necessity for a coherent and adequate strategy for managing green spaces. This strategy should include an integrated approach, sufficient institutional support, money, skilled and experienced experts, and stakeholder coordination.

Key words: Integrated management, opportunity, green space, urban green space, condominium housing

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TABLE OF CONTENTS

LIST OF TABLES

TABLE **PAGE**

LIST OF FIGURES

FIGURE **PAGE**

Acronyms

AAEPA Addis Ababa Environmental Protection Authority

BCPDMA Beautification, Cemetery and Park, Development and Management

BWUD Bureau of Work and Urban Development

CABE Commission for Architecture and Built Environments

CGAADP Clean and Green Addis Ababa Development Plan

CSA Central Statistics Authority

E.C Ethiopian Calendar

EPA Environmental Protection Authority

FDRE Federal Democratic Republic Ethiopia

MoWUDMinistry of Work and Urban Development

MUDHC Ministry of Urban Development and Housing Construction

NGO Non-Governmental Organization

NUPI Ethiopia National Urban Planning Institute

RUPI Regional Urban Planning Institute

SBPDA Sanitation, Beautification and Park, Development Agency

UGS Urban Green Spaces

CHAPTER ONE

INTRODUCTION

1.1Background of the Study

Addis Ababa, the capital of Ethiopia and headquarters of the African Union, is a swiftly evolving city that needs to meet international standards, particularly in urban green spaces. The city's reputation and quality of life have suffered from various issues, including the improper implementation of recommended green spaces from previous master plans (Abebe, 2009). A major challenge has been the lack of well-managed green areas, highlighted by the poor condition of existing ones. These aspects have been largely overlooked for years, with insufficient efforts to expand the city's geographic footprint to accommodate more open space. In recent years, inadequate governance has led to the encroachment of green spaces (Alamerew, 2012).

Currently, the administration is focusing more on beautifying Addis Ababa, emphasizing the management of corridors and green areas to create a cleaner and more attractive city. Recent projects have introduced new green spaces, including Sheger Park, Unity Park, and areas along the riverbanks. A significant initiative led by Prime Minister Dr. Abiy Ahmed aims to plant over 50 billion seedlings across Ethiopia, with over 500 million designated for Addis Ababa. While this campaign is commendable, it poses challenges since urban forestry requires a cohesive, long-term strategy. The initiative has prioritized rapid planting over ongoing care, lacking consistent oversight and monitoring. Effective planning is critical for sustainable urban green spaces, necessitating the careful selection of tree species and proper seedling nurturing.

Presently, the government primarily manages urban green spaces, but there is a growing recognition of the need for collaboration among local authorities, businesses, and community groups to enhance these areas (Baycant-Levent et al., 2004). However, institutional, social, and economic challenges hinder the development and maintenance of green spaces in Addis Ababa (Mpofu, 2013). Properly planned and maintained urban green areas are vital for environmental health and contribute to the city's social, economic, recreational, and cultural dimensions. Therefore, integrated management of urban green spaces is essential for improving the urban ecosystem and creating a sustainable model for green space management.

This study specifically investigates the opportunities and challenges of integrated green space management in the Jemo I condominium area within the Nifas Silk Laftosubcity.

1.2 Statement of the Problem

Addis Ababa's population is rapidly increasing, resulting in expanded built environments, housing development, infrastructure enhancements, and industrial reconfigurations (Abeje, 2017; Fetene and Worku, 2013). This growth raises concerns about the fate of green spaces, as many urban trees essential for environmental protection have been lost or degraded. Trees are often removed to make way for housing and construction, leading to a neglect of tree planting in favor of development (Dubbal et al., 2010). The Ethiopian government recognizes the significance of green spaces in residential areas for enhancing the quality of urban life. The Ministry of Urban Development and Housing Construction (MUDHC) has developed guidelines for urban planning, sanitation, beautification, and the establishment of recreational parks (MUDHC, 2016). However, there is a tendency to prioritize development over the preservation of green areas as urbanization accelerates (Leulsegged et al., 2011).

Despite new parks and riverbank developments, existing green spaces in the city do not meet long-term service standards. Many parks are inaccessible, suffer from security issues, or lack necessary infrastructure, diminishing their societal benefits. Poor planning and management are significant contributors to these challenges. A primary issue is the lack of collaboration between agencies responsible for planning and execution, leading to misaligned perspectives. Additionally, community involvement in green space planning is limited, resulting in a lack of ownership and awareness regarding management.

Financial constraints and a shortage of qualified personnel to oversee parks and green spaces further complicate management issues.

In the Nifas Silk Lafto Sub City and Jemo One condominiums, green areas are often neglected, poorly managed, and reduced to unkempt patches of land. This deterioration has led to a loss of appeal in the surroundings. Major factors that might be barrier to effective green space development include lack of awareness, low community participation, budgetary restrictions, inadequate professional expertise, poor coordination between the community and site administration, and insufficient regulations.

Given these challenges, coordinated management of urban green spaces is critical. There is a need for more data and integrated approaches to managing these areas. Urbanization, coupled with limited institutional resources for green spaces, contributes to the low proportion of green areas in many developing cities, especially in Sub-Saharan Africa. Factors such as neglect of green spaces, poverty, corruption, public disobedience, and political instability exacerbate the situation (Mensah, 2014).

Thus, the issues related to integrated green space management in the studied regions have been largely overlooked in existing research. This study aims to contribute to understanding the challenges and opportunities in current green space management under the Addis Ababa city administration by focusing on integrated management practices in the study area.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study is to assess the challenges and opportunities of integrated management of urban green spaces in the context of in Nifas Silk Lafto sub-city, especially in Jemo I condominium houses.

1.3.2 Specific Objectives

The specific objectives of the study are:

- Assess current status of green space for the residents of Jemo I condominium site
- Identify the constraints for integrated management of green space.
- Explore the opportunities for green spaces management in Jemo I condominium sites

1.4 Research Questions

Based on the problems stated in above, the findings of this thesis tried to answer the following research questions. These are:

- What is the current status of green spaces for the residents of Jemo I condominium?
- What are the constraints that hinder integrated management of green spaces in general and amenity and functional green spaces in particular in the study area?
- What opportunities are followed for the improvement of green spaces management in Jemo I condominium houses?

1.5 Significance of the Study

This study mainly focused on residences of Nifas silk laftocondominium sites green space and policy makers which have great impact on integrated management of green spaces.

Using this study, gardeners, residents, volunteer communities, NGOs Stake holders can improve their integrated management experience and services. They can achieve their goals and satisfy stake holders in view of the fact that they can identify their problem thus; residents can get a good services. The policy makers can get a building input to formulate a policy. In addition, this study could be used as a base for further investigation to enrich the research findings in this area.

1.6 Scope of the Study

Due to various factors, it is not feasible to examine all condominium sites that have been built and occupied in Addis Ababa. As a result, this study focuses on assessing the challenges and opportunities related to the integrated management of green spaces in the Nifas Silk Lafto condominium sites. This area was chosen because of the significant severity of the issues observed and the lack of attention given to them.

1.7 Limitations of the Study

Shortage of literature on green spaces in Ethiopia especially on urban recreational and social green spaces and access to other literatures made the study focus on the theories of books written on the context of other countries and to collect document by browsing internet. In addition, the study was unable to describe about the history of urban green space in the study area due to lack of information

1.8 Organization of the Thesis

The thesis is structured into five chapters. The first chapter provides the background of the study, outlines the problem statement, research objectives, research questions, significance, scope, and limitations of the study. The second chapter reviews related literature, detailing the historical development of urban green spaces in Addis Ababa and their current status. The third chapter describes the study area and the methodology used.

Chapter four analyzes the various data collected, presenting findings based on the study area and discussing them in relation to the research objectives and questions. Finally, chapter five offers recommendations derived from the study's findings and concludes with considerations for future planning and management of green spaces in the city.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Definition of Urban Green Spaces

"Green space" refers to any area primarily composed of unsealed, permeable surfaces such as soil, grass, shrubs, trees, and water, regardless of ownership. According to Swanwick et al. (2003), the term "urban green space" specifically pertains to these areas situated within urban settings. This study focuses on public urban green spaces, including parks, playgrounds, community gardens, landscaped squares, and green corridors, as well as unofficial green spaces. Urban green spaces can include a variety of locations, such as parks, gardens, urban forests, wildlife reserves, and waterways. Essentially, urban green areas are both public and private spaces largely covered in vegetation, encompassing urban trees, wetlands, gardens, and allotments. From tree-lined avenues to expansive urban forests, any green area within a city falls under this definition.

The diversity of green spaces is vast, ranging from rooftop gardens and green walls to city parks and allotment gardens. Recently, "green space" has come to encompass both natural and semi-natural elements, many of which are increasingly hybridized (Beatley, 2012; Waldheim, 2012).

2.2 Concepts of Urban Green Spaces

Urban green spaces are integral to great cities, blending the natural and built environments. However, the creation of such spaces can be challenging, particularly in developing countries where there is pressure on resources and land. As cities around the world become more crowded and polluted, urban green spaces can provide numerous ecosystem services that alleviate urban challenges and improve residents' quality of life. According to ecologists, economists, social scientists, and planners, urban green spaces are defined as "public and private spaces in urban areas, primarily covered by vegetation, accessible to users directly or indirectly" (Haq, 2011). This includes all aspects of parks, playgrounds, and other green spaces essential for leisure activities (Swanwick, Dunnett, and Wolley, 2002). Consequently, all land that meets this definition is collectively referred to as urban green space. Recent discussions among urban planners and scholars have highlighted the declining quantity and quality of these spaces,

particularly in metropolitan areas, which threatens wildlife diversity and exacerbates human health issues.

2.1.3 Classification of Urban Green Spaces

Urban green spaces can be categorized in various ways based on factors such as size, location, intended use, and user behavior. According to Sipe and Byrne (2010), Bonsignore (2003) identified 26 distinct types of urban green spaces in the United States. Baycan-Levent et al. (2004) further classified urban green spaces into 16 categories under five main values: ecological, social, economic, planning, and multifunctional, emphasizing the functions of these areas.

Dunnett et al. (2002) developed a comprehensive classification system for urban green spaces, dividing them into four primary categories: linear green spaces, semi-natural green spaces, amenity green spaces, and functional green spaces. This classification reflects the spatial characteristics, service purposes, and property conditions of urban green areas. For the purposes of this research, amenity and functional green spaces are highlighted in (Table 2.1)

Table 2.1: Classifications of urban green space

All Urban green Spaces	Amenity Green Space	Recreational Green Space	Parks and Gardens
			Informal Recreational Areas
			Outdoor Sports Areas
			Play Areas
		Incidental Green Space	Housing Green Spaces
			Other Incidental Green Space
		Private Green Space	Domestic Gardens
	Functional Green Space	Productive Green Space	Remnant Farmlands
			City Farms
			Allotments
		Burial Grounds	Cemeteries
			Churchyards
		Institutional Grounds	School Grounds
			Other Institutional Grounds

2.1.4 Benefits of Urban Green Spaces

Urban green spaces offer significant advantages, primarily enhancing the sustainability of cities and improving the quality of life for residents. Their benefits extend beyond immediate observations (AtiqulHaq and Shah, 2011). Thoughtfully designed and maintained green areas provide essential spaces for relaxation and connection with nature, playing a vital role in urban development. Baycan-Levent and Nijkamp (2009) found that well-designed green spaces contribute to a city's identity and attractiveness for living, working, and investing. Urban green spaces are crucial for community housing, impacting environmental, social, and economic aspects of urban planning. Research has shown that these spaces enhance environmental quality, promote public health, and offer vital ecosystem services, recreational opportunities, and urban tourism (Haq, 2011). The importance of green spaces for society was highlighted in studies like "Park Life" and "People, Parks and Cities," emphasizing the need for green space providers to create diverse, sustainable environments.

2.1.4.1 Environmental Benefits

Urban green spaces yield numerous positive environmental impacts. They are essential for sustainable urban development, recycling carbon, absorbing pollutants, providing clean air, and regulating humidity and temperature. Scholars note that these spaces can preserve or even enhance biodiversity while serving as habitats for various species. Baycan-Levent and Nijkamp (2009) indicate that urban green initiatives improve air quality, store carbon dioxide, and help manage stormwater, preventing soil erosion and lowering energy costs.

Ecological Benefits

Urban green spaces provide ecosystem services, ranging from biodiversity conservation to urban climate regulation. Compared to rural areas, cities experience significant variations in temperature, precipitation, and solar exposure. The built environment greatly influences these changes in solar radiation, air temperature, wind speed, and humidity (Heidt V. and Neef M., 2008). Proper forest planting and vegetation management can help mitigate these effects.

Biodiversity and Nature Conservation

Urban areas can support diverse wildlife and ecosystems, comparable to rural environments. CABE Space (2005) notes the rise of urban wildlife groups dedicated to promoting conservation efforts. The effectiveness of these areas for wildlife largely depends on management practices. Bayram and Ercan (2012) highlight that urban green spaces provide various environmental benefits, including species conservation and educational opportunities regarding endangered species.

Pollution Control

Urban environments are rife with pollutants, including gases, liquid droplets, and solid particles. Air and noise pollution are common challenges in cities, exacerbated by vehicle emissions and industrial pollutants. Urban greening can directly reduce air pollution by capturing smoke and dust in vegetation. Research indicates that parks can filter out, on average, 85% of nearby air pollution (Haq, 2011).

2.1.4.2 Social Benefits

Green spaces promote leisure, enjoyment, and social interaction. As public areas, they serve as melting pots of diverse cultures, ages, and social classes (Baycan-Levent and Nijkamp, 2009).

Recreation and Wellbeing

Urbanization often correlates with increased rates of chronic illnesses like diabetes and heart disease due to sedentary lifestyles and poor diets. Accessible recreational facilities are crucial for encouraging physical activity and promoting healthier lifestyles. Urban green spaces provide venues for events, sports, and leisure activities, serving as refuges from city life (Baycan-Levent and Nijkamp, 2009). They also offer "substitution value," acting as alternatives to gyms and cultural venues for those unable to access them due to transportation or financial constraints.

Human Health

Exposure to natural environments has been shown to reduce stress levels significantly compared to urban settings (Haq, 2012). Research suggests that green spaces enhance physical and mental

well-being by providing clean air, open areas, and social gathering spots (AtiqulHaq and Shah, 2011; Dunnett et al., 2002).

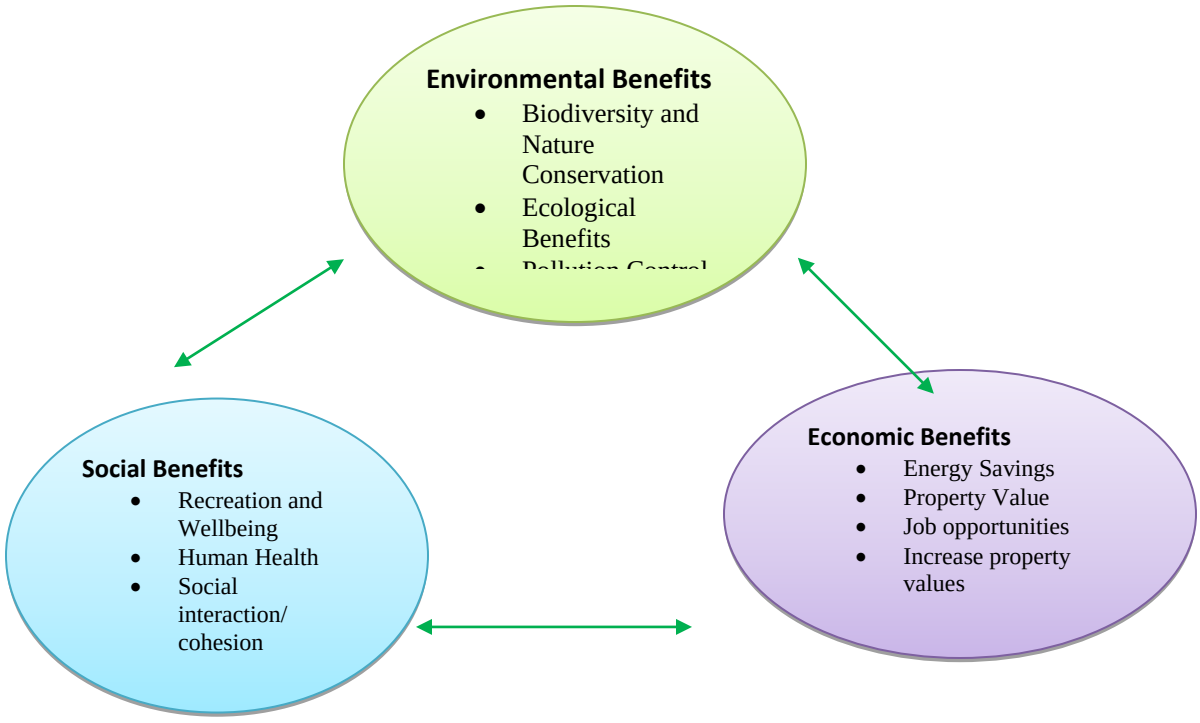
2.1.4.3 Economic Benefits

Well-managed green spaces can yield substantial economic benefits, including increased property values and attracting business investments. Green spaces that enhance the urban environment can contribute to urban regeneration (CABE Space, 2005; Dunnett et al., 2002).

Energy Savings

In temperate climate cities, green spaces and tree planting can reduce energy costs associated with cooling buildings. Plants provide shade, improve air circulation, and promote evapotranspiration, leading to a cooling effect. A study in Chicago found that a 10% increase in tree cover could result in a 5-10% decrease in energy usage for heating and cooling (Haq, 2011).

Figure 2.1: Benefits of urban green spaces



Source: Researchers' construct (2024)

2.1.5 Integrated Management of Urban Green Space

The planning, maintenance, and protection of urban green spaces significantly influence the overall quality of cities. Effective management requires integrated approaches at various levels—individual, community, municipal, and national—while fostering active involvement from public, private, and non-governmental sectors (Baycan-Levent and Nijkamp, 2004; in GebryeKefelew, 2012). Collaboration among these entities is essential for the sustainable development and management of urban green spaces.

Green areas represent interconnected units with multiple functions, as noted by Abebe (2009). This multifunctionality complicates management; to maximize the benefits of these spaces, managers must fully understand their diverse features and advantages. It is crucial to develop alternative management models to optimize these values. One such model is the "CLERE" framework, which encompasses Community, Landscape, Ecology, Recreation, and Economy (Barber, 2005).

This study evaluates the management mechanisms for green spaces in the research area through the CLERE lens, focusing on Addis Ababa, the largest city in Ethiopia. It argues that integrated management of urban green spaces can play a significant role in supporting sustainable development.

Table 2.2: The "CLERE" model for multifunctional green spaces management

Functional	Rational	Typical management issues
As an agent for **community** development and education	-Local park and green areas help to strength the spirit of community -Children are able to learn about the natural environment, and develop skills through play	-Supporting families and inter-generational mixing -Providing volume for community events -Creating opportunities for volunteers
As **land scape** to be conserved	-Landscapes helps to define a sense of place, local character and identify -Parks and green areas are cultural landscapes and integrated part of the built form of urban settlements	-using landscapes as an educational resources through schools and volunteer programs -Conserving views from and in to land escapes
As an **ecosystem** providing urban services	-Green areas provide service to the urban environment through sustaining natural process. -Their proximity for recreation and community activity helps to reduce air pollution and energy consumption generated by motor traffic	-Creating and managing wild life habitats -Promoting and recycling, environmental education -Supporting sustainable urban drainage system.
As a **recreational** resource for health and well-being	-Green areas system enables a wide range of recreational activity for urban dwellers, local and largely free to users. -Recreation is the use of leisure time to refresh and regenerate mind, body and spirit.	-Staring events, promoting sports, encouraging healthy Lifetimes' conserving train quality, providing facilities such as changing rooms, cafes and toilets.
As a contributor to the local **economy**	-Green spaces can help to promote tourism and create a favorable image of place to encourage inward investment and improve recruitment and retention of staff. -Good quality green spaces enhances properly prices, and the value of the taxable urban asset base recreational use contributes to raising productivity, saving on the cost of medical care and promoting domestic and social harmony.	-Promoting divisionally youth activity schemes. -Monitoring surrounding property values. -Creating opportunity for conservation and horticultural skill development. -Running health and education programs in partnership with social employers and schools.

Source: Adapted from Alan Barber

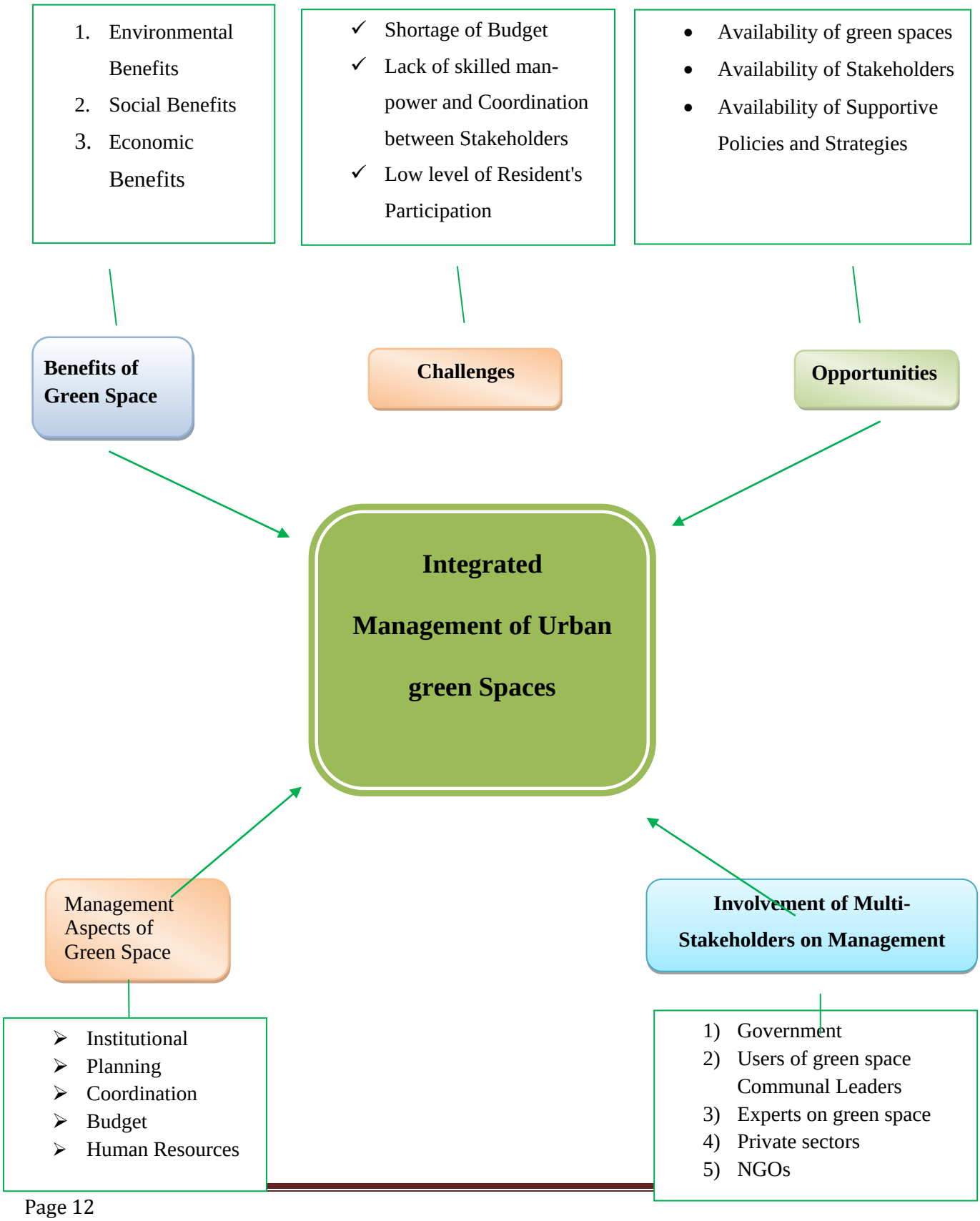

1. Environmental Benefits
2. Social Benefits
3. Economic Benefits
✓ Shortage of Budget
✓ Lack of skilled man-power and Coordination between Stakeholders
✓ Low level of Resident's Participation
• Availability of green spaces
• Availability of Stakeholders
• Availability of Supportive Policies and Strategies
Benefits of Green Space
Challenges
Opportunities
Integrated Management of Urban green Spaces
Management Aspects of Green Space
Involvement of Multi-Stakeholders on Management
➢ Institutional
➢ Planning
➢ Coordination
➢ Budget
➢ Human Resources
1) Government
2) Users of green space Communal Leaders
3) Experts on green space
4) Private sectors
5) NGOs

Figure 2.2: Conceptual Framework of the Study

Source: Researchers' Construct (2024)

From the above concept we can identify that the integration of all concerning bodies at all levels from all directions can result in better management of urban green saces.

2.2 Empirical Experience of Integrated Management of Urban Green Space

2.2.1Exerience of Urban Green Space Management Worldwide

Globally, poorly managed urban green spaces are prevalent, particularly when contrasting African cities with those in Europe and Asia (Byrne, 2010). Major challenges in Asian cities include rapid urbanization, infrastructural deficits, and environmental degradation. Over-urbanization has led to the conversion of forests and green spaces, exacerbating issues such as groundwater overdraft and pollution (AtiqulHaq, 2011).

In Malaysia, while the value of urban green spaces is recognized, industrialization poses significant challenges to their maintenance and expansion. Financial constraints and inadequate legal protections further complicate management efforts (Nor Akmar et al., 2011). Population pressures in developing countries often take precedence over green initiatives, with urban authorities focusing on basic service delivery rather than enhancing green resources.

2.2.2 Experience in Developed Countries

The concept of urban green spaces originated in the 1870s with urban farming and garden allotments, with varying priorities across the UK, Europe, and North America. In the UK, protected designations and the Garden City movement have influenced green space development (Haq, 2011). Conversely, European cities have closely linked the growth of integrated green spaces to high-density urban environments and the urban greening agenda (Beatley, 2000). In the US, the notion of "green space" emerged in the mid-1990s, rooted in landscape conservation (Benedict and McMahon, 2006).

European metropolitan regions are actively enhancing green space management through strategic planning, despite historical preservation efforts (Dingxi et al., 2009). However, challenges

remain; ineffective management often leads to unmet potential in green spaces. Evaluating urban green space policies is essential for identifying best practices that can inform policy recommendations (Baycan-Levent et al., 2004). In Denmark and several other nations, significant organizational changes have occurred in green space management under the New Public Management framework, which emphasizes public service and privatization (Randrup and Person, 2009, quoted in Schipperijin, 2010).

Cities like Copenhagen exemplify effective urban green space integration, featuring a diverse array of parks, plazas, and trails that enhance urban life. Amsterdam is similarly recognized for its sustainable urban design, promoting bicycle use and creating vibrant, pedestrian-friendly streets that cater to various community needs (Byrne and Sipe, 2010).

2.2.3 Challenges of Integrated Management of Urban Green Spaces in Addis Ababa

Historically, the Ethiopian government and urban populations have not prioritized green space development until the establishment of a national urban development policy, which introduced an urban greenery and beautification strategy (MUDHC, 2016a). This lack of policy direction has resulted in neglect and challenges, including the use of green spaces as waste disposal sites and the repurposing of land for residential or commercial development.

Public awareness of the importance of green spaces remains low, contributing to their misuse. Inadequate discussion around land use change has compounded these issues, as the community's improper waste disposal practices further diminish green space quality. Enhancing public understanding of green spaces' significance is vital for their preservation and respectful management.

2.2.4 Contextual Background of Urban Green Spaces in Addis Ababa

2.2.4.1 Historical Background of Urban Green Spaces in Addis Ababa

Addis Ababa, meaning "new flower" in Amharic, was established in 1886 and is characterized by its lush topography and abundant natural resources. However, unplanned urban expansion has severely impacted the city's green areas and biodiversity (Mikyas, 2012).

The management of recreational parks in Addis Ababa follows a hierarchical structure, with city parks managed at the city level and smaller parks managed by sub-city and neighborhood authorities. Despite this structure, green space provision often ranks low in urban planning priorities, overshadowed by housing and commercial development needs.

2.2.4.2 Accessibility and Quality of Green Spaces in Addis Ababa

Urban green spaces are crucial for sustainable city development. Well-maintained green spaces enhance a city's identity and attractiveness, positively impacting residents' physical and mental well-being (Baycan-Levent and Nijkamp, 2009). Safe and accessible green areas contribute significantly to community health and quality of life.

2.2.4.3 Current Urban Green Space in Addis Ababa

Addis Ababa's green spaces currently comprise various categories, including:

- **Plantation Forests**: Primarily eucalyptus, these areas cover approximately 3,372.8 hectares, serving both ecological and tourism functions.
- **Institutional Forests**: Found on government and NGO properties, these forests host diverse native and non-native species, encompassing around 1,549.1 hectares.
- **Recreational Parks**: The city boasts numerous parks designed for social interaction and leisure, including notable areas like Entoto Park and Sheger Park.
- **Special Function Parks**: Spaces like the Addis Zoo Park serve multiple purposes beyond recreation, focusing on conservation and education.
- **Private Gardens**: These areas serve personal uses and contribute to urban agriculture, enhancing community aesthetics and food security.
- **Street Trees**: Integral to the city's green infrastructure, these trees improve air quality, reduce urban heat, and enhance streetscape aesthetics.

The growing interest in beautifying Addis Ababa is supported by governmental initiatives aimed at creating a world-class city, reflecting a commitment to integrating green spaces into urban life.

2.2.4.4 Current Green Area Management in Condominium Sites of Addis Ababa

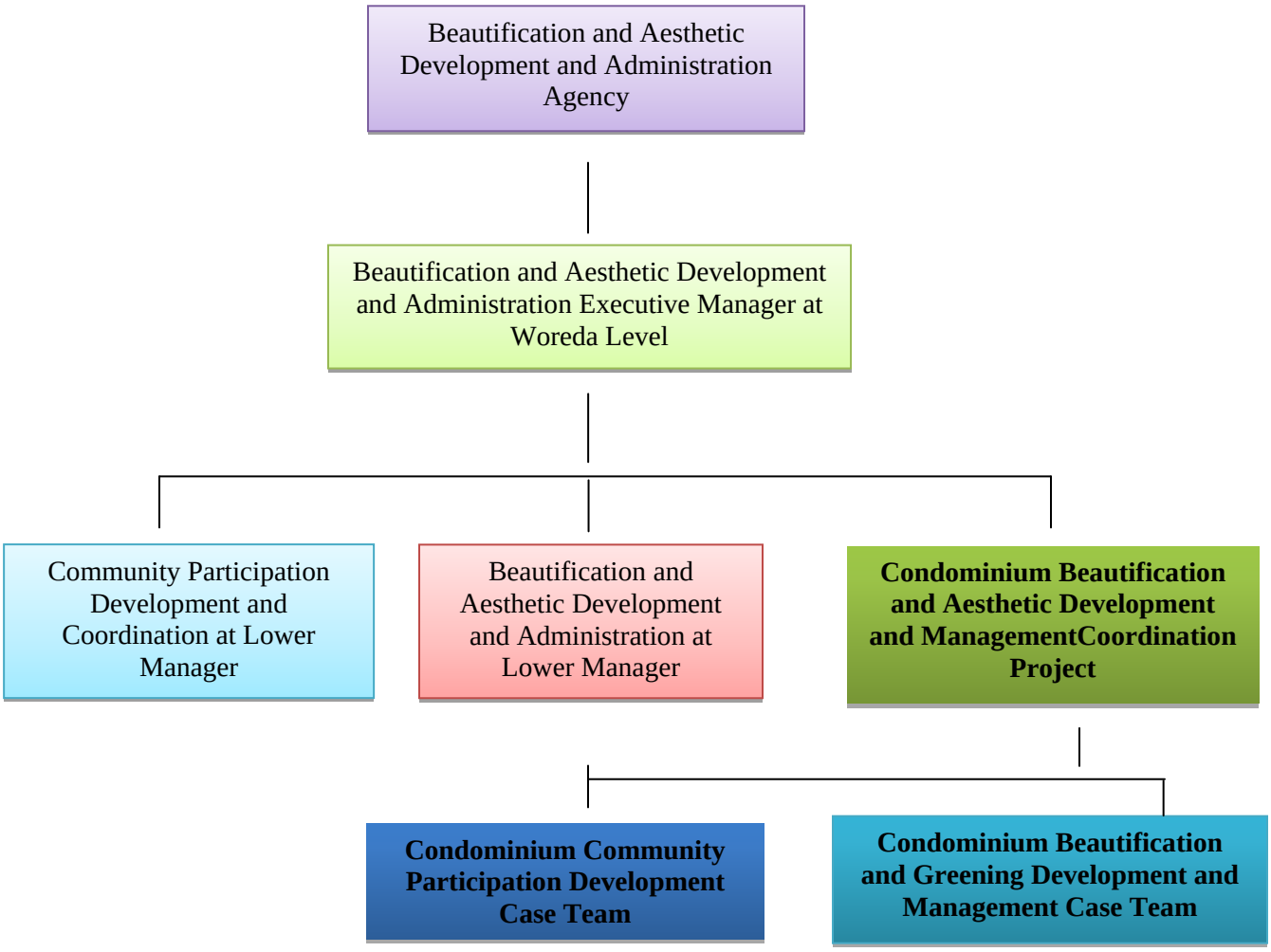
Addis Ababa's rapid urbanization has significantly impacted housing and living conditions, prompting the government to implement the Integrated Housing Development Program (IHDP). Launched in 2004 under Proclamation No. 370/2003, this initiative aims to address housing shortages for low- and middle-income families.

The program facilitates the construction of condominium housing, defined by UN Habitat (2011) as buildings with five or more separately owned units that share common elements. Over the years, a variety of housing options, including real estate and private homes, have emerged, particularly in urban areas like Addis Ababa.

One notable challenge in these condominium developments is the inadequate allocation of green space. Many residential areas lack sufficient green areas per unit, which diminishes the overall quality of life for residents (MUDHC, 2016b).

To improve the situation, careful consideration of accessibility and proximity is essential in the design and development of urban green spaces around these residential sites (Haq, 2011). Enhancing green space in condominium sites not only provides residents with recreational and social gathering opportunities but also contributes to urban biodiversity and overall community well-being. The government's recent focus on corridor management for rivers and riparian vegetation adds to the potential for integrating green areas within these densely populated neighborhoods, supporting ecological health and community connectivity.

Figure 2.4: Structure of the BCPDM case team at wereda level



Source: researcher field survey, (2024)

2.2.5 Opportunities for Urban Green Spaces Management in Addis Ababa

Ethiopia is currently presented with significant opportunities for the management and development of urban green spaces. The country has made notable strides in establishing the necessary institutions, laws, policies, and strategies aimed at environmental preservation. A pivotal initiative in this context is the "Green Legacy" program, launched by Prime Minister Abiy Ahmed in 2019.

This program is a comprehensive effort to combat deforestation and climate change through extensive tree planting and greening initiatives. Its goals include:

- **Environmental Restoration**: The program focuses on restoring degraded land, improving soil and water management, and enhancing biodiversity.
- **Urban Renewal**: By integrating green spaces into urban planning, the initiative aims to create healthier, more livable cities that can mitigate urban heat and improve air quality.
- **Community Engagement**: The Green Legacy program encourages public participation, allowing communities to take part in tree planting and maintenance efforts, fostering a sense of ownership and responsibility towards local green spaces.
- **Socioeconomic Benefits**: By improving environmental conditions, the initiative also addresses human health issues and enhances the overall quality of life. It provides opportunities for job creation in landscaping, urban forestry, and conservation efforts.
- **Agroforestry Development**: The program promotes sustainable agricultural practices that integrate trees with crops, which can improve food security and enhance livelihoods.

Through these efforts, Ethiopia aims not only to combat environmental challenges but also to create a sustainable framework for urban green space management that can contribute to the nation's long-term ecological and social resilience.

2.3 Research Gaps

In the above elaboration different scholars conducted research on green space, development and management problems and suggested possible solution to the problems.Little attempt was made to conduct research and identify the problems of green spaces management. But the need for integrated management of green spaces is not well understood at all level in the study area. As a result the researcher conducted this study to assess the challenges and opportunities for integrated management of green spaces. Therefore, this research assessed the current status of management of green spaces, by identifying the challenges and opportunities to recommend suitable way to integrated management of green spaces of Jemo one condominium housing.

CHAPTER THREE

RESEARCH METHODY

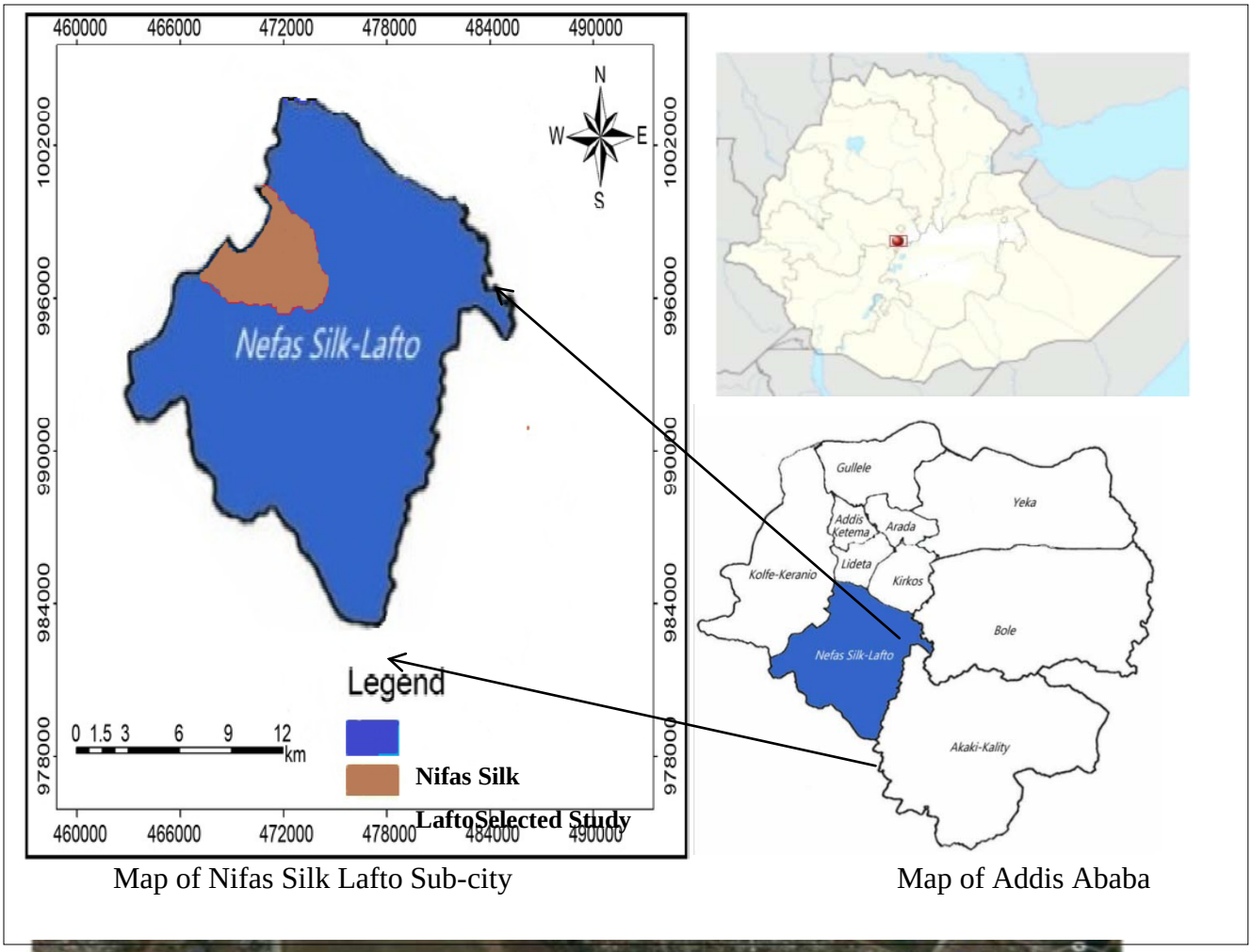
3.1 Description of the Study Area

The study area is situated in the southwestern part of Addis Ababa, specifically within the Nifas Silk Lafto sub-city, which is one of the city's 11 sub-cities. Nifas Silk Lafto covers an area of 68.30 square kilometers and has a population of approximately 335,740 (CSA, 2012). Geographically, it is positioned between 8°57’41.76” N and 38°43’39” E, bordered by Bole and AkakiKality sub-cities to the east, Cherkos and Lideta to the north, KolfeKeranio to the west, and the Oromia region to the south.

The Nifas Silk Lafto sub-city consists of 12 weredas and encompasses 18 condominium sites with around 25,000 residents. For this research, the Jemo I condominium residential area was selected, which was completed in the year 2003. This site accommodates approximately 6,550 residents, featuring a variety of housing types, including studio, one-bedroom, two-bedroom, and three-bedroom units. The Jemo I condominium area spans an estimated 763,148.74 square meters and consists of 332 buildings.

Observations indicate that there are numerous underutilized spaces left for green areas within and around the condominium sites. Some areas have been partially planted with sparse trees, which are poorly managed. Furthermore, many spaces are illegally occupied by local and informal traders, exacerbating the mismanagement of green areas. The presence of improperly planted, oversized trees raises concerns about potential damage to the ground and overall site integrity.

In summary, despite having ample open spaces for green areas, the management and condition of these spaces in the Jemo I condominium site are inadequate, leading to degradation and a loss of aesthetic value in the environment.



Map of Nifas Silk Lafto Sub-city

Map of Addis Ababa

Figure 3.1: Location map of the study area

Figure 3.1: somple of poorly managed condominium sites spaces left for greens areas

Source researchersself-observation

3.2 Research Design

This study employed a mixed approach, incorporating both quantitative and qualitative techniques. This approach aimed to triangulate findings, enhancing the robustness of the results by combining the strengths of both methodologies. The integration of diverse data types allows for a comprehensive understanding of the research problem and bolsters reliability (Creswell, 1994). The study primarily utilized a descriptive research method to document and analyze the current management situation of green spaces and to identify challenges affecting integrated management in the Jemo I condominium area of Nifas Silk Lafto sub-city, Addis Ababa.

3.3 Data Sources

Data collection involved both primary and secondary sources:

1) **Primary Data:** Information was gathered from various stakeholders, including residents, officials from the Addis Ababa Environmental Protection Authority, officers from the Beautification, Park, and Cemetery Development and Management, NGO practitioners, and communal leaders.
2) **Secondary Data:** This included literature from various articles, governmental proclamations and regulations, published and unpublished materials, existing maps, journals, and online resources. These were utilized to:
    a. Establish a theoretical framework for analyzing challenges in integrated green space management,
    b. Provide contextual insights regarding Addis Ababa through recent documents,
    c. Discuss strategies for meeting residential needs.

3.4 The Sampling Design

In Nifas Silk Lafto sub-city, Wereda 01 comprises three condominium sites (Jemo I, II, III) with varying sizes and functions for green spaces. The Jemo I site, with a population of 6,550 households distributed across 332 condominium blocks, was selected for the study.

3.4.1 Sampling Frame

The sampling frame included a list of households in the Jemo I condominium, communal areas, and key informants such as sub-city and wereda Beautification, Cemetery, Park Development and Management authorities, employees of the Addis Ababa Environmental Protection Authority, NGO workers, and communal leaders. These individuals were deemed knowledgeable about the study's focus.

3.4.3 Sampling Unit

The sampling units comprised all green spaces within the communal areas and corridors and the participants surveyed.

3.4.4 Sampling Techniques

The study employed a probability sampling technique, specifically stratified sampling with purposive sampling to identify individuals capable of providing valuable insights. The condominiums were categorized as strata within the sampling frame, and simple random sampling was utilized within each stratum. This method ensured proportional representation of each stratum, increasing the likelihood of a representative sample (Saunders, 2009). This approach was selected for its efficiency and effectiveness in achieving the study's objectives.

3.4.5 Sampling Size Determination

To determine the sample size, the formula proposed by Kothari (2008) was utilized. The study assumed a standard normal deviation corresponding to a 95% confidence level, with a proportion of the target population estimated to possess the characteristics being measured set at 50%. The level of statistical significance was set at 0.05%.

The sample size formula is as follows:

The formula to determine sample size is $\mathbf{n = Z^2 * p * q / d^2}$

Where **z** =standard normal deviation =**95% =1.96,** **q =1-p**

P = proportion of target population estimated to have characteristics being measured

50% and **d** =the level of statistical significance set **0.05%.**

Therefore **n=1.96*1.96*0.5*0.5/0.05*0.05** **n=385**

If the Sample Size is $\mathbf{N<10,000 f_n = n / (1+n/N)}$

Where $\mathbf{f_n}$ = the desired sample size when the population is less than **10,000**

n=the sample size when the population is less than 10,000

N= the estimated population size

If **N=6550** and **n=385**

Then = **385/ (1+385/6550) =364** was the sample size of the research.

Therefore, the sample (**n**=**364)** was the sample size of the research. These sample households were drawn for data collection using simple randomly sampling method from the total household of each selected communal areas i.e. by using stratified sampling method. The reasons for using all the communal areas for the study is that currently green spaces are facing serious problems related with management in Jemo I condominium.

Table 3.1: Sample Size Determination

No	*Name of Communal*	*Number of Blocks*	*Total Number of Blocks*	*Total number of Households*	*Proportion of sample to be taken*
1	Communal 01	001-020	20	380	380*364/6550= **21**
2	Communal 02	021-038	18	264	264*364/6550= **15**
3	Communal 03	039-051	13	212	212*364/6550= **12**
4	Communal 04	052-066	15	270	270*364/6550= **15**
5	Communal 05	067-081	15	260	260*364/6550= **14**
6	Communal 06	082-099	18	342	342*364/6550= **19**
7	Communal 07	100-129	31	644	644*364/6550= **36**
8	Communal 08	130-157	28	599	599*364/6550= **33**
9	Communal 09	158-186	29	563	563*364/6550= **31**
10	Communal 10	187-211	25	523	523*364/6550= **29**
11	Communal 11	212-241	30	620	620*364/6550= **34**
12	Communal 12	242-271	29	630	603*364/6550= **34**
13	Communal 13	272-300	29	596	596*364/6550= **33**
14	Communal 14	301-332	32	674	674*364/6550= **38**
Total			**332**	**6550**	**n01+n02+n03+n04+n05+ n06+n07+n08+n09+n10+ n11+n12+n13+n14=364**

Source: Construction and housing office, Nifas Silk Lafto sub-city, 2024

3.5 Data Collection Techniques

To gather comprehensive and reliable data, a combination of methods was employed:

Questionnaires

Questionnaires were distributed to randomly selected residents of Jemo I condominium. The goal was to collect data on:

- Socio-economic characteristics of respondents
- Levels of awareness and participation in green space management
- Challenges faced in integrated management
- Opportunities for enhancing green spaces

The questionnaires included a mix of open-ended and closed-ended questions, ensuring that all relevant aspects of the research objectives were covered.

Interviews

Key informant interviews were conducted to gain deeper insights into the management of green spaces. The researcher purposively selected participants, including:

- 4 representatives from the sub-city's Beautification, Park, and Cemetery Development and Management (BPCDM)
- 4 representatives from the Jemo I wereda BPCDM
- 2 representatives from NGOs working in the area
- 4 officers from the Addis Ababa Environmental Protection Authority (AAEPA)
- 10 representatives from communal committees

These interviews allowed the researcher to verify responses and explore related topics that may not have been fully addressed in the questionnaires.

Observation

The researcher conducted direct observations to validate and supplement the data obtained from questionnaires and interviews. An observation checklist was prepared to focus on:

- Services and facilities available
- Local regulations and compliance
- Challenges and opportunities related to green space management

This mixed-methods approach, including triangulation of data collection techniques, aimed to maximize the validity and reliability of the findings. By combining quantitative and qualitative data, the researcher could provide a more comprehensive understanding of the current state of green space management in the Jemo I condominium area.

Table 3.2: Types and numbers of respondents in the data collection

No.	Respondents	Data collection tools		Total	%
		Questionnaires	Interview		
1	Residents/Households/	364	-	364	87
2	BPCDM officials of sub-city	-	4	4	2
3	BPCDM officials of wereda	-	4	4	2
4	AAEPA officials	-	4	4	2
5	NGO workers	-	2	2	1
6	Committees in condominium	-	10	10	6
Total		364	24	388	100
Percentage		**87**	**13**	**100**	

Source: Own Survey (June, 2024)

As depicted in the table 3.2, (364) 87% of the respondents were residents, while 12 (6%) were government officials, 10 (6%) and 2(1%) were committee members in condominium and NGO workers respectively. On the other hand, 87% of the information was collected through questionnaire and 13% through interview.

3.6 Methods for Data Analysis and Interpretation

The data collected through various methods were meticulously recorded, organized, and analyzed. The analysis involved both quantitative and qualitative approaches:

Quantitative Analysis

- The quantitative data, primarily gathered through questionnaires, were analyzed using Excel spreadsheets.
- Frequencies and percentages were calculated to summarize the responses, and the results were presented through graphs and tables for clarity.
- A total of 364 questionnaires were distributed, with 359 returned, resulting in a 97% response rate.

Qualitative Analysis

- Open-ended questions from the questionnaires, as well as responses from interviews and field observations, were qualitatively analyzed.
- These responses were categorized and described using narratives to capture the complexities of the challenges related to green space management in the study area.

3.7 Ethical Considerations

The study adhered to strict ethical guidelines to ensure the confidentiality and integrity of participant information:

- **Confidentiality**: Respondents were assured that their information would remain confidential and would be used solely for academic purposes. No identifying details, such as names or addresses, were collected to prevent any bias or reluctance in providing honest responses.
- **Anonymity**: Participants were not required to provide names or house numbers, which allowed them to feel secure in sharing their thoughts freely without fear of identification.

CHAPTER FOUR

DATA ANALYSIS AND INTERRETATION

4.1 INTRODUCTION

This chapter presents findings from structured and a few open-ended questionnaires, interviews, and observations. The questionnaires were designed to gather biographical data, assess the availability and benefits of green spaces, identify factors contributing to low community participation, explore shortages in skilled manpower, examine stakeholder coordination, and highlight opportunities for addressing challenges in green space management.

4.2 Demographic Characteristics of Respondents

Understanding the demographic indicators of respondents—such as age, sex, educational status, professional background, occupation, marital status, and duration of residence in Jemo condominium—is crucial, as these factors may significantly impact perceptions and behaviors related to green spaces.

4.2.1 Sex Distribution of Respondents

The sex distribution among respondents plays a vital role in understanding how different genders utilize green spaces. Men and women often have varying experiences and needs concerning these areas. Increased awareness regarding the value of green spaces can enhance their management (Kestela, 2016).

From the collected data, it was found that approximately 186 respondents (52%) identified as male, while 173 respondents (48%) identified as female. This distribution provides a foundation for ensuring equity in awareness-raising efforts and developing strategies that cater to the diverse needs of both genders in managing green spaces.

Table 4.2 demographic characteristics of respondents

No	Respondents	Values	Frequencies	Percent
4.1	**Gender**	**Male**	**186**	**52**
		Female	**173**	**48**
		Total	**359**	**100**
4.2	**Age distribution**	**18-25**	**64**	**18**
		26-49	**217**	**61**
		Above 50	**78**	**21**
		Total	**359**	**100**
4.3	**Educational level**	**Read write**	**57**	**16**
		10^{th}or12^{th}compelte	**86**	**24**
		Diploma	**155**	**43**
		1^{st} degree	**55**	**15**
		2^{nd} degree	**6**	**2**
		Total	**359**	**100**
4.4	**Marital status**	**Single**	**20**	**6**
		Married and have no child	**46**	**12**
		Married and have children	**293**	**82**
		Total	**359**	**100**
4.5	**Employment status**	**Government**	**91**	**25**
		Self employed	**225**	**63**
		Unemployed	**43**	**12**
		Total	**359**	**100**
4.6	**Duration of living in the condominium**	**2-5 years**	**173**	**48**
		Above 6years	**186**	**52**
		Total	**359**	**100**

4.2.2 Age Distribution of Respondents

The age distribution of respondents is crucial in understanding the varying impacts and benefits of green spaces across different life stages. Each age group interacts with green spaces in unique ways, contributing to social, psychological, cultural, and economic development.

Research indicates that well-managed green spaces are particularly beneficial for educational purposes, providing practical teaching and learning environments for students and fostering interactive relationships among peers (Anagaw, 2009).

For adults, green spaces offer an atmosphere conducive to socio-cultural development and social cohesion, serving as venues for celebrating various events and ceremonies. For older adults, these areas provide opportunities for leisure, relaxation, and information exchange through media such as magazines, journals, and newspapers.

Understanding these age-related dynamics can inform management strategies that cater to the specific needs of different age groups, enhancing the overall effectiveness and inclusivity of green space initiatives.

In examining Fig. 4.2, the survey results reveal a clear categorization of respondents by age group and the corresponding implications for green spaces. The majority of respondents (61%) fall within the 26 to 49 age range, highlighting a vibrant demographic that can actively engage in and benefit from various socio-cultural activities and ceremonies.

For older respondents, specifically those above 50 years (21 individuals), green spaces serve primarily as restful places conducive to leisure activities and opportunities for information exchange. This suggests that while the majority of participants are in their most active years, the needs of older adults for relaxation and social interaction are also significant.

Overall, the predominance of respondents in the active age range indicates a strong understanding and familiarity with the issues related to green space management, underscoring the potential for meaningful engagement and participation in initiatives aimed at enhancing these communal areas.

4.2.3 Education level of respondents

The education levels of respondents significantly correlate with their awareness and understanding of green spaces. Higher education typically translates to greater awareness of the benefits and management of these areas, which is crucial for effective development and maintenance.

The study indicates that 43% of respondents hold a diploma, suggesting a predominance of moderate education levels that may limit awareness and engagement with green space management. Additionally, only 16% are literate, 24% completed 10th to 12th grade, 15% hold bachelor's degrees, and a mere 2% have a master's degree or higher (as shown in Table 4.3).

This distribution points to a potential challenge: with a significant portion of the population lacking higher educational attainment, there may be obstacles to fostering robust community participation and awareness initiatives. Enhancing educational efforts and targeted outreach could be vital for improving understanding and support for urban green space management.

4.2.4 Marital status and Family size of the respondents

The data from Table 4.4 reveals that a substantial 82% of respondents are married and living with their families, while 13% are unmarried, and 6% are single. This distribution is crucial, as marital status can significantly influence attitudes toward and satisfaction with green space management. Research by Dingxi et al. (2015) suggests that married individuals often demonstrate greater sensitivity and satisfaction regarding environmental conditions compared to singles.

Understanding these dynamics helps in tailoring management strategies for green spaces. For instance, with 61% of respondents reporting family sizes of three to five members, considerations for family-oriented recreational areas and amenities could enhance community satisfaction. Conversely, the 21% with larger families may require more extensive green spaces to accommodate gatherings and activities.

Overall, recognizing the implications of marital status and family size will be essential for effective planning and engagement in the management of green spaces.

4.2.5 Employment condition of respondents

The findings presented in Table 4.5 categorize respondents' occupational status into three main groups, reflecting the impact of employment type on perceptions and values associated with green spaces.

A significant 63% of respondents identified as self-employed, which encompasses roles such as merchants, traders, and business owners. This group may have limited exposure to information regarding green space management, potentially affecting their engagement and advocacy for improved management practices.

In contrast, 25% of respondents are government employees, suggesting they might possess more knowledge about policies and practices related to urban green spaces, given their access to resources and training. The remaining 12% are classified as unemployed, participating in temporary or daily work, such as carpentry or masonry. This group may face challenges in prioritizing green spaces due to immediate economic pressures.

Understanding these occupational dynamics is crucial for tailoring educational and engagement strategies around green space management, particularly for the self-employed majority. Enhancing their awareness and involvement could foster greater community investment in maintaining and improving green spaces

4.2.6 Duration of stayed in Jemo one condominium houses

The survey results in Table 4.6 reveal that a significant portion of respondents, 186 (52%), have lived in the Jemo I condominium site for over six years, while 173 (48%) have resided there for 2 to 5 years. This indicates a generally stable community, with a majority of long-term residents.

According to Haq and Shan (2011), long-term residents tend to show greater commitment to green space management compared to shorter-term residents. This finding suggests that the established community is likely to have a deeper understanding of local issues and a vested interest in the condition and management of green spaces.

The implications for planning and implementing integrated green space management initiatives are clear: the longevity of residents provides a solid foundation for engaging them in decision-making processes and fostering stewardship. Their familiarity with the area and its dynamics can be leveraged to enhance participation and ensure that management strategies are reflective of the community's needs and values. This commitment can ultimately lead to more effective and sustainable green space management in Jemo I condominium.

4.3 Benefits of green spaces

Table4.7Respondents responses regarding the benefits of green spaces

No	Variables	Responses					
		Disagree		Neutral		Agree	
		Frequency	(%)	Frequency	(%)	Frequency	(%)
1	Beautification and recreation	43	12	93	26	223	62
2	Parking and drying cloth	61	17	102	29	196	54
3	A place for community discussion	75	21	98	27	186	52
4	Ecological balance	52	15	127	35	180	50
5	Create job opportunity	84	24	102	28	173	48
6	Combating climate change	89	25	111	31	159	44
7	Carrying out different ceremony	118	33	123	34	118	33
8	Conservation of biodiversity	186	52	148	41	25	7
9	Psychological satisfaction	222	62	114	32	23	6

4.3.1 Beautification and Recreation

Green spaces are essential for providing opportunities for beautification and recreational activities, such as relaxing, walking, and socializing. According to the survey, 62% of residents utilize green spaces for these purposes. Activities mentioned include sports, sitting, walking, and listening to music. However, a representative from the Beautification and Aesthetic Administration at Wereda 01 noted that many residents do not fully engage with the limited green areas available, which are not well maintained.

Research by Haq& Shah (2011) supports the idea that urban green spaces are critical for outdoor recreation, particularly in densely populated areas. In Jakarta, for instance, a significant portion of the population regularly visits these spaces for leisure. In Jemo, despite the potential benefits, the development and management of green spaces face challenges. Observations indicate that many spaces, including street trees and small parks, are in poor condition, discouraging residents from using them for recreation and diminishing their aesthetic value.

4.3.2 Parking and Drying Clothes

Table 4.7 illustrates that 54% of respondents utilize green spaces primarily for parking and drying clothes. Many residents reported using communal washing facilities provided by the government but relying on idle green spaces for drying their clothes and crops. Additionally, these areas are used for parking cars and motorcycles.

This overlap in usage can create conflicts; as vehicles occupy the space where clothes are dried, it limits available areas for children to play. Such practices not only hinder the intended recreational use of green spaces but also contribute to their degradation, highlighting the urgent need for improved management strategies that prioritize multifunctional uses while maintaining the integrity and accessibility of green areas.

Fig. 4.3 green spaces used for drying cloth;source researchers self observation

4.3.3 A Place for Community Discussion

The survey results indicate that 52% of respondents believe green spaces are suitable venues for community discussions, while 33% disagree. This finding contrasts with other studies suggesting that neighborhoods with greenery foster stronger social ties compared to those dominated by concrete. This discrepancy highlights the need to explore how the quality and accessibility of green spaces can influence community engagement.

4.3.4 Ecological Balance

Urban green areas provide essential ecosystem services, from maintaining biodiversity to regulating local climates. As urban heat and traffic continue to rise, the ecological benefits of green spaces become increasingly important. The study found that about 50% of respondents recognize the role of green spaces in maintaining ecological balance, while 15% disagreed and 35% remained neutral. These insights align with research indicating that ecological balance is crucial for sustainable urban environments, emphasizing the need for proper management of green areas to mitigate environmental issues.

4.3.5 Job Opportunities

The findings reveal that 48% of respondents see potential job opportunities arising from green spaces, whereas 37% disagree. Many residents believe that green areas could create employment in areas such as landscaping, maintenance, and conservation. However, interviews with

communal leaders indicate that current job creation is minimal, with only a few individuals engaged in conservation efforts. This contrasts with cities in Australia and the UK, where green spaces significantly contribute to local employment.

4.3.6 Combating Climate Change

The study indicates that 44% of respondents agree that green spaces can moderate local climate, while 39% disagree. Adequate vegetation can help mitigate urban heat effects, making green spaces vital for climate adaptation and mitigation. Recognizing their multifaceted benefits, including social and environmental gains, can enhance community support for green initiatives.

4.3.7 Carrying Out Different Ceremonies

About 53% of respondents disagreed that green spaces of the study area serve as venues for ceremonies, while 32% agreed. Although some residents use these spaces for cultural celebrations, the general sentiment suggests that green areas are underutilized for such purposes. This finding points to an opportunity to encourage community gatherings and celebrations within green spaces, enhancing their social function.

4.3.8 Conservation of Biodiversity

Only 7% of respondents acknowledged the role of green spaces in conserving biodiversity, with 52% expressing disagreement. This low awareness highlights a critical gap in understanding the ecological functions of urban green areas. Effective management and education regarding biodiversity can enhance the value of green spaces for both residents and local ecosystems.

4.3.9 Psychological Satisfaction

The survey shows that only 6% of respondents feel that green spaces of the study area provide psychological benefits, while 62% disagree. This finding is concerning, as other studies suggest that exposure to natural environments significantly reduces stress and enhances mental well-being. The poor condition and management of green spaces in Jemo likely contribute to residents' lack of psychological satisfaction. Improving the quality of these areas could lead to greater mental and emotional benefits for the community.

4.4 Community participation in green spaces management

Table 4.8: Residents participation in green spaces

N^{o}	Items		Frequency	Percent
1	Green space managed by community in communal areas	Yes	165	54
		No	194	73
		Total	**359**	**100**
2	Quality of existing green spaces in the communal houses	poor	194	54
		Good	116	32
		Very good	49	14
		Total	**359**	**100**
3	Residents participation in discussion/meeting/ of green space management	Yes, I have participated	89	25
		No, I do not participated	270	75
		Total	**359**	**100**
4	Factors affecting participation of the residents	I do not invited	111	41
		I invited but not participated	159	59
		Total	**270**	**100**
5	In what level you participated in the discussion of green spaces management?	City administration level	0	0
		Sub-city level	12	13
		Wereda level	43	49
		Condominium house administration level	34	38
		Total	**89**	**100**
6	How many times you participated in discussion for implementation of green space management?	None	270	75
		Once	23	6
		Two times	17	5
		Three times	49	14
		More than four times	0	0
		Total	**359**	**100**

Source: Field survey data, (2024)

The study indicates that a significant portion of respondents (73%) perceive that green spaces in their community are poorly managed. Interestingly, 54% noted that some condominium sites have well-managed green spaces, attributed to resident participation. When asked about the quality of existing green spaces, 57% rated them as low quality, while 46% considered them well-managed.

This disparity suggests a direct link between resident involvement in decision-making and the quality of green space management. A lack of awareness about the benefits of green spaces and limited involvement in management processes likely contribute to the overall low standards observed.

Moreover, the findings reveal that 75% of respondents have not participated in discussions regarding green space management, with 59% indicating they are unlikely to engage even if invited. This lack of participation stems from a general unwillingness to engage, highlighting a critical barrier to effective management.

In terms of formal participation, 49% have engaged in discussions at the wereda level, while 38% have been involved at the condominium administration level. However, a vast majority (75%) have not participated in local implementation efforts, with only 19% reporting engagement in planning and management activities at least three times.

These results align with findings from Haq (2011), which emphasize the importance of open community participation and access to information regarding green space management. Effective engagement from residents is essential for the sustainable development, management, and protection of green spaces.

In summary, improving community involvement in the management of green spaces is crucial. Without active participation, efforts to enhance the quality and functionality of these areas are unlikely to succeed. Strategies to increase awareness and encourage participation are vital for fostering a more collaborative approach to green space management in Jemo condominium.

4.5 constraints for integrated management of green spaces

Table 4.9: Respondents responses on factors of the low resident's participation in green space management

No	Variables	Responses						Rank of the problems
		Disagree		Neutral		Agree		
		Frequency	%	Frequency	%	Frequency	%	
1	Lack of residents commitment to participate in the management of green space in the neighborhood	0	0	37	10	322	90	2nd
2	Lack of needs to attend meetings concerning green space	49	13	114	32	198	55	7th
3	Low financial support of residents to protect the existing green space	29	8	124	35	204	57	6th
4	Low attention of residents for green spaces management	41	11	89	25	229	64	5th
5	Lack of access to information about green space can discourage to participate in its management	66	20	105	29	184	51	8th
6	Lack of coordination among residents, communal leaders and officials in the implementation of management of green spaces	23	6	37	10	107	84	3rd
7	Lack of local regulations and legal protections of green spaces management	250	70	95	27	14	3	9th
8	Lack of sense of ownership among the residents	54	15	66	18	239	67	4th
9	Low environmental awareness of the residents and officials in new residential areas/apartments	0	0	23	6	336	94	1st

Source: Field Survey Data, 2024

The study identifies several key weaknesses in the current management of green spaces, primarily stemming from low environmental awareness among both residents and officials. An overwhelming 94% of respondents indicated that this lack of awareness significantly hampers resident participation in green space management. Conversely, only 6% felt that awareness was not a crucial factor, highlighting a strong consensus on the issue.

key factors contributing to low participation summerized

1. **Lack of Resident Commitment**: Residents often do not feel a sense of responsibility towards maintaining and improving green spaces.
2. **Poor Coordination**: There is a lack of effective collaboration among stakeholders, including residents, local officials, and NGOs.
3. **Sense of Ownership**: Many residents do not feel ownership over communal green areas, which diminishes their motivation to engage.
4. **Low Attention and Interest**: A general lack of interest in green space issues further reduces community engagement.
5. **Financial Support Deficiencies**: Limited funding and resources hinder the effective management and development of green spaces.
6. **Meeting Attendance**: Many residents do not see the need to attend meetings related to green space management, indicating a disconnect between community needs and governance.

Overall, the findings underscore the critical need for increased awareness and education about the importance of green spaces, alongside strategies to foster a sense of ownership and commitment among residents. This could involve targeted outreach, community workshops, and collaborative initiatives aimed at enhancing participation in the management of green spaces.

Figure 4.5: Pictures showing poorly managed green spaces in some parts of Jemo

Key pointssummerized

1. **Low Environmental Awareness**:
    - Residents frequently misuse green spaces for illegal activities, such as waste dumping and unauthorized construction.
2. **Lack of Commitment**:
    - A significant 90% of respondents noted that residents show little commitment to managing green spaces, which impedes effective participation.
3. **Coordination Issues**:
    - 84% of respondents highlighted a lack of coordination among residents, community leaders, and stakeholders as a barrier to effective management. This disconnect leads to poor planning and implementation of green space projects.
4. **Sense of Ownership**:
    - A lack of ownership over green spaces was cited by 67% of respondents as a reason for low participation. Fostering a sense of community responsibility could enhance engagement.
5. **Financial Support**:
    - Financial constraints were acknowledged by 57% of respondents, indicating that insufficient funding for maintenance and management is a critical issue.
6. **Meeting Attendance**:

- The lack of interest in attending meetings about green space management was mentioned by 55% of respondents, which suggests a disconnect between residents and decision-making processes.

7. **Access to Information**:
    - Over half of the respondents felt that limited access to information about green space management discouraged participation, indicating a need for better communication.

Constraints for Integrated Management:

- **Poor Coordination**: Different departments managing green spaces operate in silos, leading to inefficiencies and conflicts in project implementation.
- **Low Community Engagement**: Apathy towards green space management and illegal activities detract from community involvement and stewardship.
- **Financial Limitations**: Inadequate financial support undermines the sustainability of green space initiatives.
- **Lack of Information Sharing**: Insufficient communication hampers collaboration and informed decision-making among stakeholders.

Table 4.10: Constraints for integrated green space management mentioned by respondents

Nº	Variables	Responses						Rank of the problems
		Disagree		Neutral		Agree		
		Frequency	%	Frequency	%	Frequency	%	
1	Lack of skilled manpower	0	0	29	8	330	87	3rd
2	Lack of priority given to green space	23	6	111	31	225	63	5th
3	Lowawareness level of residents on participation	0	0	17	5	342	95	1st

4	Shortage of budget	8	2	68	19	283	79	4th
5	Lack of alternative sources of funding	202	56	87	24	70	20	7th
6	Lack of green spaces managements and follow-up	184	51	128	36	47	13	8th
7	Lack of coordination between stakeholders	0	0	23	6	336	94	2nd
8	Absence of responsible institution for implementation	200	56	147	41	12	3	9th
9	Poor implementation of green space management policies	27	6	138	39	198	55	6th

Source: Field Survey Data, (2024)

Key Factors Impacting Green Space Management based on rank:

1. **Low Awareness Levels**:
    - A staggering 95% of respondents identified low resident awareness as a major constraint. Awareness is crucial for community participation in environmental management, as noted by various studies (Haq, 2011; Hakim, 2015).
    - Many residents and even beautification officials lack the knowledge necessary for maintaining green spaces, resulting in neglected areas that become dumping sites.
2. **Lack of Coordination**:
    - A significant 94% of respondents emphasized poor coordination among stakeholders as a critical issue. Effective management requires collaboration among various institutions, as highlighted by studies in other urban contexts (Rustam, 2015).
    - Challenges include a lack of recognition for certain sectors, unclear responsibilities, and poor communication among involved parties.
3. **Additional Factors**:
    - **Lack of Skilled Manpower**: Insufficient expertise can hinder effective management and maintenance of green spaces.
    - **Budget Shortages**: Limited financial resources restrict the implementation of necessary maintenance and improvement efforts.

- **Lack of Regulations**: Absence of local regulations can lead to mismanagement and exploitation of green spaces.
- **Absence of Responsible Institutions**: Without designated authorities, accountability for green space management suffers.

Table 4.11: The level of coordination among allied bodies on green spaces in Nifas Silk Lafto

Institution/Body (at sub city and wereda level)	**Coordination with allied body**	**Reason**
-Beautification, cemetery and park development and management office	Poor	-Incoherent responsibilities
- Environmental protection office		-Incoherent
- Land development and management office	Poor	responsibilities
- Construction and housing office		-Lack of integration
- NGOs	Poor	- Lack of recognition
	Poor	- Incoherent
	Poor	responsibilities

Source: Field Survey Data, (2024)

Key Challenges Identified:

1. **Lack of Stakeholder Involvement**:
   - There's minimal effort from the Beautification, Cemetery, and Park Development and Management Agency, along with the Addis Ababa Environmental Protection Authority, to engage stakeholders in beautification and green space management.
   - The absence of a structured approach for stakeholder participation has led to project discontinuities and integration issues.
2. **Poor Coordination Among Institutions**:
   - Responsibilities among various agencies are poorly defined, leading to ambiguity and inefficiencies.

- Weak coordination results from ineffective communication, lack of clear roles, and insufficient regulatory enforcement.

3. **Insufficient Skilled Manpower**:
   - A significant 87% of respondents identified the shortage of skilled professionals as a major barrier to effective green space management.
   - The complexity of urban green space management requires multidisciplinary expertise, which is currently lacking.

Table 4.12: Human resource at nifas silk laftowereda 01 level

Nº	Job title	Needed		Existing		Remark
		Qualification	Nº	Qualification	Nº	
1	Law	LLB	1	LLB	-	
2	Plant Science	BSC/MSC	3	BSC/MSC	1	
3	Forestry	BSC/MSC	4	BSC/MSC	2	
4	Agro-economics	BSC/MSC	3	BSC/MSC	-	
5	Urban management	BSC/MSC	3	BSC/MSC	-	
6	Urban planner	BA/MA	2	BA/MA	-	
7	Horticulture	BSC/MSC	2	BSC/MSC	1	
8	Others	Not mentioned	6	Engineering Biology Geography Others	2 4 5 2	
Total			24		17	

Source: Field Survey Data, (2024)

Key Challenges Identified

1. **Staff Shortages**:
   - A significant shortage of qualified professionals (17 out of 24 positions filled) exacerbates management issues. Many existing staff lack the necessary skills and knowledge in areas such as horticulture and landscape management.
   - Studies indicate that urban green space management suffers from a lack of skilled personnel, which is critical for effective maintenance and planning.

2. **Budget Constraints**:
    - A majority (79%) of respondents identified budget shortages as a serious barrier to effective green space management. Financial support is often not prioritized within the city administration.
    - Insufficient funding limits the ability to hire qualified staff and maintain green spaces.
3. **Lack of Priority for Green Spaces**:
    - Approximately 63% of residents feel that green spaces are not given enough priority in planning and management efforts, which corresponds with broader trends in many urban areas.
4. **Poor Implementation of Policies**:
    - Over half of the respondents (55%) noted that green space management policies are poorly implemented, indicating systemic issues within local governance.
    - The lack of a responsible body for overseeing green space projects contributes to ineffective management.
5. **Lack of Alternative Funding Sources**:
    - While 20% of respondents identified a lack of alternative funding, 56% expressed willingness to support funding initiatives, suggesting potential avenues for community involvement.
6. **Weak Regulatory Framework**:
    - There is insufficient enforcement of existing regulations, compounded by overlapping responsibilities between agencies, leading to poor compliance and management outcomes.
7. **Absence of Coordinated Institutions**:
    - Despite having relevant agencies, there is a lack of integration among them, which hampers the effective implementation of beautification and green space projects.

4.6 Opportunities for management of green spaces in Jemo one condominium

Table 4.13: Opportunities for management of green spaces

No	Items	Responses			
		Yes		No	
		Frequency	%	Frequency	%
1	Existing rule and regulation	336	94	23	6
2	Having government institution	322	90	37	10
3	High community participation in management	149	42	210	58
4	Availability of green areas	359	100	0	0
5	Sufficient budget	157	44	202	56
6					

Source: Field Survey Data, (2024)

Key points on Opportunities for Green Space Management

The study highlights several opportunities and challenges related to the management of green spaces in the Jemo I condominium:

Opportunities Identified

1. **Existing Rules and Regulations**:
    - 94% of respondents view existing regulations as a strong opportunity for better management.
2. **Government Institutions**:
    - 90% of respondents see the presence of government bodies (like the Beautification, Cemetery, and Park Development Management Organization and the Addis Ababa Environmental Protection Authority) as beneficial.
3. **Available Green Spaces**:
    - 100% acknowledge that existing green spaces can be leveraged for management.
4. **Community Participation**:
    - While only 42% view community participation as a strength, a significant 58% see its absence as a challenge.
5. **Budget Limitations**:

- 56% noted a lack of sufficient budget as a barrier but also a potential area for improvement.

Suggested Solutions for Integrated Management from residents

- **Enhance Coordination**: Strengthen collaboration between communities and stakeholders for effective management.
- **Strategic Planning**: Develop both long-term and short-term management strategies.
- **Skilled Personnel**: Assign qualified and experienced individuals to key positions.
- **Increase Community Participation**: Foster a sense of ownership among residents regarding green spaces.
- **Awareness Campaigns**: Educate the community on the benefits of green spaces.
- **Budget Allocation**: Ensure adequate financial resources for management.
- **Learning from Others**: Share best practices and experiences from other sub-cities.

Suggested solutions from Nifas Silk Lafto Sub-City and Wereda Experts:

- **Community Awareness**: Launch awareness programs to inform the public about green space benefits and management.
- **Fill Vacancies**: Recruit qualified personnel to address staffing shortages.
- **Budget Support**: Advocate for increased budget allocations for green space initiatives.
- **Training Programs**: Provide ongoing training for staff to enhance their skills.

Suggested solutions from NGOs and Other Stakeholders:

- **Awareness and Mobilization**: Increase awareness and mobilize communities for active participation in management.
- **Stakeholder Integration**: Foster collaboration among all stakeholders to create a cohesive management approach.
- **Master Plan Implementation**: Insist on strict adherence to master plans and urban development policies.

CHAPTER FIVE

Major Findings, Conclusions, and Recommendations

5.1 Major Findings of the Study

This section summarizes the key findings, organized based on the research questions.

1. **Perceived Benefits of Green Spaces**:
    - Residents of Jemo condominium identified multiple uses for green spaces, with the most common being beautification and recreation (62%), followed by practical uses like parking and drying clothes (54%), and as venues for community discussions (52%). However, awareness of the broader ecological and psychological benefits was notably low, indicating a gap in understanding among both residents and local officials regarding the full range of advantages provided by green spaces.
2. **Constraints to Integrated Management**:
    - The study identified several primary constraints affecting the management of green spaces:
        - **Low Awareness**: Many residents lack awareness of the importance of participating in green space management.
        - **Lack of Coordination**: Insufficient collaboration between stakeholders hindered effective management.
        - **Skilled Manpower Shortages**: A significant deficit in skilled professionals for implementing management strategies was evident.
        - **Budget Constraints**: The allocated budget for green space management was perceived as inadequate, reflecting low priority given by city authorities.
        - **Policy Implementation Issues**: There was poor implementation of existing management policies and a lack of alternative funding sources.
3. **Opportunities for Improvement**:
    - Despite the challenges, the study found notable opportunities for enhancing green space management:

- **Existing Regulations**: 94% of respondents viewed existing rules as beneficial.
- **Government Support**: The presence of relevant government institutions was recognized as an asset (90% agreement).
- **Stakeholder Integration**: Effective collaboration among stakeholders (BCPDMA, private sectors, NGOs, residents) was seen as essential for success.
- **Community Participation**: Although only 42% felt community participation was high, there is a perceived potential for greater engagement.

5.2 Conclusions

Based on the findings of the study, the following conclusions are made:

Current status of green space in the study area in terms of:

a) **Quality and Sustainability**: There is a need for quality improvements and effective distribution of green spaces within the condominium to align with environmental sustainability goals. An integrated management approach is essential.

b) **Management and Use**: Current management of green spaces is inadequate, with many areas being misused for dumping waste and storing materials rather than being developed and protected.

c) **Resident Participation**: Various factors contribute to low resident involvement in managing green spaces, including low environmental awareness, lack of coordination among stakeholders, and insufficient sense of ownership.

Challenges of integrated management of green space identified:

e) **Financial Constraints**: Limited financial support, lack of awareness about meetings regarding green space management, and insufficient access to information further discourage resident participation.

g) **Awareness Gaps**: There is generally low awareness among residents, stakeholders, and officials regarding the values and planned management of green spaces.

h) **Lack of Skilled Professionals**: A shortage of skilled manpower and weak coordination between stakeholders significantly hampers effective management of green spaces.

i) **Professional Capacity Issues**: The low number of qualified personnel in the wereda authority indicates a lack of emphasis on urban greenery management.

- **Opportunities identified**

Despite the challenges, the study found notable opportunities for enhancing green space management:

Existing Regulations: 94% of respondents viewed existing rules as beneficial.

Government Support: The presence of relevant government institutions was recognized as an asset (90% agreement).

Available Green Spaces:

100% acknowledge that existing green spaces can be leveraged for management

5.3 Recommendations

To address the management challenges of green spaces in Jemo condominium, the following recommendations are proposed:

For Green Spaces Management:

- Allocate a proper budget for the maintenance and improvement of green spaces.
- Educate users on responsible usage of these spaces.
- Ensure modifications to green spaces by focusing on:
  - Preservation of green areas.
  - Providing necessary facilities (e.g., seating, pathways, recreational fields).

- Enhancing the quality of existing spaces.
- Incorporating cultural values into design.

For Nifas Silk Lafto Sub City and Wereda 01:

- Train sufficient personnel at all levels to manage green spaces effectively.
- Allocate adequate budgets for maintenance and management.
- Foster public awareness about caring for and using green spaces properly.
- Encourage community involvement in site planning to address local needs.
- Establish specific organizational structures dedicated to integrated green space management.
- Enhance capacity at the community level for better management.
- Involve local communities in funding initiatives.

For Jemo I Condominium Committee:

- Implement proper management strategies with suitable landscape designs.
- Regulate green space usage according to planned management.
- Establish a responsible community organization for ongoing maintenance and funding.

Management and Maintenance Aspects:

- Involve the community in decision-making processes.
- Increase awareness of the environmental and social benefits of green spaces to encourage resident participation.
- Ensure equitable spatial distribution and quality of green spaces based on community size.
- Create effective maintenance mechanisms to enhance functionality and recreational use.
- Design spaces thoughtfully to accommodate various activities and needs.

By implementing these recommendations, the management and maintenance of green spaces in Jemo condominium can be significantly improved, ultimately enhancing the quality of life for residents and promoting a sustainable urban environment.

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APPENDICES

Addis Ababa University

Appendix-1

Questionnaires Prepared for Sample Households

Dear respondents! This questionnaire is prepared as part of the data for my Master's study titled "Challenges and Opportunities of integrated management of urban green spaces in Nifas Silk Lafto sub city, Jemo I condominium site." More specifically; it seeks to have your views and opinions about the challenges of integrated management of green spaces in Jemo I condominium and finally to recommend opportunities to the solution. The information you provide will only be utilized for purpose of this research and will keep confidential. Since, the success of this study depends on your genuine responses; you are kindly requested to be honest in answering the questions.

In responding the questionnaire, please note the following.

- You are not required to write your name or any personal address
- All your responses will be kept confidential and used only for academic purpose
- Make a"√" mark for questions with options, and write your responses on the given space for open ended questions.

PART I: <u>Background Information</u>

Please put a" √" mark, and/ or write your response to fill the following information.

1. Sex: ☐ Male ☐ Female

2. Age: ☐ 18-25yrs ☐ 26-49yrs ☐ above 50yrs

3. Education level: ☐ Read and write ☐ 10th grade or 12th grade complete

☐ Diploma ☐ 1st Degree (BA, BSC…)

☐ 2nd Degree and above (MA, PHD)

4. Marital Status: ☐ single ☐ married and have no children ☐ married and have children

5. Household sizes: ☐ Two and less than ☐ Three-Five ☐ Six and above

6. Employment condition of respondents:

☐ Government employed ☐ Self-employed

☐ Unemployed

7. Duration of living in condominium house:

☐ Between 2-5 years ☐ 6 and above years

Part II: <u>Benefits of green space</u>

Instruction: The benefits of green spaces are listed in the following table. Please read each of them carefully and indicate your agreement or disagreement by putting a**"√"**mark in space provided according with the items listed.

Indicate your response for the following questions by putting a"√"mark in space provided according with items listed.

1=Disagree 2=Neutral 3=Agree

8	**What are the benefits of green space for the residents of Jemo condominium?**	**Scales**		
		1	**2**	**3**
a	Ecological balance			
b	Create job opportunity			
c	Conservation of biodiversity			
d	Combating climate change			
e	A place for community discussion			

f	Beautification and recreation			
g	Carrying out different ceremony			
h	Psychological satisfaction			
i	Parking and drying			

Part III: <u>Community participation in management of green space</u>

Instruction: In the following questions concepts related to community participation in the integrated managementof green space are listed. Please indicate your response by putting a **"√ "** mark in space provided accordingly with items listed.

9. By whom green space is managed now?

……

……

10. Is there a green space managed by the residents of condominium itself?

☐ Yes ☐ No

11. If your answer is **yes** for question#10 explains its current function.

……..

……

12. Who do you think is the main responsible body for the integrated management green space?

……..……..

……

13. How do you evaluate the existing green space management in condominium houses?

☐ Less good ☐ good ☐ Very good

14. How do you evaluate Nifas Silk Lafto sub city in green space management?

……

……..

15. Did you have any participation in the implementation of green space management discussion in your condominium houses?

☐ Yes, I have participated ☐ No, I didn't participate

16. If your response in question #15 is '**No**'. What is the reason?

☐ I'm not invited ☐ I am invited but not participated

Others, please specify----------

17. If your response in question #**16** is **'yes'** in what level you are participated?

☐ City administration level ☐ Sub-city level

Wore☐level Co☐minium house administration level

18. How many times do you participate in the discussion for the implementation?

☐ None ☐ Once ☐ Two times

☐ Three times ☐ More than four times

Indicate your response for the following questions by putting a"√"mark in space provided according with items listed.

1=Disagree 2=Neutral 3=Agree

19	**What are the factors of low residents' participation in management green spaces?**	**Scales**		
		1	**2**	**3**
a	Lack of residents commitment to participate in the management of green space in the neighborhood			
b	Lack of needs to attend meetings concerning green space			
c	Low financial support of the residents to protect the existing green space			
d	Low attention of residents for green spaces management			

e	Lack of access to information about green Space can discourage to participate in its management			
f	Lack of coordination among residents, communal leaders and stakeholders in the implementation of management of green spaces			
g	Lack of local regulations and legal protection on the integrated management of green spaces			
h	Lack of sense of ownership among the residents			
i	Low environmental awareness of the resident and officials in new residential areas/apartments			

Part IV: <u>Constraints for integrated management of green spaces</u>

Instruction: Constraints that hinder integrated management of green spaces are listed in the below table. Indicate your response for the following questions by putting a"√"mark in space according provided with items listed.

1=Disagree 2=Neutral 3= Agree

20	**What are the constraints for green space management in Jemo condominium?**	**Scales**		
		1	**2**	**3**
a	Lack of priority given to green space			
b	Lack of skilled manpower			
c	Low level of residents awareness on participate			
d	Lack of budget			
e	Lack of alternative sources of funding			
f	Lack of green spaces regulations and follow-up			
g	Lack of coordination between stakeholders			
h	Absence of responsible institution for implementation			
i	Poor implementation of green space management polices			

PART V: <u>Opportunities for Management of green Spaces</u>

Instruction: Opportunities for management of open spaces are listed in the below table. Indicate your response for the following questions by putting a"√"mark in space provided according with items listed.

21	**What are the opportunities for management green spaces in Jemo I condominium?**	**Response**	
		YES	**NO**
A	Existing rule and regulation		
B	Having government institution		
C	High community participation in management		
D	Availability of green spaces		
E	Sufficient budget		
F	Integration between all stakeholders (BSPDMO, private sectors, NGOs, residents and communal leaders)		

22. In your opinion, what are the mechanisms that create conducive environment for integrated management of green spaces*?*

……

……

……

……

……..…….

Thank you in advance for your cooperation!

Appendix-2

በጋራመኖርያቤትነዋሪዎችየሚሞላመጠይቅ

የዚህመጠይቅዓላማበአዲስአበባከተማአስተዳደርበሚገኘውንፋስልክላፍቶክ/ክተማበጀሞየጋራመኖሪያቤትየተቀናጀየአረንጓዴቦ ታዎችአስተዳደርችግሮችበማጥናትናበችግሮቹላይየመፍተሄሀሳብመጠቆምእንድንችልታስቦየተዘጋጀነዉ።በመሆኑበመጠይቁየሚ ሰበሰበውመረጃለየትኛውምሶስተኛወገንአይሰጥም፣ስለሆነምተጠያቂውበነፃነትናበመተማመንምላሽእንዲሰጥአጥኒውያሣስባል።

ማሳሰቢያ. 1. በዚህመጠይቅስምወይምየግልአደራሻወይምስምመጻፍአያስፈልግም

2. ትክክለኛመልስዎን

ሀ. በተሰጠውሳጥን“√” ያኑሩ

ለ. በክፍትቦታላይአስፈለጊመልስበአጭሩይጻፉ

ክፍል 1:<u>ዳራዊመረጃዎች</u>

መመሪያ:ከዚህበታችየተለያዩጥያቄዎችቀርበዋል።ጥያቄዎችንበጥንቃቄካነበብክ(ሽ) በኃላበትክክልየኔንአመለካከትወይምባህሪይመስላልየምትለውን(ይውን) ከምርጫዎችበአንደኛዉፊትለፊትበሚገኘዉሳጥንዉስጥየ“√” ምልክትበማድረግመልስ(ሽ)።

1. ፆታ፤ወንድሴት ☐ ☐

2. ዕድሜ፤ ☐ 18-25 ዓመት ☐ 26-49 ዓመት ☐ 50-በለይዓመት

3. የትምህርትደረጃ፤መጻፍናማንበ☐ 10ኛወይም☐ኛያጠናቀቀ

ዲፕሎማ ☐ BA, BSC & BED ☐

ሁለተኛዲግሪናበላይ (MA, PH☐)

4. የጋብቻሁኔታ፤ያላገባያገባናል☐ሌዉያገባናልጅያ☐ ☐

5. የቤተሰብብዛት፤ሁለትናከዚህ☐ችከሶስት-አምስትከ6 በላይ ☐ ☐

6. የስራሁኔታ፤የመንግስትሰራተ☐ልስራየሚተዳደር ☐

ስራየለሌው ☐

7. በጋራመኖርያቤትየቆይታጊዜ፤ከ2-5 ዓመትከ☐ትበላይ ☐

ክፍል 2:<u>የአረንጓዴቦታዎችጠቀሜታ</u>

መመሪያ: ከዚህበታችየተለያዩጥያቄዎችበሁለትክፍሎችቀርበዋል።ጥያቄዎቹንበጥንቃቀካነበብክ(ሽ) በኃላበትክክልየኔንአመለካከትወይምባህሪይመስላልየምትለውን(ይውን) ከምርጫዎቹበአንዱፊትለፊትበሚገኘዉሳጥንዉስጥየ"√" ምልክትበማድረግመልስ(ሽ)።

በሰንጠረዡዉስጥየተመለከቱትምርጫዎችየሚወክሉት፤

1= አልስማማ 2= መወሰንያቅተኛል 3= እስማማለሁ

8	**በጀሞጋራመኖርያቤትአረንጓዴቦታዎችለነዋሪዎችምንጠቀሜታይሰጣቸዋል?**	**አማራጭ**		
		1	**2**	**3**
ሀ	የተለያዩበዓላትንለማክበር			
ለ	የስራእድሎችንለመፍጠር			
ሐ	ለስነህይወትጥበቃ			
መ	የአየርንብረትለዉጥንለመጠበቅ			
ሠ	ለማህበረሰቡየውይይትቦታለማዘጋጀት			
ረ	ለዉበትናመዝናኛ			
ሸ	ለስነምህዳርጥበቃ			
ቀ	ለአእምሮእርካታ			
በ	ለመኪናማቆሚያናልብስማድረቅቦታ			

ክፍል 3፡<u>የነዋሪዎችተሳትፎበተቀናጀየአረንጓዴቦታዎችአስተዳደር</u>

መመሪያ: ከዚህበታችየተለያዩጥያቄዎችበሁለትክፍሎችቀርበዋል።ጥያቄዎቹንበጥንቃቄካነበብክ(ሽ) በኃላበትክክልየኔንአመለካከትወይምባህሪይመስላልየምትለውን(ይውን) ከምርጫዎቹበአንደኛዉፊትለፊትበሚገኘዉሳጥንዉስጥየ" √ " ምልክትበማድረግመልስ(ሽ)።

9. በአሁኑጊዜአረንጓዴቦታዎችንየሚያስተዳድረውአካልማነዉ?

……

……

10. በጋራመኖሪያቤትነዋሪዎችየሚያስተዳድሩ (አያያዝየሚደረግለት) አረንጓዴቦታአለ?

አዎየለም☐ ☐

11. የጥያቄቁጥር #10 መልሶዎ "**አዎ**" ከሆነየተከናወኑትተግባራትያብራሩ?

……

……

12. በዋናነትአረንጓዴቦታዎችንለማስተዳደርሀላፊነትመዉሰድያለበትማነዉ?

……

……

13. በመኖርያቤትአከባቢየሚገኙአረንጓዴቦታዎችአያያዝእንዴትትመዝነዋለ?

መጥፎ☐ጥሩ☐ጣምጥሩ ☐

14. በአረንጓዴቦታዎችአስተዳዳርንፋስልክላፍቶክፍለከተማእንዴትትገልጻዋለ?

……

……

15. በጋራመኖሪያቤትየአረንጓዴቦታዎችአስተዳደርአተገባበር/የአፈጻጸምዉይይትላይተሳትፈዉያዉቃሉ?

አዎን፡ተሳትፌ☐ለሁአይ፡አልተሳተፍኩም ☐

16. የጥያቄቁጥር #15 መልሶዎ "**አይ**" ከሆነምክንያትዎምንድነዉ?

አልተጋበዝኩ☐መሣተፍአልፈለኩም ☐

ሌላምክንያትካለዎትይግለፁ ----------

17. የጥያቄቁጥር#**16**መልሶዎ “**አዎ** ” ከሆነበምንደረጃነዉየተሳተፉት?

በከተማአቀፍ ጉባኤበክፍለከተማደረጃ ☐

በወረዳደረጃ ☐ በጋራመኖሪያቤትአስተዳደርደረጃ ☐

18. ለምንያህልጊዜነዉየተሳተፉት?

ምንምአንድጊዜብ ☐ ለትጊዜ ☐ ☐

☐ 3 ጊዜይሆናልከ 4 ጊዜበላይ ☐

በሰንጠረዡዉስጥየተመለከቱትምርጫዎችበጥንቃቄካነበብክ(ሽ)

በኃላበትክክልየኔንአመለካከትወይምባህሪይመስላልየምትለውን(ይውን)

ከምርጫዎችበአንደኛዉፊትለፊትበሚገኘዉሳጥንዉስጥየ“√” ምልክትበማድረግመልስ(ሽ)።

1= አልስማማ 2= መወሰንያቅተኛል 3= እስማማለሁ

19	**በጋራመኖሪያቤትአከባቢበአረንጓዴቦታዎችአስተዳደርዙርያየነዋሪዎችአነስተኛተሳትፎምክንያትምንድነዉ?**	**አማራጭ**		
		1	**2**	**3**
ሀ	በአረንጓዴቦታዎችአስተዳደርየነዋሪዎችተነሳሽነትአለመኖር			
ለ	አረንጓዴቦታዎችበተመለከተበሚደረገዉስብሰባላይበተከታታይነትየመሳተፍፍላጎትማጣት			
ሐ	አረንጓዴቦታዎችእንድጠበቁየገንዘብዲጎማ/እጥረትበመኖሩ			
መ	የነዋሪዎችአነስተኛትኩረት			
ሠ	ግልፅየሆነየመረጃልውውጥባላመኖሩበአረንጓዴቦታዎችአስተዳደርየመሳተፍፍላጎታቸንንይቀንሳል			
ረ	የተቀናጀየአረንጓዴቦታዎችአስተዳደርትግበራበነዋሪዎች፣በጋራመኖርያቤትአስተዳደሪዎችናባላድርሻአካላትመካከልባለመኖሩ			
ሸ	የተቀናጀየአረንጓዴቦታዎችአስተዳደርበአከባቢደንብናሕገዉስጥባለመካተቱ			
ቀ	በነዋቸሪዎችዘንድዝቅተኛየሆነየአረንጓዴቦታዎችየባሌበትነትስሜትበመኖሩ			

በ	በማህብረሰቡናበአስተዳደርአካላትአዲስበሚገነቡመኖርያቤቶችአነስተኛየሆነየአከባቢግንዛቤበመኖሩ			

ክፍል 4:**<u>የተቀናጀአረንጓዴቦታዎችአስተዳደርችግሮች</u>**

መመሪያ:ከዚህበታችየተለያዩጥያቄዎችቀርበዋል።ጥያቄዎቹንበጥንቃቄካነበብክ(ሽ)

በኃላበትክክልየኔንአመለካከትወይምባህሪይመስላልየምትለውን(ይውን)

ከምርጫዎቹበአንደኛዉፊትለፊትበሚገኘዉሳጥንዉስጥየ“√” ምልክትበማድረግመልስ(ሽ)።

1= አልስማማ 2= መወሰንያቅተኛል 3= እስማማለሁ

20	**በአሁኑጊዜየተቀናጀአረንጓዴቦታአስተዳደርዋናዋናችግሮችምን ድናቸው?**	**አማራጭ**		
		1	**2**	**3**
ሀ	ለአረንጓዴቦታዎችአያያዝቅድሚያአለመሰጠት			
ለ	የተማረሰውእጥረት			
ሐ	የማህበረሰቡግንዛቤአናሳመሆን			
መ	የባጀትእጥረት			
ሠ	አማራጭየገቢምንጮችእጥረት			
ረ	ለአረንጓዴቦታዎችህጎችናተከታታይነትያለሁኔትልአለመኖር			
ሸ	የተለያዩባለድርሻአካላትመካከልቅንጅትአለመኖር			
ቀ	የተቆዋማትተጠያቅነትአለመኖር			
በ	ደካማየሆነየአረንጓዴቦታዎችእቅድአፈጻጸም			

ክፍል 5: <u>ለአረንጓዴቦታዎችአስተዳደርምቹሁኔታዎች</u>

መመሪያ: ከዚህበታችየተለያዩጥያቄዎችቀርበዋል።ጥያቄዎችንበጥንቃቄካነበብክ(ሽ)

በኃላበትክክልየኔንአመለካከትወይምባህሪይመስላልየምትለውን(ይውን)

ከምርጫዎችበአንደዉፊትለፊትበሚገኘዉሳጥንዉስጥየ“√” ምልክትበማድረግመልስ(ሽ)።

21	ለአረንጓዴቦታዎችአስተዳደርምቹሁኔታዎችምንድናቸዉ?	አማራጭ	
		አዎ	የለም
ሀ	የተለያዩህንችናደንቦችመኖር		
ለ	የተለያዩየመንግስትተቆዋማትመኖር		
ሐ	ከፍተኛየሕዝብተሳትፎ		
መ	አረንጓዴቦታዎችመኖራቸዉ		
ሠ	በቅባጀት		
ረ	የተለየዩባለድርሻካላትመካከልቅንጅትመኖር		

22.

በአጠቅላይበጋራመኖሪያቤትአከባቢአረንጓዴቦታዎችአስተዳደረየተሻለ/ምቹየመኖርያአከባቢለመፍጠርምንመደረግአለበት?

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ለዚህመጠይቅበትክክልበመሞላትእንድትተባበሩኝበትህትናእጠይቃለሁ!

Appendix-3

Interview guide for the Beautification, Cemetery and Park Development and Management officials of the Nifas Silk Lafto sub-city.

Date of interview: ……..……..

Position: ……..…….

Interviewee Gender: …….

1. Is green space part of the plan of the sub-city?

☐ Yes ☐ No If your yes, what are activities undertaken?

2. Who is responsible for the management of green spaces in Jemo one condominium?

3. What are the main roles of Nifas Silk Lafto sub-city BCPDMO in green space management?

4. How do you evaluate the coordination between stakeholders in green space management in your sub city?

5. What is the total budget of the Nifas Silk Lafto Sub-city from 2018-2022/2023?

6. What are the main factors that cause low participation of the residents in the green space management in your sub-city?

7.Would you please briefly describe how the local community is participated in green space management?

8. Are there enough skilled man power and professionals in BCPDMO in your sub city? (If the problem is common, how do lack of skilled man power and professionals leads to weak management of green spaces?

9. How do you evaluate the implementation of regulations of green spaces management in your sub-city?

10. Who many experts are there in the Nifas silk Lafto sub-city in BCPDMA concerning integrated management green spaces?

No	**Job title**	**Needed**	**Existing**	**Remark**
		Qualification	**Qualification**	

11. What are the challenges that hinder the integrated management green space in general and amenity and functional green space in particular in the Jemo condominium?
12. What you suggest the solution for question #12?
13. What are the opportunities to manage green spaces in the sub city?
14. Is there any policies, proclamations, rules and regulations, strategies related to green Space management and maintenance in your sub city? Is it applied in the sub city?

Appendix-4

Interview guide for the Beautification, Cemetery and Park, Development and Management officials of wereda 01 Jemo areas administration.

Date of interview: ----------

Interviewee Gender: ----------

Position: ----------

1. What is the current status of green space in Jemo I condominium?

2. Are the green space able to benefit the quality of life's of Jemo condominium residents?

(Economic, social, environmental development of Jemo condominium residents)

3. Who is responsible for the management of green spaces in general and amenity and functional green spaces in particular in Jemo I condominium?

4. What are the main roles of wereda 01 BCPDMO in management of green space?

5. How do you evaluate the coordination between stakeholders in green space management in your wereda?

6. What are the main factors that cause low participation of the residents in the green space management in your wereda?

7.Would you please briefly describe how the local community is participated in green spaces management?

8. How can you assess the participation of the residents in the integrated management of green spaces their neighborhood?

9. How many experts are there in the wereda 01 administration concerning green space management?

Nº	Job title	Needed	Existing	Remark
		Qualification	Qualification	

10. Are there enough skilled man power and professionals in BCPDMO in your wereda? (If the problem is common, how do lack of skilled man power and professionals leads to weak management of green spaces?
11. What are the challenges that hinder the integrated management green space in general and amenity and functional green space in particular in the Jemo I condominium?
12. What are the solutions you suggest for question #14?
13. What are the opportunities to manage and maintenance of green spaces in the sub city?
14. Are there any policies, proclamations, rules and regulations, strategies related to green spacemanagement? Does it applied in the wereda

Appendix-5

Interview guide for the Communal Committee Leaders of Jemo I

condominium site.

Date of interview: ----------

Educational status: ----------

Position: ----------

1. Are there any green spaces in your neighborhood?

☐ Yes ☐ No

2. If your answer is 'Yes' for question #1, what are the benefits of green spaces for the residents of the condominium? (Mention some of them)
3. Who is responsible for the management of green space in the condominium houses?
4. What are the sources of finances for management green spaces in the neighborhood?
5. Do you think the allocated budget and professionals for green spaces management and maintenance is enough for your communal areas?
6. What are the main causes of low participation of the residents in the management green spaces?
7. Would you briefly describe how the local community is participated in green spaces management?
8. What are the main functions of the committees in the integrated management of green spaces?
9. Which local regulation is used for the green space management in your condominium house?
10. What is your relationship with other stakeholders in woreda green spaces management?
11. Which government body supports your work in integrated management green space?

In what way: ☐ Money ☐ Materials ☐ Training

12. What are the challenges that hinder integrated management of green spaces in your site?
13. What do you suggest the solutions for question#12?

Appendix-6

Interview guide for the Addis Ababa Environmental Protection Authorities

Date of interview: ----------

Educational status: ----------

Position: ----------

1. What are the environmental and socio-economic roles of green spaces in urban areas?

2. What should be done in order to conserve green spaces?

3. Who should involve managing and maintaining green spaces?

4. What are the objectives of establishing green spaces in urban areas?

5. What are the rules of governing and managing green spaces?

6. In your opinion, which institutions are doing well and also not doing well concerning the management of green spaces in Addis Ababa?

7. How do you see the flow of information between the institutions mandated to manage green spaces in Addis Ababa?

8. What is the staus current integrated management of environmental in the Addis Ababa, especially in Nifas Silk Lafto sub-city?

Appendix 7

Interview guide for the non-governmental organizations in Nifas Silk Lafto

sub city

1. In what ways your organization involving developing and managing green spaces in Nifas Silk Lafto sub city/?
2. Explain the role of NGOs in green spaces management and development?
3. What are the problems that affect the management of green spaces in the sub city?
4. What should be done for making Addis Ababa and Nifas Silk Lafto sub-city competitive with other sister cities in livability and tourist destinations?
5. Any comment or suggestions you can forward regarding green spaces management.

Appendix-8

Observation checklist

Observation checklist on the condition and activities on urban green space management in Jemo condominium

No	**State of the green spaces**	**Responses**		**Date of observation**	**Remark**
		Yes	**No**		
1	Existing green spaces challenges				
2	Availability of green spaces regulation and rules				
3	Availability of green space				
4	Community participation in green space management				
5	Existing maintenance level of green spaces				
6	Changed to other purpose				
7	Well-developed and serviced				
8	Existing institutional structures				
9	Existing committee at each condominium sites				