



This thesis is submitted to the graduate Program Director of Ethiopian Institution of Architecture, Building Construction and City Development (EiABC) Addis Ababa University, in partial fulfillment of the requirements for the Masters of Science Degree in Housing and Sustainable Development

Title of Thesis: “Management of Shared Outdoor Space in Government Developed Condominium Housing- The Case of Lafto Deset and Ayat Arenguadew Mender Condominium Site”

Author: BETELHEM DEMEKE DILAMO

Date: Oct, 2024 GC

Approved by the Examining Board:

Wubshet Berhanu (Dr. Ing)	_____	_____
Advisor	Signature	Date

Mekonnen Abebe (PhD)	_____	_____
External Examiner	Signature	Date

Elias Yitbarek (PhD)	_____	_____
Internal Examiner	Signature	Date

Abunu Arega (PhD)	_____	_____
Chair Person	Signature	Date

Dagnachew Adugna (PhD)	_____	_____
Graduate program director	Signature	Date

## **DECLARATION**

I declare that, this research entitled “**Management of Shared Outdoor Space in Government Developed Condominium Housing- The Case of Lafto Deset and Ayat Arenguadew Mender Condominium Site**”, is my original work and has not been submitted as a requirement for the award of any degree at Addis Ababa University or elsewhere. All sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Betelhem Demeke Dilamo

Date: Oct, 2024 GC

Signature \_\_\_\_\_ Date \_\_\_\_\_

### **Certification**

Here with, I state that Betelhem Demeke Dilamo has carried out this research work on “**Management of Shared Outdoor Space in Government Developed Condominium Housing- The Case of Lafto Deset and Ayat Arenguadew Mender Condominium Site**”, under my supervision and it is sufficient for submission for the partial fulfillment for the award of MSc Degree in Housing and Sustainable Development.

Wubshet Berhanu (Dr. Ing)  
Associate professor

Signature \_\_\_\_\_ Date \_\_\_\_\_

## **ABSTRACT**

This study assessed the state and management of shared outdoor spaces in condominium housing and their impact on social interaction within selected neighborhoods in Addis Ababa. Since the launch of Ethiopia's IHDP program in 2004, which aimed to integrate green spaces, playgrounds, schools, and commercial hubs into condominium sites, poor management and improper use of these shared spaces have emerged as significant challenges. Using case studies of two condominium sites, the research aimed to evaluate the state and management of shared outdoor spaces, identify challenges in their management, and examine the effects on residents' social ties. Data collection involved questionnaires, observations, interviews with 30 residents, key informants, and condominium association members, supported by secondary sources on housing management policies. The management of shared outdoor spaces in the Lafto Deset condominium highlights significant challenges. Despite the presence of internal regulations meant to govern these spaces, such as parking areas, playgrounds, roads, and slaughtering areas, are largely ignored in practice. Residents are overwhelmingly dissatisfied, with 93.3% expressing frustration over the poor performance of the management committees. Issues such as corruption, resource mismanagement, budget constraints, lack of commitment, and inadequate communication contribute to this dissatisfaction. Additionally, inappropriate design and neglect exacerbate the problems, leading to unsafe and unsanitary conditions. In contrast, the Ayat Arengudew Mender site demonstrates a well-functioning management system, fostering better social interactions and community bonds through effective use and maintenance of shared spaces. The study underscores the importance of robust management systems in enhancing the quality of life and social ties within condominium communities.

**Keywords:** Shared outdoor space; Social Interaction; Management system; Addis Ababa; Ethiopia

## **ACKNOWLEDGMENT**

First and foremost, I want to express my gratitude to Almighty God for all of his support throughout my life. I appreciate the sincere and motivating professional advice provided by my supervisor, Wubshet Berhanu (Dr. Ing.). Moreover, I would like to express my sincere gratitude to all of the informants who contributed to data gathering by completing surveys and answering interview questions.

Last but not least, I'd like to thank my family for believing in me throughout this journey. Additionally, I would want to convey my sincere gratitude to everyone who has helped this study endeavor in any way.

**Betlehem Demeke Dilamo**

## TABLE OF CONTENT

<b>DECLARATION.....</b>	<b>ii</b>
<b>ABSTRACT.....</b>	<b>iii</b>
<b>ACKNOWLEDGMENT .....</b>	<b>iv</b>
<b>TABLE OF CONTENT.....</b>	<b>v</b>
<b>LIST OF TABLE .....</b>	<b>viii</b>
<b>LIST OF FIGURE .....</b>	<b>ix</b>
<b>ACRONYMS .....</b>	<b>x</b>
<b>CHAPTER ONE- INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the Study .....	1
1.2 Statement of the problem .....	2
1.3 Research Questions.....	3
1.4 Objectives .....	4
1.4.1. General objective.....	4
1.4.2 Specific objectives.....	4
1.5 Significance of the research .....	4
1.6 Scope of the study.....	5
1.7 Limitation of the study.....	5
1.8. Organization of the research .....	6
<b>CHAPTER TWO - LITERATURE REVIEW.....</b>	<b>7</b>
2.1 Definitions.....	8
2.2 Public space/ outdoor space .....	10
2.3 Management and Maintenance .....	12
2.4 Characteristics of public spaces .....	13
2.5 The effect of shared outdoor space on social interaction.....	15
2.6 Policies and rules regarding shared outdoor space .....	17

2.7 Policies and regulations that govern the shared outdoor space of condominium housing in Ethiopia .....	20
2.7.1 General regulations on shared outdoor space on Proc.370/2003 .....	21
2.7.2 Internal regulations on shared outdoor space of condominium housing .....	22
2.7.3 The management body of the association .....	23
2.7.4 The Role of the management body of the association.....	24
2.8 Sample Case studies from other countries .....	25
2.9 Evaluation frame work.....	29
<b>CHAPTER THREE- RESEARCH METHODOLOGY .....</b>	<b>33</b>
3.1 Introduction.....	33
3.2 Research design .....	33
3.3 Selection of the Case.....	34
3.4 Data collection .....	34
3.5 Sources of Data.....	35
3.6 Data collection techniques .....	35
3.7 Study Area Description.....	38
3.8 Sampling Techniques.....	40
3.9 Data processing and analysis .....	41
<b>CHAPTER FOUR- CASE STUDIES.....</b>	<b>45</b>
4.1 Introduction.....	45
4.2 CASE 1: LAFTO DESET Condominium.....	46
4.2.1The current state of Shared outdoor spaces.....	47
4.3.2 The Management of Shared outdoor spaces.....	49
4.2.3 The local regulation on Shared space of LAFTO DESET condominium .....	50
4.2.4 Shared outdoor space user’s responses.....	50
4.2.5 The perspective of the Interviewees with their Life story .....	55
4.3 CASE 2: AYAT ARENGUADEW MENDER CONDOMINIUM.....	58
4.3.1 The Management of Shared outdoor space .....	59

4.3.2 The current state of Shared outdoor spaces .....	60
4.3.3 Shared outdoor space user’s responses.....	63
4.4 Summary of analysis according to the evaluation framework.....	66
<b>CHAPTER FIVE:- FINDINGS, DISCUSSION AND RECOMENDATION .....</b>	<b>70</b>
5.1 Introduction.....	70
5.2 Management of shared outdoor spaces .....	70
5.3 Challenges on managements of shared outdoor spaces in condominium housing .....	73
5.4 The effect of the existing policies and management of shared outdoor spaces on social ties of residents .....	74
5.5 Conclusion .....	75
5.6 Recommendation .....	75
5.6.1 In terms of policies and regulations.....	75
5.6.2 In terms of the management body .....	76
5.6.3 In terms of design .....	76
<b>References .....</b>	<b>78</b>
<b>Appendix A: Interview .....</b>	<b>81</b>
<b>Appendix B: Questioner .....</b>	<b>83</b>
<b>Appendix C: Internal Regulation Document of the Neighborhood .....</b>	<b>88</b>
<b>Appendix D: Journal Article Manuscript.....</b>	<b>90</b>

## **LIST OF TABLE**

Table 1. Evaluation frame work .....	29
Table 2. The first planned condominium housing for Addis Ababa and other regional states from 2006- 2010 .....	39
Table 3. Sample variables on sampling techniques .....	41
Table 4. Data processing and way of analysis .....	43
Table 5. Activities on planned purpose and current function of shared outdoor spaces.....	47
Table 6. Pictorial analysis of LAFTO DESET condominium site.....	48
Table 7. Ownership type of Lafto deset condominium.....	51
Table 8. Duration of stay Lafto deset condominium.....	51
Table 9. Activities that most demand shared outdoor spaces for the household in LDC.....	52
Table 10. Major reason for not using the required shared outdoor space of LDC.....	53
Table 11. Level of social interaction of Lafto deset condominium.....	53
Table 12. Reasons for weak social interaction of Lafto deset condominium.....	54
Table 13. Level of satisfaction with the provided shared outdoor space LDC.....	54
Table 14. Level of satisfaction with the management system of shared outdoor space LDC.....	55
Table 15. Pictorial analysis of Ayat Arengwadew mender condominium site.....	61
Table 16. Ownership type of Ayat Arengwadew mender condominium.....	63
Table 17. Duration of stay Ayat Arengwadew mender condominium.....	64
Table 18. Activities that most demand shared outdoor spaces for the household AAMC.....	64
Table 19. Level of social interaction of Ayat Arengwadew mender condominium.....	65
Table 20. Reasons for weak social interaction of Ayat Arengwadew mender condominium.....	65

Table 21. Level of satisfaction with the provided shared outdoor space AAMC.....66

Table 22. Level of satisfaction with the management system of shared outdoor space AAMC.....66

Table 23. Summary of analysis according to the evaluation framework.....67

Table 24. Comparison of satisfaction level on the management system across the two cases.....72

Table 25. Comparison of level of social interaction across the two cases.....74

Table 26. List of activities performed by the resident.....85

**LIST OF FIGURE**

Figure 1. The structure of the management body .....24

Figure 2. Site plan of la cité des 1000 logts. ....27

Figure 3. Map of Ethiopia and Addis Ababa .....38

Figure 4. Location of case study areas .....40

Figure 5. Research design flow chart .....42

Figure 6. Location of Lafto Deset Condominium site.....46

Figure 7. Ato Kasahun’s block.....55

Figure 8. Construction at the open space of block 3.....56

Figure 9. Current state of play-ground around block 10 and road from Gate 1 to Gate4.....57

Figure 10. W/ro Alemitu’s block.....57

Figure 11. Roads and ditches..... 58

Figure 12. Location of Ayat Arengwadew mender condominium site.....59

Figure 13. Left: space provided for parking purpose and Right: current parking space .....71

Figure 14. The current state of the playground .....71

Figure 15. Images taken by the author.....87

## **ACRONYMS**

AAHDPO.....Addis Ababa Housing Development Project Office

AAMC.....Ayat Arengadew mender Condominium

GYM.....Gymnasium

HOA.....Home owner’s association

IHDP.....Integrated Housing Development program

ILWU.....International Long shore and Warehouse Union

LDC.....Lafto Deset Condominium

MWUD.....The Ministry of Works and Urban Development

UN HABITAT.....United Nation Habitat

PASDEP.....Plan for Accelerated and Sustained Development to End Poverty

## **CHAPTER ONE- INTRODUCTION**

### **1.1 Background of the Study**

Housing is a composite commodity that fulfills several human needs. The main need is dwelling, but also having a social space to interact and socialize with the family and friends or to be able to reach a desired social status might be some of the reasons for which individuals demand housing services. From a social point of view, housing is more than a dwelling unit and its characteristics, since it also provides health services, security, privacy, neighborhood and social relations, status, community facilities and services, access to jobs and control over the environment.(victoria Ateca & Esperanza vera- Toscano,2008)

The Ethiopian Government also provides IHDP co-housing system in order to resolve the shortage of Housing. The Integrated Housing Development Program (IHDP) is a government-led and financed housing provision program for low-and middle-income households in Ethiopia. The program was launched in 2004 (1996 in the Ethiopian calendar) by State Minister Arkebe Ekubay, then the Mayor of Addis Ababa. (UN HABITAT, 2011)

Condominium housing is a name given to the form of housing tenure where each resident household owns their individual unit, but equally shares ownership and responsibility for the communal areas and facilities of the building, such as hallways, heating systems, and elevators.(Belay File,2017)

A condominium is here referred to as a form of housing with communal spaces, shared facilities, and activities. Common property is owned jointly, and each individual unit owner therefore also owns a share of the common property.

Urban landscapes have changed due to the growing popularity of condominium housing, which has created distinctive community dynamics. Gardens, parks, and recreational areas are examples of shared outdoor spaces that are essential community centers that have a big impact on how citizens interact with one another. Improving community cohesiveness and quality of life requires a better knowledge of how these common areas are maintained, especially as urban populations increase and housing demand increases.

The fabric of a community is shaped by social interactions, which can be facilitated or hindered by efficient management systems for public outdoor spaces. These systems include a variety of tasks, including as programming, dispute settlement, and maintenance and accessibility. Condo

management has the power to either foster inclusion or involvement among residents many of whom come from varied origins and cultures or to foster isolation and disengagement.

The objective of this paper is to investigate the management systems of shared outdoor spaces in two chosen condominium neighborhoods with an emphasis on the effects these systems have on social interaction and community ties. Through the analysis of particular case studies, the researcher investigates the ways in which various management approaches—such as those that prioritize accessibility, maintenance, or community programming—affect residents' propensity to interact with one another and the ways in which these interactions foster the growth of social networks and support systems within the community.

It is imperative for legislators, property managers, and urban planners to comprehend the connection between social interaction and management methods in condominium communities. In an increasingly urbanized world, it may cultivate more lively and interconnected communities by figuring out practical tactics that strengthen community bonds. This research adds to the corpus of knowledge on urban sociology and community development, but it also provides useful advice on how to make common outdoor areas in condominiums as socially beneficial as possible.

The study assess the whole management system of shared outdoor spaces in condominium neighborhoods and identify the problems. Since these shared outdoor spaces are a key for strong social interaction of the community it is also better to know the problems on the management system.

## **1.2 Statement of the problem**

Shared outdoor spaces are vital in fostering social interaction within communities, serving as hubs where residents can engage, connect, and build relationships. These spaces, when designed to be accessible, flexible, and inviting, offer opportunities for meaningful engagement and community-building. High-quality shared spaces—whether indoor or outdoor—must not only address the functional needs of residents but also maximize their potential as social focal points. To achieve this, these spaces should be centrally positioned, visible, and seamlessly integrated into common pathways, making them easy to access and naturally conducive to observation and interaction, as emphasized by Williams (2006).

In Ethiopia, traditional social practices such as weddings, cultural courts (shimglana), idir, ekub, and mahber (associations) have historically played a pivotal role in creating strong community ties. These practices provided platforms for collaboration, mutual support, and the preservation of cultural identity. However, rapid urbanization, population growth, and the shift to modern lifestyles have led to the gradual erosion of these communal traditions.

To address the growing demand for urban housing, the Ethiopian government has introduced condominium housing developments. While these developments aim to provide affordable and scalable housing solutions, they have brought new challenges to community dynamics. Poorly managed and inadequately designed shared spaces have significantly limited opportunities for social interaction in condominium neighborhoods. Key issues include the improper utilization of these spaces, a lack of accessibility, poorly considered centrality, and limited visibility, all of which undermine their intended role as facilitators of community interaction.

This decline in the functionality and usability of shared outdoor spaces not only weakens social cohesion but also raises critical questions about the design and management of urban housing projects. Addressing these issues necessitates a comprehensive evaluation of the current state of shared outdoor spaces, identification of existing challenges, and exploration of innovative strategies for improvement. Enhancing the quality and management of these spaces will not only revitalize social interactions among residents but also provide valuable insights for policymakers and urban planners in creating residential environments that prioritize social cohesion and community well-being.

### **1.3 Research Questions**

The research issues of this study are investigated through the search for answers for the following questions.

1. How are shared outdoor spaces managed in condominiums?
2. What are the challenges of managing shared outdoor spaces in condominium housing?
3. How do existing policies and management systems of shared outdoor spaces influence the strength and quality of social ties among condominium residents, and what potential pathways can enhance community connections?

## **1.4 Objectives**

### **1.4.1. General objective**

The aim of the study is to examine the management system of shared outdoor spaces and its impacts on the social interaction of the community in condominium housing areas in Addis Ababa.

### **1.4.2 Specific objectives**

The specific objectives of the study are:

1. To evaluate the general state and management system of shared outdoor spaces of condominium housing areas.
2. To identify the challenges on management of shared outdoor spaces in condominium housing areas.
3. To determine how the existing policies and management systems of shared outdoor spaces influence the strength and quality of social ties among condominium residents, thereby uncovering potential pathways for fostering stronger community connections.

## **1.5 Significance of the research**

Shared spaces are one of the aspects of Ethiopia's Integrated Housing Development Programs (IHDP), and they are also available in newly built condominiums. However, the current state of previously built areas indicates that the management system and various forms of common spaces require further improvement. As a result, this research focuses on identifying the important concerns related to the management system and the provision of shared outdoor areas in condominium communities. A social interaction is an exchange between two or more individuals and is a building block of society. A better space should be provided for the community in order to build their social interaction. The only space in condominium neighborhood that can build the social interaction of the community is the shared outdoor space. These spaces provide the most significant opportunity for social activities, interactions, and exposure to build sustainable social interactions in condominiums (Ford, 2000) and the well planned communal spaces provide excellent opportunities to maximize the usage of the communal areas for social interactions. (Bandara W. et.al.; 2020)

The study provides a better understanding and knowledge of the use and management system of shared outdoor spaces, strengthening and sustaining the social bonds of the community in condominium neighborhoods. The research also plays a significant role in understanding the problem of the management system which is relevant for all stakeholders who are involved on IHDP. In addition, the study serves as an input for the respective institutions that are responsible for the preparation of condominium neighborhood designs in terms of designing enough shared outdoor spaces. Furthermore, the study contributes insights for local residents and administrators to improve the existing management system and create a more suitable environment.

The findings of this study helps to provide information for future researchers about the challenges of people inside condominium neighborhoods related with shared outdoor space provision and its management system.

### **1.6 Scope of the study**

The basic goal of the study is to investigate the problem and management system of shared outdoor spaces and its influence on social interaction in the community in condominium housing areas, which are confined to two selected condominium housing areas in Addis Ababa: LAFTO DESET and AYAT ARENGUADEW MENDER condominium; each condominium site has 28 and 24 blocks, respectively. Whereas the thematic scope is confined to researching the management system(s) of shared outdoor spaces in terms of their adaptability to current and perceived difficulties, as well as their feasibility. The study deals with the types and intensities of social interactions, as well as residents' impressions of the shared outdoor space management system, in the social domain.

### **1.7 Limitation of the study**

Despite the limitations encountered, such as the lack of organized written documents on the study sites, unavailability of officials for interviews, and low commitment from residents to engage in in-depth discussions, the research paper was successfully completed by adopting a strategic and flexible approach to data collection and analysis. First, alternative sources of information, including direct observation, focus group discussions, and secondary data from existing policies and literature, were extensively utilized. Additionally, the researcher leveraged informal interactions and personal familiarity with one of the sites to gather critical insights. Pre-tested tools, like questionnaires in

Amharic, facilitated effective communication with participants. By employing diverse qualitative methods and triangulating data from various sources, the study achieved its objectives while mitigating the impact of these challenges.

### **1.8. Organization of the research**

The study is divided into five chapters. The first chapter has introduced the main study issues—The Second chapter covers the theoretical foundation of the investigation, followed by a review of relevant literature and contextual review which is an overview of Ethiopia and its capital city Addis Ababa as well as background information on shared outdoor spaces in condominium neighborhoods is provided. Third chapter discusses the research approach used to perform the study. It includes method selection, case study selection, data sources, and data collecting strategies. Chapter four discusses the case study areas which is analyzed using qualitative technique. The Fifth chapter discusses the findings and results and derived from evidence analysis, implications for housing development policy and execution, as well as conclusion and recommendations for improving existing problems.

## **CHAPTER TWO - LITERATURE REVIEW**

### **Introduction**

The literature review is organized into four distinct sections, providing a comprehensive examination of the management of shared open spaces. The first section introduces key definitions essential for understanding the topic. The second part offers a theoretical literature review, exploring core issues related to the management and governance of shared spaces, drawing on relevant theories and models. The third section presents a comparative review of practical views, policies, and regulations governing shared open spaces, incorporating a range of international perspectives. Finally, the review concludes with the development of an evaluative framework based on insights gathered from the previous sections. This literature review employs a conceptual, theoretical, comparative, and methodological approach to provide a holistic understanding of shared open spaces management, contributing both theoretical knowledge and practical applications in this field.

### **Conceptual Review**

A **conceptual review** provides clarity and a deeper understanding of key terms, frameworks, and constructs by exploring and synthesizing their definitions and relationships from various authoritative sources. In this review, the foundational concepts relevant to housing, condominium management, shared spaces, and social activities are analyzed to establish a comprehensive understanding. Drawing on insights from global and local perspectives, including definitions from UN Habitat, UNECE, and scholarly research, the review captures the multifaceted dimensions of housing as a social, economic, and physical entity. Furthermore, it examines essential terminologies such as condominium units, common property, public spaces, and communal facilities, alongside the roles of leadership, management systems, and social activities within shared spaces. This conceptual foundation serves as a basis for exploring the dynamics of shared living environments, emphasizing the interconnections between physical spaces, governance structures, and social interactions. By consolidating these definitions, the review lays a solid groundwork for subsequent analysis and application in related case studies or practical frameworks.

## **2.1 Definitions**

**Housing:** is a composite commodity that fulfills several human needs. The main need is dwelling, but also having a social space to interact and socialize with the family and friends or to be able to reach a desired social status might be some reasons for which individuals demand some housing services. From a social point of view, housing is more than a dwelling unit and its characteristics, since it also provides health services, security, privacy, neighborhood and social relations, status, community facilities and services, access to jobs and control over the environment. (UN HABITAT, 2011)

**Condominium unit:** any of the separately demarcated spaces that have been assigned individual legal title and can be legally owned separately from the whole. Condominium units can be owned by an individual, a family, company or municipality, as permitted by law. A condominium unit can be either a residential dwelling unit or a commercial space. (UNECE, 2019)

**Common property:** is comprised by all parts of the condominium that are not part of any individual condominium unit, including: land plot, any greenery, play courts and recreation areas building structure such as roof, staircases, exterior walls, windows, and building foundations infrastructure and building systems such as piping, electrical cables, engineering systems, equipment, circuits and devices which serve the entire property, or parts of it, and covering more than one condominium unit. Common property is owned jointly, and each individual unit owner therefore also owns a share of the common property. This share, which is specific for each unit, is called the “ownership fraction”. Common property may also be referred to as “common areas”, “common parts”, “commonly owned areas”, “common elements”, or “jointly owned parts”.

**Communal areas and facilities:** are elements of the building, such as hallways which are specific for each unit, is called the “ownership fraction” and designed to be accessible to individuals and groups from the community, without compromising the safety of residents. (UN HABITAT, 2011)

**Public space:** is a place that is used for a variety of practical and symbolic purposes that are sometimes overlapped and fall outside the jurisdiction of a single person or small group. (R Sendi and B Golicnik Marusic, 2012)

**Manager:** is legal person (e.g., external advisor) or company contractually charged with the professional day-to-day management of the owners’ association, including the maintenance and

operation of the common property and all matters of common interest. The Manager's duties should be in accordance with the provisions of any national act on condominiums, the contract of administration, and the resolutions and decisions of the owners' meetings. This may also be referred to as an "administrator". (UNECE, 2019)

**Management system:** A management system is a set of policies, processes and procedures used by an organization or a sector to ensure that it can fulfill the tasks required to achieve its objectives. When it is in condominiums management system it will cover many aspects like: security of the compound, maintenance of shared spaces and facilities, protection, provision of permission for the use of different shared spaces. Shared spaces in condominium mostly include open spaces, stairs, balconies, corridors, and communal buildings. (Ifasuziella Ibrahim.et al., 2012).

**Leadership** is a continual evolution process of qualities like vision, commitment, discipline, trust, integrity, innovation, motivation, authority, dedication, humility, creativity etc., within leaders. (Seema Hiregoudar, & Dr. G. Vani, 2018)

**Space management:** is to manage space effectively to reduce the cost of wasted space and optimize use of space. The efficiency of space management can return the benefit as increased occupancy of space and reduce costs, ensure proper information for space planning and can be used with existing facilities and infrastructure data. (Ifasuziella, Ibrahim.et al., 2012).

**Management of Condominium:** refers to all tasks and duties concerning administration, operation and maintenance of the condominium, irrespective of the method of management chosen. (UNECE, 2019)

**Social activities** are all activities that depend on the presence of others in public spaces. Social activities include children at play, greetings and conversations, communal activities of various kinds, and finally – as the most widespread social activity – passive contacts, that is, simply seeing and hearing other people. (Jan Gehl, 2011)

## **Theoretical Review**

The theoretical review explores the conceptual foundations that inform the design, use, and management of public and shared outdoor spaces. Public spaces are not merely open areas but are

critical components of urban and residential neighborhoods, serving multifaceted roles that range from fostering social interactions to enhancing community cohesion and well-being. Scholars and theorists such as Jan Gehl, R. Sendi, and B. Golcink Marusic highlight that the success of public spaces lies in their design, inclusiveness, and ability to accommodate diverse user needs.

Key theoretical insights emphasize that public spaces function as arenas for both practical activities and symbolic interactions. They represent a dynamic relationship between people and their environment, where physical design and social factors converge to influence usability and satisfaction. Theories like those proposed by Gehl (2011) on the quality of outdoor spaces, and concepts like territoriality and defensible space by Newman (1972), further underscore the importance of thoughtful spatial arrangements in fostering social life.

This review integrates these perspectives to examine the roles of physical structure, safety, inclusivity, accessibility, and comfort in public spaces. It also addresses the implications of management and maintenance practices on their effectiveness. By grounding the discussion in theoretical insights, this section lays the foundation for understanding the interplay between public space characteristics and their impact on social interaction and community life.

## **2.2 Public space/ outdoor space**

With an emphasis on how people interact with these places, public space is defined as an open, publicly accessible location where people go for either solitary or group activity. Therefore, public space is a place that is used for a variety of practical and symbolic purposes that are sometimes overlapped and fall outside the jurisdiction of a single person or small group. People may now access places, activities, data, and resources as a consequence. As a result, public spaces are frequently multipurpose locations that can be classified as totally, partially, or non-green areas as well as soft or hard areas positioned in between man-made buildings that are similarly accessible to the general public. To put it succinctly, public space may be seen as an essential component in a two-way process in which the public (people) and space (Location). (R Sendi and B Golcink Marusic, 2012)

Public spaces should possess a physical attribute that facilitates our ability to distinguish them from their surroundings. This typically results in a sense of enclosure as the surrounding structures and buildings open up to create a space to varied degrees, then wrap around and "contain" the space to

attract attention and form a distinctive site. (Cullen 1961, p. 29), as cited in (Matthew Carmona, 2018)

Well-designed public open spaces provide opportunities for outdoor physical activity and social engagement, making them important community assets. By creating interesting attractions, offering sufficient facilities, and renovating or guaranteeing proper maintenance of the region, more people can be persuaded to visit these locations. (Golicnik & Thompson, 2010).

According to studies, a sense of community is strongly correlated with public space quality, which increases the social efficacy of public places (Friesen 2017). Creating a location for social gatherings requires careful management of public areas (Zhang and Lawson 2009).

Some studies have established how 'high-quality' public spaces can promote greater associations through providing a sense of community, thus enhancing its social effectiveness (Chen, Liu and Liu 2016)

As mentioned in the book of 'Life Between Buildings' by Jan Gehl, When outdoor areas are poor quality, only strictly necessary activities occur. When outdoor areas are of high quality, necessary activities take place with approximately the same frequency – though they clearly tend to take a longer time, because the physical conditions are better. (Jan Gehl, 2011)

The use value of a public area from the perspective of its users must be taken into account, according to environment behavior experts, while evaluating public spaces. A public space's worth, for instance, has to be evaluated in light of its capacity to satisfy the various demands of its users, according to Low, Taplin, and Scheld (2005).

### **Importance of public space within residential neighborhood**

The diverse usage of public areas in residential neighborhoods provides them multiple functions. Recreation, exposing various residents to one another, fostering social cohesion and intergenerational interaction, contact with nature (especially green spaces), articulating built areas, legibility of the residential area, and providing a means of orientation within it can all be considered as the main functions of public space. Public space may also affect the perception of a certain neighborhood due to its architectural elements. Well-designed public areas, particularly those that are green, enhance residential environments' visual appeal and residents' contentment with them. These aspects are crucial because they serve as healing environments that promote health and wellbeing.

Successful public spaces ought to be easily accessible and have good connections to the activities taking place in the nearby buildings as well as to each other. They are effective when they can offer a range of activities to suit the needs of many users, when they are aesthetically pleasant and cozy, and most importantly, when they encourage user socialization. Convenience, connectedness, closeness, continuity, dependability, readability, and walkability are all considered aspects of accessibility and linking. Homegrown quality, vibrancy, fun, originality, specialness, realness, sustainability, affordability, utility, celebration, and indigenoussness should all be included in the variety of activities and purposes. Cleaning, greenness, walkability, sittability, spirituality, beauty, safety, charm, and historical elements are all included in comfort and image, whilst friendliness, storytelling, gossip, stewardship, neighborliness, collaboration, diversity, welcomeness, and pride are all included in sociability. (R Sendi and B Golicnik Marusic, 2012)

### **2.3 Management and Maintenance**

Managers should be fast at planning, should be able to organize and delegate work, motivate people, control the performance, and collaborate with others. They should be energetic and goal-oriented, creative and initiator, flexible in new situations, responsible, etc. They should have critical thinking, communication skills, decision making methods and techniques, teamwork skills, broad and non-standard thinking, self-development and personal growth needs, psychological ability to influence people. (Gayane Tovmasyan, 2017)

Negative outcomes might also result from improper upkeep and poor management of public areas. Even while, open public green spaces are frequently cited as the most desirable aspect of many residential neighborhoods, inadequate management and upkeep can make these areas the source of the neighborhood's greatest animosity and unwelcome areas. Poor management and upkeep of public areas may give the neighborhood a bad reputation among outsiders, which might make the locals unhappy. Additionally, improper maintenance of public areas can result in a decline in the neighborhood's visual appeal and, in certain situations, even turn these areas into dangerous locations. The formation of a pleasant residential environment and the establishment of a sense of neighborhood or community cohesiveness among inhabitants are significantly influenced by well-managed and well-maintained public areas. (R Sendi and B Golicnik Marusic, 2012)

The management of indoor communal facilities was also shown to influence usage and social interaction. The exclusion of residents from communal facilities for private events was highlighted

in communities as being a factor that reduced social interaction, as it created conflict and lowered use of communal facilities by those who were excluded. Poor maintenance of communal spaces was also shown to reduce use and social interaction. (Williams, 2006).

The research conducted by the aforementioned academics has shown the following characteristics of public outdoor areas.

## **2.4 Characteristics of public spaces**

Urban Planning Institute of the Republic of Slovenia produced a paper by R Sendi and B Golcicnik Marusic titled Neighborhood Design: Public Spaces. In it, they claimed that Public areas need to be visually appealing, safe, hygienic, convenient, recognizable, customizable, and flexible. (R Sendi and B Golcicnik Marusic, 2012)

To build well-designed public spaces or Shared outdoor areas inside the residential neighborhood, the following important factors should be addressed according to the study and should be taken into account.

### **Physical structure**

The physical structure plays a crucial role in design as it creates a welcoming and safe living space and fosters a feeling of place. Public space design needs to have a certain amount of flexibility so that people may periodically rearrange or modify portions of their surroundings, in addition to being readable. Physical elements that promote socialization, allow people to actively engage in the modification or adaption of public areas for specific goals or activities, and create an environment that fosters a feeling of community. (R Sendi and B Golcicnik Marusic, 2012)

### **Inclusiveness**

A public place is one where anyone may participate. It is a platform for the voice of the group as a whole and for common interests, but it is also a place where confrontations and divisions between different groups take place. An area's capacity to accommodate a variety of activities and actors may define how inclusive it is. (Vikas Mehta, 2013)

### **Safety**

Certain residential neighborhoods do have safety concerns, thus these issues need to be given extra consideration while planning. In addition to being a major risk to residents' lives, unsafe public

areas might eventually cause the social and economic downfall of a specific residential neighborhood. Designs intended to provide safety must refrain from creating inhospitable, alienating public spaces, such as locations with severe usage limitations, where the safety and terror elements are genuine. (R Sendi and B Golicnik Marusic, 2012). Another crucial consideration while using public space is traffic safety. Numerous policies and physical characteristics have been recommended as being important in studies pertaining to actual and perceived safety from traffic. ( Clarke, Andrew;Dornfeld. et el., 1994)

### **Access**

As far as public space definitions go, accessibility is the one that is most frequently mentioned. Diverse writers assign distinct functions and interpretations to the phrase, both in terms of its definition and its application in assessing the efficacy of public areas. In actuality, three forms of access are often taken into account: symbolic, visual, and physical. Physical access entails the removal of obstacles and connection to other areas. When it comes to public space amenities for the elderly and small children, ease of access is extremely important. In connection to the residential structures, these places have to be conveniently accessible as well. The term "visual access" describes a user's proper visual contact with the location they are traveling towards. In this instance, visibility is a critical component of public space safety. Being noticeable within a space is just as crucial as the space's overall visibility. Symbolic access is also becoming more and more acknowledged. In many cases, it is shown by the existence of markers or signs that indicate who is allowed and who is not in particular areas. These indicators may consist of physical components and place-specific articulations, such monuments, sculptures, etc. (R Sendi and B Golicnik Marusic, 2012).

### **Comfort and Amenities**

Physical features like seating areas, additional street furniture and tangible artifacts, trees, shade, and shelter, wide sidewalks, a high degree of articulation with nooks and corners, slight setbacks in nearby walls, and landscape elements like planters and ledges are a few more elements that can make public spaces more comfortable. (De Jonge 1967 – 1968 ) as sited in (Vikas Mehta, 2013).

For comfort and an amenity in public areas, recreation is the most crucial consideration. The recreational component is the interaction that takes place between users of a public area and how

that engagement affects a person's personality. All residents' recreational interests are catered to, and a wide range of recreational activities are made possible by the places and services that are designed to cater to everyone, regardless of age or status. (R Sendi and B Golicnik Marusic, 2012)

## **2.5 The effect of shared outdoor space on social interaction**

The paper titled "Housing Layout, Social Interaction, and the Place of Contact in Abu-Nuseir, Jordan" was presented by Tawfiq Mabu and Hazzeh at the University of Jordan's Department of Architecture, states that the common areas between houses are important features that facilitate social activities in neighborhoods. Urban research indicates that the decline of social life in housing estates is closely related to the design of communal outdoor spaces. The spatial arrangement of apartment blocks has been found to reduce social interaction among residents and influence their activity patterns. (Hazzeh, Tawfiq Mabu, 1999)

### **How can space facilitate social interaction?**

Outdoor settings, according to the above studies, can improve social interaction. People visit outdoor locations in order to engage in social contact. (Marcus & Francis, 1990) Outdoor spaces provide opportunities for incidental meetings and potential interactions with strangers (Drucker & Gumpert, 1998)

Individuals have the opportunity to participate in high-level social interaction in these locations. Individuals congregate in communal outdoor spaces in large apartment buildings to increase recreational options outside the home. (Glaeser Edward, Laibson David, et.al., 2002)

According to Farida Naceur's 2013 paper, "Effects of outdoor shared spaces on social interaction in a housing estate in Algeria," published in *Frontiers of Architectural Research*, Social variables and physical components of shared outdoor areas are the three types of factors that influence social interaction in housing estates. The following is a detailed description of these:

### **Social variables**

The socio-demographic characteristics of a neighborhood affect how neighbors interact with others, and how they use shared outdoor spaces. Factors such as respondents' stage in the lifecycle (including age, marital status, and presence of children at home), owner-renter status, length of

residence, educational attainment and annual income are relevant socio-demographic characteristics presumably associated with social interaction (Haggerty,1982 sited in Naceur Farida).

### **Layout pattern**

This refers to the spatial arrangement of a neighborhood. The layout plan of housing estates can contribute to the interaction among residents and eventually to the formation of social relationships. (Jacobs, 1961) reported that the arrangement of traditional neighborhoods can enhance social life, with physical features, such as side walks, facilitating social activities. (Gehl, 1986) found that “long-duration activities” in residential streets occur in semi-private zones that have so called soft edges (e.g., front gardens).This point of view is supported by Newman's “defensible theory” (Newman, 1972) states that territoriality is a critical mechanism to create a cohesive residential environment and thus make it well contained and easy to monitor and control. (Farida Naceur, 2013).

### **Physical features**

A high-quality outdoor space can enhance social interaction by attracting people to come and stay for some time. The more time people spend outdoors, the more likely are they to engage in activities. (Knack, 2000 sited in Farida Naceur, 2013.)The visual appearance of common outdoor spaces is important to develop neighborhood relations. (Skjaeveland and Garling, 1997 sited in Farida Naceur, 2013). Physical features are identified as efficient design elements in outdoor spaces to encourage social interaction .Physical features can attract people to stay outdoors and engage in conversations. The existence of interesting objects or features, such as artificial water scenery and properly arranged seats, also encourages the use of public space. The provision of greenery in residential communities increases opportunities for social activity and enhances social bonding among residents.(shu-chun, 2006 sited in Farida Naceur, 2013).). Play grounds with recreational facilities that are attractive to children are likely to make people on this site interact. (Farida Naceur, 2013).

### **Comparative review**

A well-managed shared outdoor space is essential for fostering social interaction, enhancing the quality of life for residents, and maintaining the safety and environmental standards of condominium communities. In this context, national condominium laws play a pivotal role in

regulating the use, maintenance, and governance of shared outdoor spaces. This section explores and compares the legal frameworks governing shared spaces in condominiums across three distinct countries: China, Rwanda, and Ethiopia. By reviewing national condominium laws, the responsibilities and rights of residents, and the role of management bodies, we can understand the various mechanisms that ensure these spaces are used fairly, safely, and sustainably.

This comparative literature review draws on specific condominium laws and regulations from the Real Right Law in China, Law N°15/2010 in Rwanda, and Proclamation No. 370/2003 in Ethiopia, each of which outlines provisions for shared spaces. In doing so, the review examines how legal systems define management structures, the duties of owners' associations, and the scope of control over shared outdoor spaces. Additionally, it highlights the role of internal condominium regulations and how they govern the day-to-day use of these spaces, focusing on environmental hygiene, security, and resident interaction.

By analyzing these laws and regulations, this review provides insight into the ways that different legal systems approach the governance of shared outdoor spaces and the implications for community life in condominium settings.

## **2.6 Policies and rules regarding shared outdoor space**

National condominium laws should identify management functions and define the duties and obligations of the manager, the board, and the owners' association, as appropriate. Further, the law should specify if owners' associations or condominium boards are considered legally competent entities authorized to enter into contracts for services, utilities, or other things. The law should also specify all the possible circumstances that could lead to failure to organize management bodies. When such is the case, the unit owners should have the right to organize a general meeting and choose a management structure and/or request from the concerned government authority to do this for them. (UNECE, 2019)

One of the research's goals is to discover the laws and regulations that control public areas or shared outdoor spaces. Based on this information, sample laws governing shared outdoor spaces from various nations have been chosen, and the particular study area is assessed.

## **Real Right Law of the People's Republic of China**

Condominium law in China is separately covered in the Real Right Law and Law on Property Management. The Real Right Law, enacted in 2007, covers the division between individual and collective property (Real Right Law, 2007). A condominium is required to create a management committee or elect a manager. Once a management committee is created, the members shall elect among them a person to be the chairperson to represent the committee. The election, dismissal and authority of the chairperson and committee members and the number of members, the convening procedure, and the approaches to conduct related affairs and proxy shall be decided by the unit owner assembly unless otherwise stipulated in the condominium regulations.

The duties of a condominium management committee are as follows:

- The cleaning, maintenance, reparation, and general improvement of the common properties and shared areas;
- The security and environmental maintenance of the condominium and the surroundings;
- Suggestions for improvement of the common affairs of the inhabitants;
- Stopping the violations of inhabitants and provision of required information;
- Income, expenditures, custody and utilization of the revenue, common fund, and related expenses;
- Presentation and announcement of accounting reports, financial reports, and other management affairs;
- Confirmation, takeover and custody of shared areas, designated shared areas, and their affiliated facilities and equipment;
- Declaration of public safety inspection and fire safety equipment maintenance records and execution of needed improvements specified as to be carried out by the management committee

All inhabitants are required to abide by the following:

- Not to disturb the peace, safety and sanitation of other inhabitants when maintaining, repairing their own units or designated private areas or exercising their rights;

- Not to refuse the requests of other inhabitants to enter or use their units or designated private areas for maintenance or reparation of their units or designated private areas, or conduct plumbing and wiring works;
- Not to refuse the requests of the manager or management committee to enter or use their units or designated private areas for maintenance or reparation of shared areas or to conduct piping and wiring works;
- Obtain the consent of the manager or management committee before accessing shared areas for maintenance or reparation of individual units or designated private areas or to conduct piping and wiring works;(Real Right Law of the people's Republic of china, 2007)

### **Rwandan Condominium Law**

#### **Law N°15/2010 of 07/05/2010 Creating and Organizing Condominiums and Setting Up Procedures for their Registration**

The association shall have the following objectives:

- Maintenance, development and repair of common elements in the condominium or changes to the exterior of the units or any other change that can affect all or part of the condominium;
- Provision of communal services to members of the association;
- Representation and protection of the interests of the members of the association.

The association of co-owners has the following main obligations:

- oversee the whole management of the condominium and ensure full protection of common interest of owners in a condominium;
- maintenance and improvement of the immovable property in a condominium;
- construct and repair with or without demolition of common elements in accordance with laws governing housing;
- ensure the compliance with laws and Articles of the Association;
- Ensure that all members of the association fulfill their obligations;
- Ensure proper hygiene, sanitary and technical condition of the common elements of the condominium;

Powers of the association shall include:

- representing the common interests of its members in case of litigation;
- concluding contracts for maintenance of the common elements within the building;

- determining the quantum of obligatory fees due by each co-owner in accordance with the co-share participation of each member;
- determining fees to be paid by each member for dealing with the consequences of calamities or other unexpected activities;
- demanding co-owners the entire compensation of losses caused by the non-payment of obligatory fees for maintenance and repair of common elements of the condominium;
- Applying for bank loan for any activities that will benefit the association of owners in case of insufficient funds. The procedure for deciding to apply for a loan shall be provided for by the articles of the association; (Official Gazette,2010).

Examining the condominium regulations in China and Rwanda reveals the types of activities that are restricted and the rights unit owners and residents enjoy. Next, Ethiopian laws and regulations are addressed.

## **2.7 Policies and regulations that govern the shared outdoor space of condominium housing in Ethiopia**

### **Ethiopian Condominium Proclamation No. 370/2003**

The federal government issued the decree in 2003 with a variety of goals in mind for the new condominium housing construction. The proclamation's main goals were to improve the supply of residential land by instituting alternative modalities to plot-based allocation, to narrow the imbalance between demand and supply of housing, to encourage vertical development, and to create favorable conditions for private developers and co-operatives. This edict applies to the administrations of Addis Ababa and Dire Dawa City. The proclamation defines condominium as a building for residential or other purposes with five or more individually owned units and common components, in a high-rise structure or in a row of homes, and includes the building's land holding. "Common elements" refers to all of the building's common features. (FDRE, 2003)

### **On management of condominiums**

The association's general meeting has the following powers and duties:.

Approve the declaration, description and amendments to the by-laws and rules, and amendments there to; Elect and remove members of the board of directors; Hear and decide on activity and audit reports of the association; Decide on amalgamation with other unit owners associations and

termination of the condominium to be administered this Proclamation. The board of directors is the managerial organ of unit owners association. There shall be a quorum in any general meeting where owners who own 50% +1 (fifty per cent plus one) and above of the units are present. Board of directors shall have the following powers and duties:.. Call the unit owners' General meeting under this Proclamation and keep minutes; Prepare amendments for the declaration, description, by-laws and rules and implement it upon approval. (FDRE, 2003)

### **On Common Elements/ Shared Elements**

The right to use common elements is undivided and attached to the unit ownership. The percentage of the undivided share of interest in the common elements attached to the unit ownership shall be determined in the declaration. The percentage of the undivided interest in the common elements shall be a part of the unit ownership and any legal act on a unit shall also be effective upon the undivided share of interest. Unless otherwise provided in this Proclamation common elements are not divisible. (FDRE, 2003)

#### **2.7.1 General regulations on shared outdoor space on Proc.370/2003**

Policies and regulations help to obtain and continue a balanced level of safety, fairness, order and justice. According to the collected data on policies and the lessons from review of similar situations elsewhere, the current research found of the following:

Condominium houses are managed and administrated under Proclamation 370/2003, which focuses on unit registration, certification, ownership, sale, and lease, as well as association and governance. The proclamation states the general rules on how to use the condominium and the power of the association to administer them and the right to use common elements as it is undivided and attached to the unit ownership.

The proclamation states the following powers and duties of the associations:

Adopt or amend the declaration description by-laws and rules, approve budgets and amendments thereto; determine the conditions on the use of common elements; lease, subject to security and transfer the common elements; determine fines, fees and contributions; hire, administer fire employees;

## **2.7.2 Internal regulations on shared outdoor space of condominium housing**

Condominium associations have their own internal regulations which are prepared according to the authority given to them on the proclamation of condominium housing of Ethiopia. They have the power to create, amend and approve condominium building bylaws so that they can determine the use of common facilities. In terms of structure and procedural standards, the internal regulations of condominium organizations are rather similar. Even with certain linguistic and phraseological variations, the fundamental ideas and working frameworks are still essentially the same.

The following internal regulations concerning shared outdoor spaces have been revised as follows:

### **Use of common facilities in a condominium**

Building owners/residents who obstruct corridors that should always be available for common use, measures will be taken against them in accordance with the regulations. It is prohibited to close the corridors of the common building by stacking different items such as cartons, dishes, wood, other metals, firewood, bags containing charcoal, laundry baskets, etc. If this is found, the association will take action. All the areas reserved for parking and other services in front of the common building are the common uses of the residents of the building and should be used equally by all.

### **Security and noise**

Social events such as feasting and mourning should be held in designated areas for this purpose. The association will decide this. Setting up a tent in front of the entrance of roads and buildings outside the area reserved by the association for common use will be penalized according to the association's bylaws.

### **Environmental sanitation and care**

Condominiums are areas where many people live together, thus inhabitants should not conduct random slaughter in the neighborhood. As a result, it is not feasible to butcher sheep or goats etc., outside of the region that the association has restricted for this service. Sewage is only disposed through sewage pipes, and solid trash is only disposed of in accordance with the association's program. Homeowners and residents who do not comply will be penalized in accordance with the ordinances. It is prohibited to discharge clothing and laundry from floor to floor.

## **Use of internal roads and car parks**

Vehicles must be parked only in designated areas on shared-use areas. Thus, it should be able to serve the local corridors without blocking them. Cars that are damaged or out of service can be kept in shared facilities by notifying and allowing the operation of the association for a short period of time only. However, it is prohibited to pour burnt car fuel and other fluids that pollute the environment. Out-of-service vehicles may not be parked in common areas. It is forbidden to bring large trucks and public transport buses into the premises or to park in common areas. If the vehicle is parked in the common areas designated for vehicle usage, it is the entire responsibility of the association; the association is liable for any accidents that occur with the vehicle. To keep the area secure, the association may engage guards or a security company.

## **Waste disposal**

It is the responsibility of the facility manager to ensure that all waste disposed of at an approved solid waste disposal site is properly wrapped or that the bottles and cans are free of liquid or other materials. It is strictly prohibited to take out solid waste outside of the designated day and throw it anywhere. Even if there is a compelling situation to take it out, it is mandatory to deliver it to the nearest garbage storage tank. Anyone found in violation of this will be punished with the relevant penalty. The association will take the necessary legal action.

## **General**

Washing cars near residential buildings is prohibited. However, cars can be cleaned with a dry or wet cloth. It is not allowed to build any type of fence privately unless it is done with permission from the relevant body through the house owner/resident cooperative association. Cover the building's corridors and balconies with canvas, covering with cloth or other material is not allowed. Vegetables placed in any container on the corridor are prohibited. The association will manage and refurbish or repair communal amenities, as well as ensure that residents utilize the communal facilities properly and with care. *(Source: internal regulation of selected condominium association, 2014)*

### **2.7.3 The management body of the association**

The neighborhood's administration bodies, known as committees, are an elected group of persons who are also members of the Association. They are in charge of overseeing the neighborhood.

According to the association’s internal regulations the elected management bodies who run the neighborhood has the following structure.

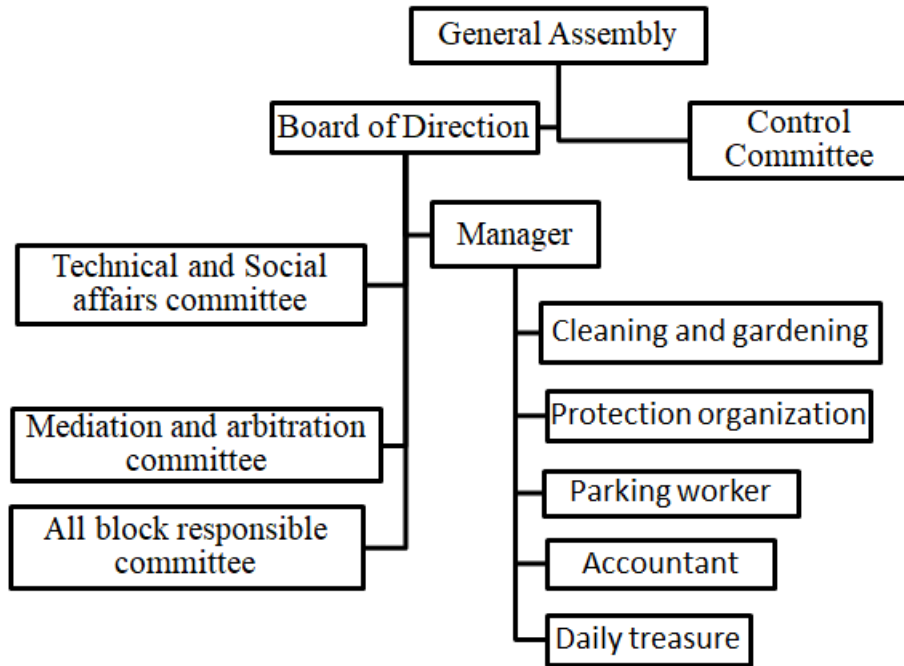


Figure 1. The structure of the management body

Source: Author’s work, March2023

#### 2.7.4 The Role of the management body of the association

The role and function of the management bodies of the association is listed as follows:

- Collecting rental money from the members who live in communal buildings.
- Taking appropriate action against members who do not comply with the rules and regulations of the cooperative society
- Collecting money from the security service, which is decided by the general assembly to pay the association's common expenditures and is collected monthly by each member and resident of the association; the parking lot charge generates monthly revenue for the association's members and residents; rental money from the association's communal dwellings; income from slaughtering services; income from the sale of identification cards; and income from gifts assistance and compensation; Interest and other donations.
- Handling employee recruiting and dismissal

- They have the role in order to Clean and beautify the living area; cultivating protected areas for trees, gardens, and flowers; and carrying out other activities that make the purpose of the association come true but the finding shows nothing.

## **2.8 Sample Case studies from other countries**

To gain a deeper comprehension of how shared outdoor spaces are used and how they affect social ties within society, it would be helpful to have some real-world case studies from other cities. For this reason, two cities—one in North Africa and the other in America—have been selected as case studies. As previously mentioned, the experiences of the other cities with policies and regulations have been described, so having experience from different nations helps the assessment process.

### **Francis Square**

Franklin Square is one of the five sites that have been described in the journal article "Shared Outdoor Space and Community Life" by Clare Cooper Marcus in the Departments of Architecture and Landscape Architecture, University of California, Berkeley. It is well explained and can serve as a better example for the case.

St. Francis Square is a middle-class cooperative consisting of 299 units located in San Francisco's Western Addition district, It is Constructed in 1964. During the 1960s and 1970s urban renewal era, it was the first of several such medium-density garden apartment complexes constructed. The architects, Lawrence Halprin, Claude Stoller, and Robert Marquis, were given the task of creating a peaceful, green, safe community that would give middle-class families who wished to raise their kids in the city a choice. Francis Square is the name of the ILWU Pension Fund. With a density of 36.5 units per acre, the site spans 8.2 acres. (Clare Cooper Marcus, 2002).

There are several reasons why the Co-op's owned and managed outdoor space is so important to the neighborhood. It offers a peaceful, green view that is partially obscured by trees from the view of adjacent flats, which lowers the impression of density. With grassy slopes, walkways, and play equipment all within sight and calling distance of the house, it offers a visually appealing and secure environment for kids to play in.

Adult residents have opportunity to often encounter one other and stop for a talk while they are out and about with young children, going home from one of the three communal laundries, or sitting outside with a kid. St. Francis Square's courtyards effectively took on the role of the backyard for the whole family. (Clare Cooper Marcus, 2002)

Residents would be less inclined to assist in maintaining the area, confront strangers, or go out to assist a needy neighbor if parents did not let their kids play outdoors alone.

Because of the following factors, residents of St. Francis Square highly value and make good use of the shared outdoor space:

- Narrow entries between buildings clearly indicate the transition from the public space of the street and sidewalk into the shared space of landscaped courtyards;
- The courtyards are enclosed by the units they serve, and nearly every unit has views into the outdoor space, making child supervision easier;
- The landscaping features of this common area received a great deal of care and funding, making it incredibly functional and aesthetically pleasing for both adults and kids, as well as long-lasting;
- The common areas of the courtyards and the private areas of the apartments are clearly marked by walled patios and/or "Keep off" landscaping;
- There is simple access from the flats and patios into the courtyards.

The other example is taken from a journal article by Farida titled "Effects of Outdoor Shared Spaces on Social Interaction in a Housing Estate in Algeria."

### **Cite des1000logts**

**Cite des1000logts** is a housing project in Biskra, a middle-sized city in southeast Algeria, which is around 430 kilometers south of Algiers. Like most Algerian cities, Biskra experienced rapid rate of urbanization following the independence of the country. The total area of estate is about 24,663 hectares; it comprises 123 domestic blocks with total number of flat units of 1000. Like other residential areas from that period, the estate had a specific physical character of 4-5 story housing and large communal outdoor spaces. It includes 2 different types of blocks which are rectangular blocks and blocks in "H" form. The estate is surrounded by numerous residential areas and public facilities: A museum, and a handicraft center in the west and residential areas in the south and East.(Farida, 2013)

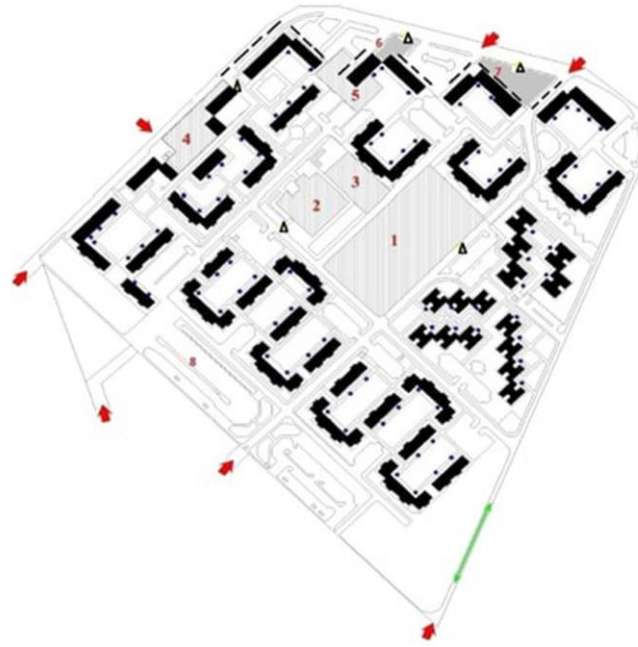


Fig.2 Site plan of la cité des 1000 logts.

Source: Case Study Effects of Outdoor Shared Spaces On Social Interaction in a Housing Estate In Algeria By Naceur Faridan,2013

### Use of outdoor shared spaces in "cite des1000logts"

The study Observations show that

- Outdoor shared spaces are mostly used for transit rather than recreation.
- Weekends see a significant increase in the use of outdoor spaces.
- The rate of social interaction increases slightly, and outdoor spaces serve as gathering places for neighbors.
- Observations show that on weekends, some groups engage in their favorite activities in public outdoor spaces.
- Children are frequent users of public outdoor spaces. Large open spaces allow for a variety of children's games, such as football, biking, running, and playing with toy vehicles.

According to the findings, the majority of people living in "a cite des1000logts" share a wide range of socioeconomic conditions. They have a fair level of education and come from a middle-class socioeconomic background. They are a relatively homogeneous group of people. This could explain the neighborhood's extensive networks of interactions. According to Haggerty, socio-demographic characteristics naturally influence residents' living styles, use of open spaces, and social interaction

patterns (Haggerty, 1982). In this sample study, however, children, who were expected to strengthen ties between residents, were a source of disruption and conflict in the neighborhood. Due to a lack of adequate playground areas, many parents were discouraged from accompanying their children outside to supervise them at playground and, as a result, socialize with others. Despite the variety of block arrangements, the overall project lacks a sense of closeness due to the lack of barriers to demarcate the units and limit the number of residents around the blocks. The majority of the blocks were not properly arranged to form small neighborhood groups. As a result, there is a high degree of openness in the study area. This could explain the "Cite's" low rate of social interaction and use of shared outdoor spaces. Residential outdoor spaces, which were intended to be an extension of living space and a part of the home, have been converted into public transit areas. Aside from its impact on residents' daily lives, the lack of planning and furniture made the large spaces between blocks appear larger and more open. The current study's main hypothesis, that the layout of "cité des 1000 logts" does not support lively interaction among the inhabitant, is clearly confirmed.

Inadequate facilities installed in the neighborhood failed to make it livable. Administrative amenities installed in the neighborhood transformed it into a space open to all and browsed by a diverse flux of users, discouraging any use by the occupants. Shopping facilities were insufficient and improperly designated to provide residents with a shopping experience while enjoying space and gathering with others. Their impact on urban life and social interaction was reduced. Because of its layout and the poor quality of its outdoor spaces, "cité des 1000 logts" could not provide its residents with a living residential environment that could be used to improve social interaction. (Farida, 2013).

### **Methodological Review**

The evaluation framework, grounded in a methodological review approach, synthesizes a wide array of criteria derived from the literature on shared outdoor spaces and their role in fostering social connections. This framework serves as a structured tool for systematically assessing case studies, incorporating standards and metrics informed by international and Ethiopian practices. It evaluates physical structures, sociability, safety, inclusiveness, and access, emphasizing measurable attributes like flexibility, accessibility, and symbolic markers. Additionally, it integrates social variables, regulations, and management systems to provide a comprehensive perspective. By combining

insights from diverse sources, the framework ensures a holistic and replicable method for examining shared outdoor environments, contributing to robust, evidence-based conclusions.

## 2.9 Evaluation frame work

Based on the aforementioned literature research of the characteristics of shared outdoor spaces and their impact on social ties, the evaluation framework below is designed to assess the chosen case studies using the standards and metrics provided within the framework. The framework is designed with lessons from the review of international as well as Ethiopian regulations and practices.

Table 1. Evaluation frame work

Aspects		Criteria
Physical structure		-flexibility, re-arrangeability or modifiability of the surroundings -being readable. -Physical elements that promote socialization
Sociability		-friendliness, storytelling, stewardship, neighborliness, collaboration, diversity, and welcomenes
Safety		-It is best to avoid making public areas unwelcoming and hostile. - Sites with strict usage restrictions ought to be preserved - Terrifying components must be eliminated -The safety of traffic should be a concern.
Access	Physical access	- Removal of obstacles and connection to other areas - Ease of access
	visual access	- proper visual contact with the location - Being noticeable
	Symbolic access	- Existence of markers or signs - Physical components and place-specific articulations
Inclusiveness		-Presence of diverse classes -Presence of people of diverse ages -Presence of people with diverse physical abilities -Presence of people of different genders
Layout pattern		-Spatial arrangement of a neighborhood
Variety of activities and purposes.		-Homegrown quality, vibrancy, fun, originality, specialness, realness, sustainability, affordability, utility, celebration, and indigenousness

<p>Comfort and Amenities</p>	<ul style="list-style-type: none"> <li>-Physical features like seating areas</li> <li>-Additional street furniture and tangible artifacts, trees, shade, and shelter, wide sidewalks, a high degree of articulation with nooks and corners, -Landscape elements like planters and ledges</li> <li>-Greenness, walkability, sit ability, beauty, safety, charm, and historical elements</li> </ul>
<p>Social variables</p>	<p>The socio-demographic characteristics of a neighborhood affect how neighbors interact with others,</p> <ul style="list-style-type: none"> <li>- How they use shared outdoor spaces.</li> <li>- Factors such as respondents' stage in the lifecycle (including age, marital status, and presence of children at home), owner-renter status, length of residence, educational attainment and annual income are relevant socio-demographic characteristics presumably associated with social interaction</li> </ul>
<p>Physical features</p>	<ul style="list-style-type: none"> <li>- The existence of interesting objects or features, such as artificial water scenery and properly arranged seats,</li> <li>-The provision of greenery in residential communities</li> <li>-Play grounds with recreational facilities</li> </ul>
<p>Rule and Regulation</p>	<ul style="list-style-type: none"> <li>- Presence of Governing rule for shared outdoor space.</li> <li>- Indication of the role and power of the associations</li> <li>- Amendment of Rules and by laws</li> </ul>
<p>Management system</p>	<ul style="list-style-type: none"> <li>-Participation of government bodies and home owner Associations on the preparation of regulations</li> <li>-Participation of all members of association during meeting and decision making.</li> <li>-There should be energetic and goal-oriented managers, creative and initiator, flexible in new situations, and responsible.</li> <li>-The manager Should be fast at planning, should be able to organize and delegate work, motivated.</li> <li>- The managers should have critical thinking, communication skills, decision making methods and techniques, teamwork skills.</li> </ul> <p>The manager should control the performance, and collaborate with others.</p>

Source: Author's work, May 2023

## **Summary**

The literature review offers an in-depth examination of shared open space management, organized into four distinct yet interconnected sections. The first section defines key terms, establishing a clear and consistent understanding of essential concepts to ensure coherence across the review. This section sets the stage for the subsequent discussions by clarifying terminology that can vary across different fields and cultural contexts. The second section presents the theoretical review, delving into the core theories and frameworks that inform the management of these spaces. It addresses critical issues such as spatial dynamics, governance models, and the interplay between public and private interests, drawing from both traditional and contemporary theoretical approaches.

In the third section, the comparative review, the focus shifts to an exploration of practical perspectives, policies, and regulations that shape the management of shared open spaces. This section compares global practices and approaches, providing a nuanced understanding of how different regions and cultures adapt to the challenges of shared space management and their varied outcomes. Finally, the methodological review evaluates the research methods used to assess the effectiveness of shared open space management. It considers how data is gathered, the evaluation techniques employed, and the methods used to measure the social, environmental, and economic impacts of different management strategies. Together, these sections offer a holistic framework, integrating conceptual definitions, theoretical insights, comparative analysis, and methodological approaches to comprehensively evaluate shared open spaces.

## **Gaps of the literature review**

Despite the extensive theoretical discussion on public space design, management, and social interaction, certain gaps in the literature remain. First, while much of the research emphasizes the physical and social aspects of public spaces, there is a lack of studies that examine the long-term impacts of public space management on community cohesion, particularly in developing countries. Although studies on the social benefits of public spaces are abundant, the complexities of management and its relation to sustained social outcomes need more attention. Additionally, while physical features like safety, accessibility, and amenities are well-documented, fewer studies explore the interactions between these elements and their specific impact on different demographic groups, such as children, elderly, and marginalized populations.

While theoretical frameworks such as those by Gehl (1986) and Sendi & Golicnik Marusic (2012) offer valuable insights into the design and maintenance of public spaces, there is a need for more empirical studies that bridge the gap between theory and practice. Many studies discuss idealized models without fully examining the practical challenges of implementing these models in diverse, real-world settings. Thus, future research could focus on how different management strategies are employed across various socio-cultural contexts and what factors contribute to their success or failure in fostering social interaction.

While various laws and regulations governing shared outdoor spaces in condominium housing have been explored in the context of countries like China, Rwanda, and Ethiopia, there is a noticeable gap in understanding the implementation and effectiveness of these regulations. The studies provide comprehensive details on legal frameworks, but there is limited research that critically examines how these regulations translate into actual management practices at the local level and the impact on community life. For instance, while the Ethiopian Condominium Proclamation No. 370/2003 provides general rules on condominium management and the use of shared spaces, there is little research on how these regulations are enforced and whether they are sufficient to address the diverse needs of residents in urban environments. Similar gaps exist in other countries, such as China and Rwanda, where laws outline the rights and duties of residents and management bodies, but there is a lack of empirical studies on how these laws are applied in practice, particularly in relation to the social dynamics and challenges faced by the residents.

Additionally, the socio-demographic factors influencing the use and perception of shared outdoor spaces remain under-explored. Case studies like St. Francis Square and Cite des 1000 logs highlight how shared spaces are used for social interaction, yet they also point to design and layout issues that affect their functionality. These observations underline the need for further investigation into how different cultural, social, and economic factors impact the usage patterns and social cohesion within shared spaces, particularly in developing urban settings like Ethiopia.

In conclusion, while the existing literature offers valuable insights into the regulations governing shared spaces, there is a need for further research on the practical enforcement of these laws and their socio-cultural implications. Moreover, more studies are needed to understand how urban design and socio-economic factors shape the social dynamics within shared outdoor spaces, particularly in diverse and rapidly urbanizing environments.

## **CHAPTER THREE- RESEARCH METHODOLOGY**

### **3.1 Introduction**

In This chapter outlines the research methodology employed to address the objectives of the study. It provides a detailed explanation of the research design, the rationale behind the selected approaches, and the criteria used to choose the case study areas. The chapter also elaborates on the data collection process, identifying both primary and secondary data sources and describing the techniques used for gathering information. Furthermore, it discusses the sampling strategies, methods for data analysis, and the procedures followed to validate the findings.

The study focuses on exploring the management of shared outdoor spaces in condominium housing in Addis Ababa and its implications for social interaction among residents. To achieve this, a qualitative research approach was adopted, enabling an in-depth examination of the lived experiences and perspectives of residents. This approach was complemented by a case study design, allowing for a comparative analysis of two selected sites: LAFTO DESET Condominium in Nifas Silk Lafto Sub-City and AYAT ARENGUADEW MENDER Condominium in Lemi Kura Sub-City. The methodology integrates various data collection techniques, including direct observation, surveys, focus group discussions, and interviews with key informants. The selection of respondents was guided by purposive and snowball sampling techniques to ensure diverse and representative insights. This approach also facilitated the identification of community leaders and long-term residents with in-depth knowledge of shared space management.

### **3.2 Research design**

The research design is the plan and structure of the investigation, aimed at answering the research questions. For this study, a qualitative research approach is selected due to its ability to provide in-depth insights into the management systems of shared spaces in condominium housing and their impact on social interaction. Unlike quantitative research, which focuses on empirical generalization and larger sample sizes, qualitative research explores phenomena without predetermined hypotheses, emphasizing rich, contextual understanding. This approach is particularly suited for studying complex issues such as the quality of shared spaces and the social dynamics within a community. The study uses qualitative methods to explore the experiences and perspectives of

residents, focusing on the management of shared spaces and the social interactions that occur within them.

### **3.3 Selection of the Case**

Based on the goal of obtaining an in depth understanding of the management systems on various aspects of shared outdoor space problems the following criteria were used for the selection of case study areas:

- Variation on the location of the study sites
- The difference on construction time and size of the compounds.
- The researcher had a chance to live near one of the sites, so has more information on some of the research issues and gathered data from other condominium sites and selected the second one. During the research on selection of site, the Ayat site is well known with its variety of condominium type and large number of associations.
- The first site is located in south west of Addis Ababa city, and the second site is located in north east of Addis Ababa city, making them two similar types of sites in different locations with huge differences, which helps the researcher to compare the site's problem.
- The difference in size and number of shared outdoor areas, number of services inside same type of condominium site but constructed in different seasons.

The second goal is to identify the case study location after locating the case, which is analyzing the management system of shared outdoor spaces and its effects on the social interaction of the community in condominium housing areas in Addis Ababa. Based to the criteria indicated above, pre-study tests were done on different condominium sites, and it is determined to analyze these two sites: LAFTO-DESET and AYAT ARENGUADEW MENDER.

### **3.4 Data collection**

The main purpose of data collection is to obtain evidence from the study area and to understand the general state of the shared space among the condominium buildings. Both primary and secondary data are used to achieve the objective of the study. These data are also used to assess the existed problem and to understand the management of the existing shared open spaces.

### **3.5 Sources of Data**

Both primary and secondary data were employed. The primary data were collected using survey questionnaires, key informant interviews and site observation.

The primary data sources are the following:

**Home owner associations:** The home owner associations are one of the main sources of data regarding the ownership and management of shared outdoor spaces.

**Government Offices:** The main source of data is the Ministry of Urban and infrastructure.

**Households:** the resident of the compound/the owners are also one of the main source of data in order to get the main information on the shared outdoor spaces.

**The physical environment:** The physical environment of the selected sites.

Secondary data for the research is gathered from reports, maps, laws and regulations, other publications and books on outdoor shared open spaces.

### **3.6 Data collection techniques**

The following techniques were used for data collection:

- Direct Observation: - Sketches, photographs and videos of the selected sites
- Resource person: Interview is used to collect data from committees, Guards, and residents who have firsthand knowledge about the community and some specific offices.
- Questionnaire: The study applied both open ended and close-ended questions to get detail information on the problem. A questionnaire is utilized to support the qualitative data gathering procedures. Questionnaire is prepared in Amharic, pre-tested and minor changes were made. The total number of homes in both case regions (1056 in LAFTO DESET, and 728 in AYAT ARENGUADEW MENDER) were screened out using purposive sampling method.
- Focus Group discussion: applying group discussion as one of my data collection methods to collect in-depth information.

- **Mapping:** Mapping of the activities is done during interviewing inhabitants to locate the spaces where the activities are happening and to identify the area territory of their activity for later spatial analysis purpose. In addition sketching also used to record some of the physical features and elements on the open space during observational study of the study area.
- **Literature analysis:**-government policies/guidelines on shared outdoor spaces and other related secondary sources are also the main data collection techniques.

**Study and Sample Populations:** The study population consists of residents living in condominium complexes, specifically at two locations: LAFTO DESET with 1056 households across 28 blocks, and AYAT ARENGUADEW MENDER with 728 households across 24 blocks in Addis Ababa. The sample population is a subset of these residents, selected from each block within the two case study sites.

**Sample Size Determination:** The sample size was determined through purposive sampling, snowball sampling and a pre-study test. Given the aim for qualitative insights, the researcher opted for 30 households from each site, ensuring that each block is represented. A formal sample size formula is often used in quantitative research, but qualitative research like this prioritizes depth of information rather than statistical generalizability. However, to ensure adequate sample coverage, the researcher chose one household from each block, totaling 28 households from LAFTO DESET and 24 from AYAT.

**Characterizing Respondents:** Respondents were categorized based on sex, age, and duration of stay. For LAFTO DESET, the sample consists of 17 males and 13 females, with respondents having varying lengths of residence: 0% had lived there for less than a year, 16.7% had lived there for 2-3 years, 26.7% for 4-5 years, and 56.7% for over 5 years. For AYAT, there were 16 males and 14 females, with 3.3% having lived there for under a year, 16.7% for 2-3 years, 26.7% for 4-5 years, and 53.3% for over 5 years. Educational qualifications and family size are also considered for selection.

**Selection of 30 Respondents per Case Study Site:** The decision to select 30 respondents (one household per block) from each site was based on the pre-study test results, which showed that many households had similar responses due to shared lifestyles and living conditions. To minimize

redundancy and ensure diversity, the researcher chose to sample only one household per block while ensuring coverage of different floor levels, household types, and resident experiences.

**Justification for Snowball Sampling:** Snowball sampling was chosen because it allows for the identification of relevant respondents within the community. As a qualitative research method, it helps the researcher gather in-depth data from individuals who are well-embedded in the community, such as those with significant experience or responsibility within the condominium. Snowball sampling facilitates access to hard-to-reach individuals, such as long-term residents or those with specific insights into shared space management.

**Is the Sample Representative?** While the study populations at the two sites (LAFTO DESET and AYAT ARENGUADEW MENDER) are distinct in size and layout, the same sample size of 30 households was selected from each. This approach may not capture the full diversity of each population statistically, but it is representative in terms of qualitative insights, focusing on a range of experiences across different blocks, floor levels, and lengths of residence. For qualitative studies, representativeness is less about exact statistical diversity and more about capturing varied perspectives.

**Gender Distribution of Respondents:** The selection of 17 males and 13 females from LAFTO and 16 males and 14 females from AYAT reflects an attempt to achieve gender balance, with slightly more males than females in both sites. This distribution was likely based on the overall gender composition in the two areas, aiming to ensure that both male and female residents were equally represented in the research.

**One Household per Block – Is it Representative?** The decision to select one household per block was based on the pre-study test findings, which revealed that many households within the same block had similar responses due to comparable lifestyles. This approach ensures that each block is represented, covering different sections of the condominium, including floor levels and household types. While this method may not statistically represent the entire population, it ensures a broad range of experiences and is appropriate for qualitative research, where the goal is to explore diverse perspectives rather than achieve perfect statistical representation.

### 3.7 Study Area Description

#### General Overview of Addis Ababa

Addis Ababa is the Capital City of Ethiopia and one of the largest cities on the African continent, with a few millions of people of various origins and occupations currently living there. Addis Ababa is located in the very central part of the country and it is a key center of transportation, logistics, and commerce. Addis Ababa is chartered city and is accountable to the federal government and the residents. The city has a physical structural plan. (UN-HABITAT, 2008). There is a federal urban development policy, but it doesn't adequately cover maintenance, construction and funding for urban housing. There is a condominium policy and it is serving as the baseline for building of cost efficient housing in the city. However, it lacks an extent, and doesn't adequately cover housing for the poor. (UN-HABITAT, 2008).

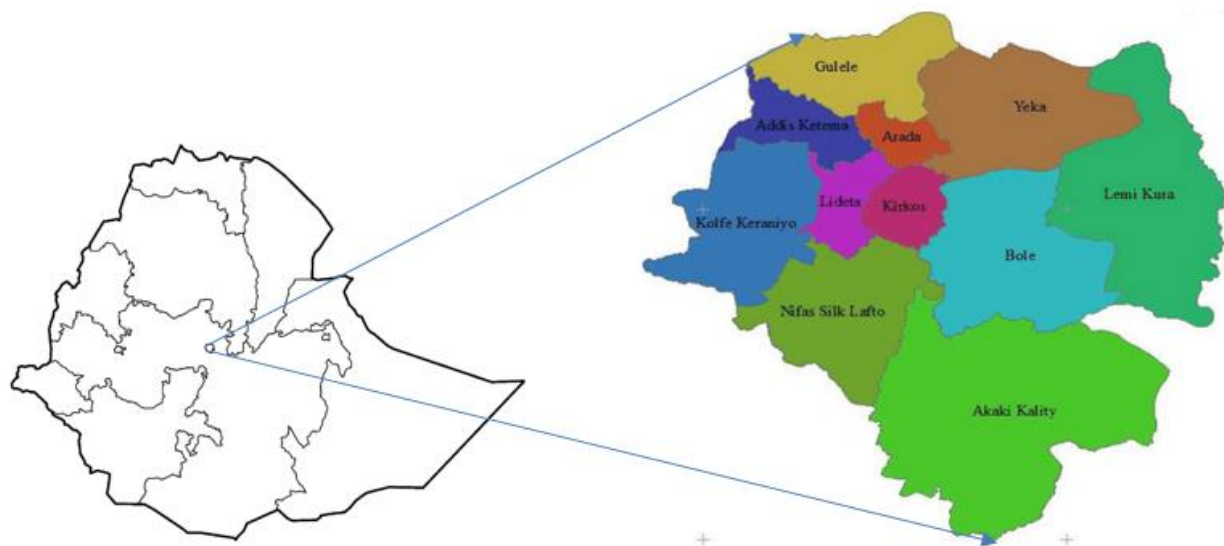


Fig 3. Map of Ethiopia and Addis Ababa

Source: Current Google map of Ethiopia and Addis Ababa

The five-year Growth and Transformation Plans (GTP - I and II), which began in 2010 and 2016, respectively, have been implemented. The urban agenda was also emphasized. Massive public investments, including a large-scale government-sponsored housing, provision of public services, and substantial infrastructure development, have been made to enhance the conditions of urban people and their built environment. The Integrated Housing Development Programme (IHDP),

which began in 2005, is one of the initiatives targeted at alleviating persistent unemployment, housing shortages, and infrastructural deficiencies in metropolitan areas. (UN HABITAT, 2011)

### **The Integrated Housing Development Program**

The Integrated Housing Development Program (IHDP) is the government approach to solve the low-income housing challenge initiated by the Ministry of Works and Urban Development (MWUD) in 2005. The Program is a continuation of the ‘Addis Ababa Grand Housing Program which supported the endeavors of the Ethiopian Government in their implementation of the ‘Plan for Accelerated and Sustained Development to End Poverty’ (PASDEP). Addis ababa’s Goal and strategies on housing is compact and green development with good balance between open and green spaces and the built form environmental sustainability through protection of the natural environment (AACPPO, 2017).

Table 2. The first planned condominium housing for Addis Ababa and other regional states from 2006- 2010

	Studio	1 Bedroom	2 Bedroom	3 Bedroom	Total units
Addis Ababa	36,750	71,750	52,500	14,000	175,000
Other regional states	38,850	75,850	55,500	14,800	185,000
Total	75,600	147,600	108,000	28,800	360,000
% distribution	21%	41%	30%	8%	100%

Source: (UN-HABITAT, 2011)

### **Integrated housing development program and shared outdoor space**

The layout of a condominium site should include not just green areas, but also schools, playgrounds, and commercial centers - locations that may generate enough cash to subsidize the housing. This would result in a mixed-use area that benefits its population while, most crucially, avoiding social displacement. The community structures' aim is to offer a safe location for inhabitants to do traditional duties like as slaughtering goats, hand-washing clothes, and preparing large feasts, which the dwelling units themselves cannot support. They are generally standalone masonry structures that are situated in the open courtyards formed by the condominium towers. (UN-HABITAT, 2011)

## Case Study Areas

This research focuses on two key condominium sites in Addis Ababa:

- LAFTO DESET Condominium: Situated in Nifas Silk Lafto Sub-City.
- AYAT ARENGUADEW MENDER Condominium: Located in the newly established Lemi Kura Sub-City.

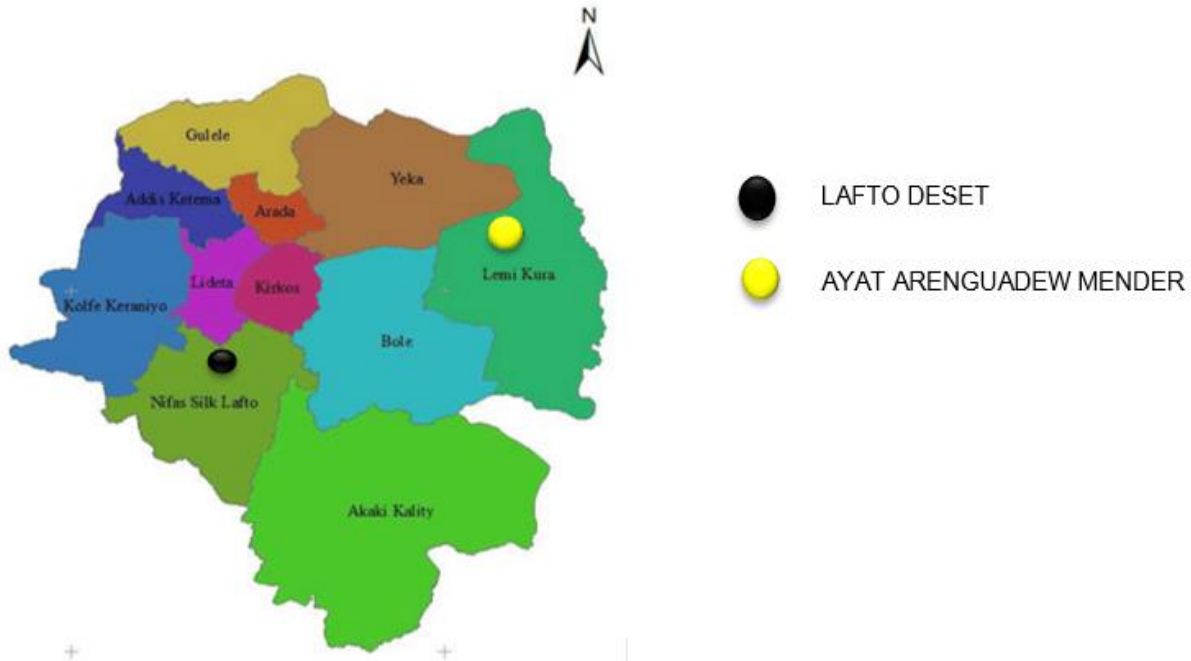


Fig. 4. Location of case study areas

Source: Current Google map of Addis Ababa with new additional sub city

## 3.8 Sampling Techniques

First, a pilot test was conducted to determine residents' thoughts on the shared outdoor space management system as well as the reliability of the questionnaire. During the pilot test, it is discovered that there are 1056 households living in 28 blocks of the LAFTO DESET condominium and 728 households living in 24 blocks of the AYATARENGUADEW MENDER condominium. Additionally to examine several aspects of the condominium society, samples were obtained by taking into account block location, informant age, Physical disability, Gender, Duration of stay and family size of a few selected residents.

According to the pre-study results, and time constraints, the researcher opted to select 30 households, three key informants, one committee, and one guard from each study location by using purposive sampling.

The data collection was designed to encompass each block inside the research area in order to cover the study area and have widely dispersed data coverage. As a result, interviews is conducted by selecting a minimum of one household from each block with different floor level, and a few potential respondents are selected using snowball sampling (Friends of Friends) according to their length of stay and their responsibility in the neighborhood in order to collect a qualitative data for the study.

Table 3. Sample variables on sampling techniques

Sample variables		LAFTO DESET		AYAT ARENGUADEW MENDER	
		Frequency	Percentage	Frequency	Percentage
Gender	Male	17	56.7	16	53.3
	Female	13	43.3	14	46.7
Duration of stay	<1 year	0	0	1	3.3
	2-3 Years	5	16.7	5	16.7
	4-5 Years	8	26.7	8	26.7
	>5 Years	17	56.7	16	53.3

Source: Fieldwork by the author, March2023

### 3.9 Data processing and analysis

To display and explain the data processing and analysis done in this study, texts, tables, percentages, charts, and graphs were employed. To deal with data collected from interviews, content analysis and narrative analysis are employed as qualitative analysis methods, and the material is presented as words, pictures, and observations. SPSS is used to examine this raw data. The shared outdoor space management system, the amount of shared outdoor spaces, the issues that residents experienced, and the perception of residents at both the LAFTO DESET and AYAT ARENGUADEW MENDER condominium sites were compared in an inter-case comparison. The same-case comparison is also performed using data acquired with in the same site with the following issues floor level, location of block, length of stay, frequency of usage of shared outdoor space, age, gender, handicap, and

marital status. The gathered findings are organized and evaluated using SPSS and displayed as text, photos, tables, and graphs in accordance with objectives of evaluating the general condition and management system of shared outdoor spaces of condominium housing areas and identifying the challenges on management of shared outdoor spaces in condominium housing areas.

The following diagram in Fig.5 and Table 3 shows how all the above listed techniques were used and the flow charts of the research.

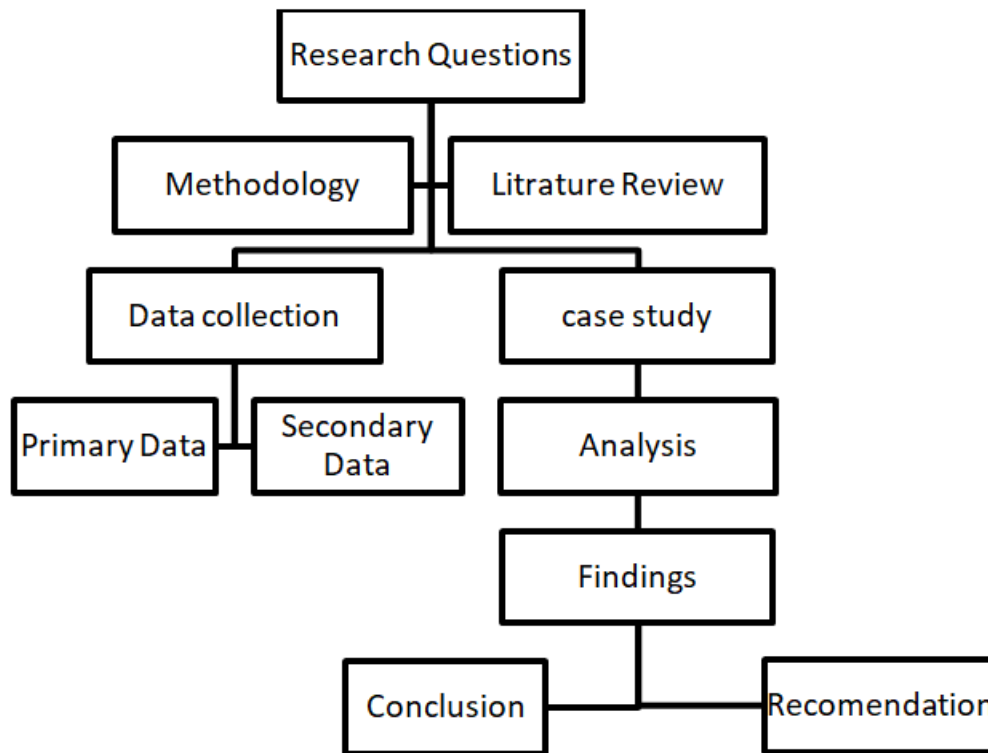


Fig.5 Research Design flow chart

Source: Author's work, March2023

Table 4. Data processing and ways of analysis

<b>Objective</b>	<b>Research Question</b>	<b>Data Type</b>	<b>Data Source</b>	<b>Data Analysis</b>
To evaluate the management system of shared outdoor spaces of condominium housing areas.	How are shared spaces managed in condominiums? -Who owns what and who has what kind of right on which shared space? -Who manages them?	primary data Secondary data	Existing situation of the compound. Key informants Existing policy Literature Government officials Collected Data from Resource Person: community leaders, residents who have firsthand knowledge about the community	Interview Questioner Observation Literature reviews photograph
To identify the challenges on management of shared outdoor spaces in condominium housing areas.	What are the challenges on management of shared outdoor spaces in condominium housing?	primary and Secondary data	Existing situation of the compound. House owners/renters Key informants	photograph Observation Literature reviews Questioner
To identify the effect of the existing policies and management of shared outdoor spaces on social lives of residents.	What is the effect of the existing policies and management of shared outdoor spaces on social lives of residents	primary and Secondary data	Existing situation of the compound. House owners/renters Literature review Key informants	Observation Literature reviews Questioner

Source: Author's work, March2023

## **Validity of Data**

The validity of this study is ensured through the careful alignment of its research design, data collection methods, and objectives. By employing qualitative methods, such as direct observations, interviews, and focus group discussions, the study captures rich, contextual insights into the management and social dynamics of shared outdoor spaces in condominium housing. The diverse selection of two distinct case study areas, LAFTO-DESET and AYAT ARENGUADEW MENDER, further enhances validity by providing comparative data from different locations, sizes, and timeframes of construction. Secondary data sources, such as government policies and literature, provide additional support for validating the primary findings. The pilot testing of questionnaires ensures that the instruments effectively measure the intended constructs, contributing to construct and content validity.

## **Reliability of the Study**

The reliability of the study is addressed through the consistency and systematic nature of its methodology. The use of pre-tested questionnaires ensures dependable data collection across both case study sites. Additionally, purposive and snowball sampling techniques guarantee that data is consistently gathered from relevant stakeholders, such as homeowners, government officials, and community leaders. Data analysis methods, including content and narrative analysis, are systematically applied using SPSS and MS-Excel, ensuring replicability and consistency in the interpretation of results. The detailed documentation of the research process, from sampling techniques to data processing, enhances the reliability of the findings.

## **Ethical Considerations**

Ethical considerations for this research are maintained throughout the study. Participants were informed about the purpose of the research, and their consent was obtained prior to data collection. Privacy and confidentiality are preserved by changing the actual name of the key informant and by anonymizing responses and ensuring that data is used solely for research purposes. The researcher adhered to ethical guidelines by avoiding biases, respecting diverse perspectives, and fairly representing all stakeholders' input. The use of pre-tested and culturally appropriate questionnaires in Amharic further ensures ethical data collection practices by promoting clarity and inclusiveness.

## **CHAPTER FOUR- CASE STUDIES**

### **4.1 Introduction**

This chapter provides an analysis and discussion of the selected case study sites to address the research objectives and questions. The focus is on the conditions, challenges, and potential of shared outdoor spaces in Addis Ababa's condominium housing. The chapter employs mapping, tables, graphs, and charts as analytical tools, integrating both primary data (from household surveys, observations, and interviews) and secondary sources. Each site is evaluated based on criteria derived from the literature review, such as usability, accessibility, and management effectiveness of shared spaces.

Additionally, the chapter highlights the response rates and contextualizes the methodologies employed, including interviews and direct observations. Tool like SPSS is utilized in order to analyze data gathered through questioner ; and manual tabulation and fieldwork summaries form the basis of analysis. The data reflect a 100% response rate from the 30 participants approached for the study, providing robust insights into the issues under investigation.

#### **Response Rate**

The study achieved a full response rate, with all 30 selected households from the two condominiums participating in surveys and interviews. This high participation ensures the reliability of insights regarding shared outdoor space usage, challenges, and management.

#### **Data Analysis Approach**

SPSS is used to analyze the user response which is gathered through questioner, and also data analysis relied on detailed manual tabulation, observation records, and thematic coding of interview responses. Graphical representations were created to summarize trends in satisfaction levels, usage patterns, and challenges associated with shared outdoor spaces.

This approach effectively illustrates the complex interplay between the design, use, and management of shared outdoor spaces in Addis Ababa's condominium housing. Key findings from the Lafto Deset and Ayat Arengwadewe Mender sites are presented and analyzed in detail in subsequent sections.

In this chapter the selected sites and the collected data from the households and the environment is discussed and analyzed. Mapping, summary, tables, graphs and charts are used as analysis tools and the site is evaluated according to the criteria listed above. Both sites are described separately below.

## 4.2 CASE 1: LAFTO DESET Condominium

The first selected location for this study is the LAFTO DESET condominium, one of three condominium developments situated in the Lafto neighborhood in the southwest of Addis Ababa. Completed and ready for occupancy in 2002 EC, this site consists of 1,056 residential units spread across 28 blocks. In comparison to the other two condominium complexes in the area—Lafto Number 1 and Lafto Genet—LAFTO DESET stands out as the largest, covering an area of approximately 50,168 square meters, or 5 hectares. The site is bordered by several notable features, including the Lafto Genet condominium neighborhood, Lafto Michael Church, the Akaki River, and the main road leading to Kera, Saris, and other nearby areas. Within the LAFTO DESET complex, the architectural layout includes three main types of building blocks: single straight, U-shaped, and L-shaped designs. The complex is equipped with various amenities, such as communal buildings, committee offices, security stations, green spaces, walkways, parking lots, and playgrounds, all of which are accessible to the residents. Using an assessment framework derived from the literature review, the study will evaluate several key aspects of the LAFTO DESET condominium, including sociability, accessibility, inclusivity, layout patterns, diversity of uses and activities, amenities and comfort, social factors, physical characteristics, rules and regulations, and the management system. Various data collection techniques such as observation, surveys, interviews, and group discussions will be employed to analyze these elements.



Fig.6. Location of Lafto Deset Condominium site

Source: Google earth location map taken by author, Jan 2023

#### 4.2.1 The current state of Shared outdoor spaces

Shared outdoor spaces include green areas, car parking lots, playgrounds, roads, and paved and unpaved open spaces. In this LAFTO DESET condominium there are 6 spaces for parking: 3 playground two of them are out of service, small green areas for each block but some of them are not well managed and a lot of left over spaces. Roads are also used as car parking. Children are accustomed to playing in streets and other open areas, and many homes use available open space for spice drying. Lack of designated shared outdoor space is causing some residents to use these locations for unforeseen reasons, even if they are not intended for activities.





Table 5. Activities on planned purpose and current function of shared outdoor spaces






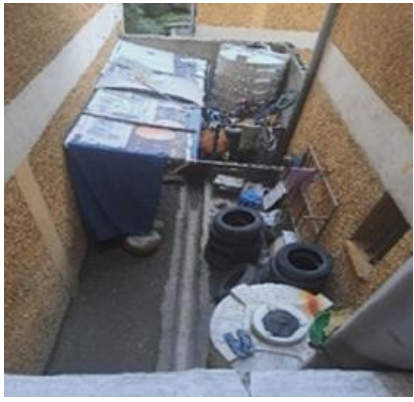
Type of Shared outdoor space	Planned purpose of the Shared outdoor space	Current function	Reason for the change of function
Road	Circulation	Car Parking	Use of Provided parking spaces for other purposes lack of enough space for parking
		Slaughtering	Because of the committees decision to rent the communal buildings without the consent of the inhabitants
Road and Open spaces	Circulation and Recreation	Playground	Lack of enough playground Lack of maintenance and enough facilities for existing playground
Open spaces and cloth drying areas	Cloth drying area	Spice drying and preparation and Cloth drying area	There is no provided space for spice preparation Mistake in space design.
		Traditional food preparation	Because of the committees decision to rent the communal buildings without the consent of the inhabitants
Leftover spaces	Has no purpose	Storage area	Lack of storage area Due to poor management system

Source: Field work by the Author, Jan 2023

A pictorial analysis of the main open spaces in LAFTO DESET condominium site is presented below.

Table 6. Pictorial analysis of LAFTO DESET condominium site

Observational analysis	Pictorial evidence
<p><b>Roads</b></p> <p>Instead of parking in the spaces that are given, inhabitants of the LAFTO DESET condominium neighborhood utilize the road as a parking lot.</p> 	
<p><b>Parking spaces</b></p> <p>This shared outdoor space was originally supposed to be used for parking, however it is now unused.</p> 	
<p><b>Playground-1</b></p> <p>The playground located between blocks 10 and 12 is currently inoperable, and as seen in the photo, the space is used as temporary storage for building materials.</p> 	

<p><b>Playground-2</b></p> <p>As seen in the image, the playground area has been improperly managed and has turned into a storage location for unsuitable personnel, mud, and woody items.</p> 	
<p><b>Greenery</b></p> <p>Open areas that ought to be tidy, clean, and used for recreation are currently vacant. Inappropriate plants and shrubs have proliferated.</p> 	
<p>There is space between two building blocks that is used as a storage area for the households that live near the space, which is located on Block 28 around Gate 1.</p>  <p><b>Block 28</b></p> <p><b>Gate 1</b></p>	

Source: Field work by the Author, Jan 2023

### 4.3.2 The Management of Shared outdoor spaces

LAFTO DESET condominium was established in 2002 E.C, Formerly it was called Lafto number 2 condominium association and since 2006 E.C the name of the association was changed into LAFTO DESET condominium.

The association consists of only homeowners those who got their house through lottery system, inheritance from their family, owners who bought the houses and others who have legal documents.

These association have the right to manage and administer the whole Shared outdoor spaces, each of the 28 blocks have their own provided small green space and provided parking spaces between Block 1 and 28, between 4 and 22, between 7 and 17, between 10 and 12, in front of block 26, in front of block 6, and the entire road from Gate 1 up to Gate 4 is also provided for parking services, and also three playgrounds currently the two of them are not working, other open spaces and left over spaces are also managed by the association.

#### **4.2.3 The local regulation on Shared space of LAFTO DESET condominium**

The association's goal is to make the condominium village a quiet, healthy, safe, clean, and attractive location for a contemporary living; to solidify the association's daily operations; and to use its internal ability to strengthen and lead to the resolution of the association's problems. And this internal rule has been published to guarantee that the compound's members and inhabitants understand and carry out their rights and responsibilities. They made this internal rule in accordance with the power granted to them by the general assembly of the Addis Ababa administration condominium declaration. The condominium association plays an important role in resolving day-to-day issues in condominium communities. It is the primary accountable body for managing the neighborhood's shared open space, ensuring the compound's peace and security, resolving conflicts between inhabitants, and so on. In other Addis Ababa condominium sites, the association manages communal buildings, but because they have not yet accepted it, they act as a middleman between the housing development office and the residents. The association is made up of elected residents' committee members and full-time employees who handle day-to-day office operations. Every unit owner and legal representative who is prepared to embrace the association's aim and mission can join the condominium association.

#### **4.2.4 Shared outdoor space user's responses**

##### **Respondents by Ownership type**

According to the data collected from Lafto Deset condominium, 63.3 % of the societies living inside the neighborhood have rented the house and the rest 36.7 % are home owners.

Table 7. Ownership type of Lafto deset condominium

Ownership type	Frequency	Percentage
Rented	19	63.3
Owner	11	36.7
Total	30	100.0

The observation indicates that a compound with a higher proportion of renters than owners does not care about having enough common outdoor areas since the tenants feel they are not there to live permanently.

### Duration of stay

Length of stay is another factor in strengthening ties within a society; the longer a society stays in the neighborhood, the stronger their social interactions will be. However, even though societies on this particular site have been there for more than five years, their social interactions are still weak.

Most of the Lafto Deset condominium society duration of stay is more than 5 years; most of them know the challenges on using those shared spaces. As shown in Table 8 below out of 30 inhabitant 17 (56.7%) of the inhabitant have been here for more than 5 years and the rest 44.3% have been here less than 5 years.

Table 8. Duration of stay in Lafto deset condominium

Duration of stay	Frequency	Percentage
2-3 Years	5	16.7
4-5 Years	8	26.7
>5 Years	17	56.7
Total	30	100.0

Source: Field work by the Author

### Activities that demand shared outdoor spaces for the households

The other data about the marital status of the inhabitant showed us most of the people inside the neighborhood are married and have children and out of the shared spaces available inside the compound inhabitant frequently use the playground, however there is no enough and properly managed playground. The following Table 9 indicates 50% of the inhabitant mostly demands playground shared outdoor spaces.

### Activities that demand shared outdoor spaces for households

Table 9. Activities that most demand shared outdoor spaces for the household in Lafto deset condominium

Activities that most demand shared outdoor spaces for the household	Frequency	Percentage
Play ground	15	50.0
Parking	7	23.3
Green area	6	20.0
Cloth drying area	2	6.7
Total	30	100.0

Source: Field work by the Author

### Major reasons for not using the shared outdoor spaces

The users' response indicates that the absence of the required shared outdoor spaces, inappropriate design, and lack of facilities. 50% of them were complaining about the absence of the required shared outdoor spaces; again, the most needed shared outdoor space is the playground, and there are three playgrounds in the compound, but two of them are out of service and the remaining playground lacks facilities and a proper management system.

Table 10. Major reason for not using the required shared outdoor space of Lafto deset condominium

Reasons	Frequency	Percentage
Lack of facilities	8	26.7
Inappropriate design	7	23.3
Absence of the space	15	50.0
Total	30	100.0

Source: Field work by the Author

### Level of social interaction

18 people out of 30 or 60% of the inhabitant have weak social interaction with the society due to different reasons as indicated on Table 11.

Table 11. Level of social interaction of Lafto deset condominium

Level of social interaction	Frequency	Percentage
Strong	12	40.0
Weak	18	60.0
Total	30	100.0

Source: Field work by the Author

### Reasons for weak social interaction

The following Table 12 presents the reason for the weak social interactions which are mentioned by the Lafto deset condominium society. 30% of them have weak social interaction due to lack of awareness about role of shared outdoor space for social interaction; 20% of them are due to lack of appropriate shared outdoor space for social interaction and the rest 10% are due to lack of time to interact with people.

Table 12. Reasons for weak social interaction of Lafto deset condominium

Reasons	Frequency	Percentage
Lack of appropriate shared outdoor space for social interaction	6	20.0
Lack of awareness about role of shared outdoor space for social interaction	9	30.0
Lack of time	3	10.0
have strong social interaction	12	40.0
Total	30	100.0

Source: Field work by the Author

### Level of satisfaction with the provided shared outdoor space

The majority of the Lafto deset condominium society were disappointed with the existing shared outdoor spaces the availability of mostly demanded shared outdoor spaces as shown in Table 13 indicate 80% of them are totally not satisfied with the provided shared outdoor spaces.

Table 13. Level of satisfaction with the provided shared outdoor space Lafto deset condominium

Satisfaction level	Frequency	Percentage
Poor	24	80.0
Fair	6	20.0
Total	30	100.0

Source: Field work by the Author

### Level of satisfaction with the management system of shared outdoor spaces

The following Table 14 indicates majority of inhabitant are not satisfied by the management system of the shared outdoor spaces. Inhabitant that uses playground and parking are the one which are mostly disappointed by the management system. And they explained the problem they faced during

their stay inside the compound. As indicated below 93.3% of the societies were complaining about committees that led and administered the management system of shared-outdoor spaces and the other 2 people have fair satisfaction level

Table 14. Level of satisfaction with the management system of shared outdoor space Lafto deset condominium

Satisfaction level	Frequency	Percentage
Poor	28	93.3
Fair	2	6.7
Total	30	100.0

#### 4.2.5 The perspective of the Interviewees with their Life story

The following interviewees were chosen based on their length of stay in the neighborhood, level of interaction with society, position or responsibility within society, and experience with shared outdoor space usage.

##### 1. Ato Kasahun Teklu

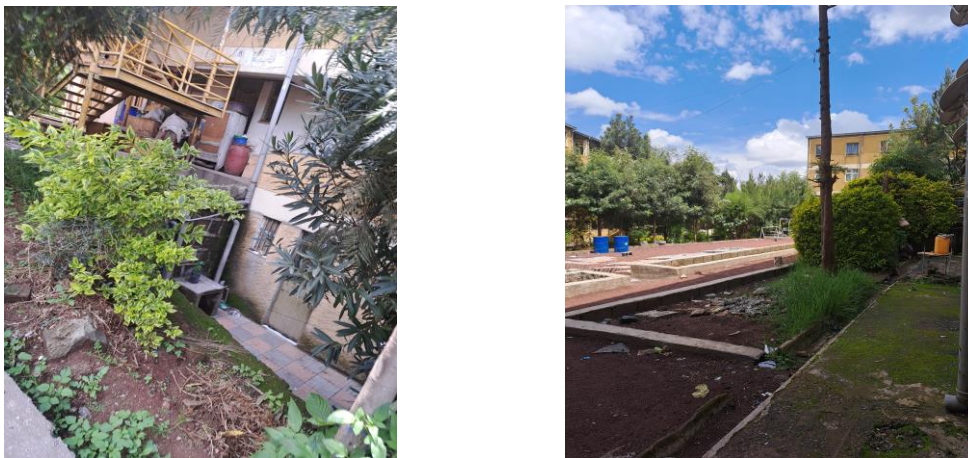
<p>Age:- 57                  Block no:- 3                  Floor:- 3rd                  Housing type:- One-Bedroom                  Marital status:-Married                  Family size:-5                  No. of children :-3                  Duration of stay -14 years                  Ownership type:- Owner                  Employment status::-Self Employed</p>	 <p><i>Fig 7. Ato Kasahun's block</i>                  Source: Field work by the Author, Feb 2023</p>
---	---

**Introduction:** Ato Kasahun Teklu is a pioneer resident of the Lafto Deset condominium community, where he has lived since 2002 E.C. He is a private business owner and the father of three children, ages 12, 14, and 16, respectively. Both Ato Kasahun and his wife work at their tailor business, and their income level is more than eight thousand birr per month. They don't own a car,

so they don't use the parking slot. Ato-Kasahun's family has little social interaction due to their private businesses, lack of time, and the poor management system of the shared outdoor space to interact with people inside the neighborhood.

**Usage of Shared outdoor space:** Ato Kasahun Teklu stated that living on the top levels makes it difficult to use the most of shared outdoor area. "Despite the fact that living on the upper floor making it difficult to do our activities on the ground, my family and I wanted to use the open space available in front of our block for important events such as children's birthday ceremonies, Mahber, cloth drying, and spice preparation, but the open spaces are occupied by ground floor householders for personal purpose so that we only uses for cloth drying and some small staffs in difficult way. Because of the poor management structure of this property and the absence of acceptable communal outdoor places, our family preferred to stay at home and do everything on our own.

As shown in the following images, the ground open spaces are being built for personal use, and the ground households have also built an extra structure as a kitchen adjacent to the existing block, which was previously utilized as an open circulation area for all households.



*Fig 8. Construction at the open space of block 3*

*Source: Field work by the Author, Feb 2023*

**Management system:** As the compound's first occupants, we are quite unsatisfied with the committee's management system. Despite providing additional services, they do not appropriately manage the existing open areas. They simply know how to gather money. We are disappointed.


**Challenges:** As you can see, the playground is full of unnecessary and inappropriate materials such as grinded stone and rocks, and it lacks facilities so that which always hurts children's bodies, so I am concerned about allowing my children to play on the playground. Furthermore, an asphalt road that serves as both a road and a parking lot makes it difficult for us to move freely within the compound. One of our main challenges here is the lack of clean green areas; we cannot gather, discuss, or relax anywhere due to a lack of space.



Fig .9 current state of play-ground around block 10 and road from Gate 1 to Gate4

Source: Field work by the Author, Feb 2023

## 2. W/ro Alemitu Tesfaye

<p>Age:- 60                  Block no:- 21                  Marital status:-Divorced                  Floor:- 1st                  Family size:-3                  Housing type:- One-Bedroom                  No. of Children :-1                  Ownership type:- Tenant                  Employment status:-Unemployed                  Duration of stay -5years</p>	 <p>Fig. 10. W/ro Alemitu’s block ,</p> <p>Source: Field work by the Author, Feb 2023</p>
--	---

**Introduction:** W/ro Alemitu Tesfaye has been a resident of the Lafto Deset condominium neighborhood since 2011 E.C. She is a single mother with a kid and a grandchild. W/ro Alemitu’s kid has his own business and is the only one in the family with a source of income, and their

monthly income exceeds 12 thousand birr. They owned a car and used the parking space on a daily basis. W/ro Alemitu is a disabled person who walks with crutches. She has terrible social contact as a result of her condition, a lack of space to spend as a disabled person, and inadequate management of the public outdoor area.

**Usage of Shared outdoor space:** According to W/ro Alemitu Tesfaye, residing on the upper floors makes it harder to take advantage of the shared outdoor area. And she said "Despite the fact that being disabled and living on the top floor makes doing our activities on the ground harder, Because of the property's inadequate management structure and the lack of appropriate shared outdoor spaces, our family decided to stay at home and do everything on our own. As a disabled person, the living conditions in this area are so difficult that we can't even walk on acceptable routes, and there are several ditches that are extremely unsafe for our daily activities. I once fell off a poorly constructed road while escaping from a car on the road. The road and the ditches built for floods, as shown in the accompanying image, are extremely dangerous for persons like W/ro Alemitu.



*Fig .11. Roads and ditches. Source: Field work by the Author, Feb 2023*

#### **4.3 CASE 2: AYAT ARENGUADEW MENDER CONDOMINIUM**

The second selected site is Ayat Arengudew Mender condominium. The condominium is one of the government-sponsored condominiums located at the Ayat condominium sites, which started with block 62 and ended with block 85 and it is 35,450m<sup>2</sup>. It includes 24 G+4 blocks with 728 housing units and was constructed in 2005 E.C.

The primary characteristics that surround this property are the Ayat Arsema Church, the Makedonya Charity Association, the Main Road to Megenagna, and other Ayat condominium sites.

Based on the elements mentioned in the assessment framework above, the availability and state of the common outdoor area within this condominium complex are also evaluated.



Fig. 12. Location of Ayat Arengudew mender condominium site

Source: Google earth Location Map taken by Author Feb2023

#### 4.3.1 The Management of Shared outdoor space

Ayat Arengudew Mender condominium is now in the new Lemi Kura sub-city; it was formerly in the Bole sub-city. The Arengudew Mender Association is a portion of the larger condominium complex, which began with block 62 and finished with block 85. It was built in 2005 E.C. and consists of 24 blocks of G+4 having 728 dwelling units.

This compound's management structure is led by the chairperson of the committee, and the members of the committees are elected by the society inside the complex. The committee's job is to

lead and govern the property inside the condominium site, manage and offer services for the society, and collect a monthly fee from residents in accordance with the set rules outlined in their own regulations.








Clean and well-managed green areas, wide, adequate, and properly used car parking, well-designed walkways between green areas, gardens of small edible plants, roundabouts, sufficient cloth drying areas, sheds for pet animals, and services like mill houses, GYMs, private study centers, and libraries are the main and well-managed shared spaces and activities observed during the site visit and in-depth interview with the residents and workers inside the condominium site.









#### **4.3.2 The current state of Shared outdoor spaces**

The current state of shared outdoor spaces inside the Ayat Arengadew Mender condominium is much better than that inside the Lafto Deset condominium neighborhood. This site includes not only enough shared outdoor spaces, but also social services like a mill house (Wefcho Bet), a sports area (GYM), a study area for children, small gardens of green edible plants, a space provided for pet animals that are bought for holidays, and other commonly known shared outdoor areas like well-managed green areas, wide parking lots, safe playgrounds, roads, roundabouts, cloth drying areas, and paved and unpaved open spaces.

The response from the residence and observation during the site visit indicates the current state of Ayat Arengadew mender condominium neighborhood has better management system compared to other 20/80 condominiums and also it has various services which a person who lives inside a condominium neighborhood needs and that is the reason for the strong satisfaction level of the residences and well-managed shared outdoor spaces. A pictorial analysis of the main open spaces in Ayat Arengadew Mender condominium site is presented below.

Table 15. Pictorial analysis of Ayat Arengwadew mender condominium site

Observational analysis	Pictorial evidence
<p><b>Parking</b></p> <p>Wide and enough parking spaces are located around the roundabout and in the space provided for parking.</p>  	
<p><b>GYM</b></p> <p>GYM is one of additional services for youths inside the compound. situated where the office of the compound is located</p>  	
<p><b>Garden area</b></p> <p>The compound administrator provides garden spaces for small edible plants to residents of Ayat Arengwadew Mender condominium neighborhood. Located around each block.</p>  	

<p><b>Sheds</b></p> <p>Residents can keep their animals in sheds provided. These "pet animals" include sheep, oxen, and goats, which are bought for holidays. It is a safe haven for the animals, where they can rest until they are slaughtered.</p>  
<p><b>Mill House/ Wefcho bet</b></p> <p>This is one of the additional services that the previous site demanded, and it's not part of the shared outdoor spaces, but it is a good quality that the management body provides for the community.</p>  
<p><b>Walkways</b></p> <p>Well-designed Walkways between green areas inside the Ayat Arengudew Mender condominium neighborhood are usual.</p>  
<p><b>Green area</b></p> <p>As the name indicates, the Ayat Arengudew Mender condominium neighborhood is known for its well-managed and clean green areas, which are provided for its residents.</p>  

Source: Field work by the Author

### 4.3.3 Shared outdoor space user’s responses

#### Ownership Type

According to statistics acquired from the AYAT ARENGUADEW MENDER condominium, 73.3% of the society residing inside the area rents their house, while the remaining 26.7% own their house.

Even though there is large number of tenants in this site, there is well- managed shared out door areas and the social ties of the society is strong according to the aspects listed in the evaluation framework. As more renters move in for a temporary period of time, it may have an impact on how the community interacts socially.

Table 16. Ownership type of Ayat Arenguadew mender condominium

Ownership Type	Frequency	Percentage
Rented	22	73.3
Owner	8	26.7
Total	30	100.0

*Source: Field work by the Author*

#### Duration of stay

As the following table indicates, 53.33% of Arenguadew Mender society has been living here for more than 5 years, 26.7% of them for between 4 and 5 years, and the rest have been here from 1 year up to 3 years. People engage in the condominium community over extended stays, therefore the longer they remain, the stronger their social ties will be.

Table 17. Duration of stay Ayat Arenguadew mender condominium

Duration of stay	Frequency	Percentage
<1 Year	1	3.3
2-3 Years	5	16.7
4-5 Years	8	26.7
>5 Years	16	53.3
Total	30	100.0

Source: Field work by the Author

### Activities that demand shared outdoor spaces for the household

There is no shortage of green space inside Ayat Arenguadew Mender compound because, as the name suggests, the compound distinguishes itself from other condominium compounds by having a better and well-managed green environment. So it's only one person, or 3.3% of the residents, who said the most desired shared outdoor space is a green area, but the majority of residents, or 50%, said "playground." 33.3% of them said "cloth drying area," and 13.3% of them said "parking."

Table 18. Activities that most demand shared outdoor spaces for the household Ayat arenguadew mender condominium

Activities that most demand shared outdoor spaces for the household	Frequency	Percentage
Play ground	15	50.0
Parking	4	13.3
Green area	1	3.3
Cloth drying area	10	33.3
Total	30	100.0

Source: Field work by the Author

## Social interaction

The level of social interaction with the community is asked because shared outdoor space is the major element inside condominium neighborhoods that increase the social interaction of the community. According to this concept, 76.7% of the society has strong social interaction with people inside the neighborhood, while 23.3% of them have weak social interaction.

Table 19. Level of social interaction of Ayat arenguadew mender condominium

Social interaction level	Frequency	Percentage
Strong	23	76.7
Weak	7	23.3
Total	30	100.0

Source: Field work by the Author

## Reasons for weak social interaction

As the above table shows, 23.3% of the residents of Ayat arenguadew mender residence have weak social interaction with the community, and lack of time for interaction is their main reason.

Table 20. Reasons for weak social interaction of Ayat arenguadew mender condominium

Reasons for weak social interaction	Frequency	Percentage
Lack of time	7	23.3
I have strong social interaction	23	76.7
Total	30	100.0

Source: Field work by the Author

## Level of satisfaction with the provided shared outdoor space

According to the residence response, the following Table 21 indicates that 93.3% of the Ayat Arenguadew Mender condominium society are satisfied with the provided shared outdoor space, and the rest, 6.7%, of the society are not satisfied with the provided shared outdoor spaces.

Table 21. Level of satisfaction with the provided shared outdoor space Ayat arenguadew mender condominium

Level of satisfaction	Frequency	Percent
Poor	2	6.7
Good	28	93.3
Total	30	100.0

Source: Field work by the Author

#### Level of satisfaction with the management system of shared outdoor space

The following Table 22 indicates majority of Residence in Ayat arenguadew mender are satisfied with the management system of shared outdoor space while 26.7% have fair satisfaction level.

Table 22. Level of satisfaction with the management system of shared outdoor space Ayat arenguadew mender condominium

Level of satisfaction	Frequency	Percent
Good	22	73.3
Fair	8	26.7
Total	30	100.0

Source: Field work by the Author

#### 4.4 Summary of analysis according to the evaluation framework

The following evaluations table of the two study sites is based on the assessment framework discussed earlier, which is created to analyze the selected case studies using the criteria and metrics it provides.

Table 23: Summary of analysis according to the evaluation framework

Aspects		Criteria	Lafto Deset	Ayat arenguadew mender
sociability		friendliness, storytelling, stewardship, neighborliness, collaboration, diversity, and welcomeness.	The response from the residents is that, except from a few minor get-togethers for meetings, weeding, and mourning, there is nothing like.	Owing to numerous mass-participation activities, the residents of Ayat exhibit sociability and possess more social characteristics.
Access	Physical access	- Removal of obstacles and connection to other areas - Ease of access	Certain locations, such as playgrounds, are inaccessible and have deteriorated stonework and splintered wood, which seriously harms the surroundings and the kids.	With the exception of a small amount of upkeep on the common outdoor space, most of these locations are accessible.
	visual access	- proper visual contact with the location - Being noticeable	Generally speaking, the neglected ness of the majority of common outdoor spaces makes the place noticeable	Since there are so many green plants surrounding the common outdoor space, they can be seen from other locations.
	Symbolic access	- Existence of markers or signs - Physical components and place-specific articulations	None	None
Inclusiveness		Presence of diverse classes Presence of people of diverse ages Presence of people with diverse physical abilities Presence of people of different genders	Yes Yes Yes Yes	Yes Yes Yes yes
Layout pattern		-Spatial arrangement of a neighborhood	Indeed, common outdoor places are	The majority of activities

		available for some activities; but, there are also many unutilized areas where certain activities cannot take place.	take place in the designated areas, while certain commercial community activities like the mill house, gym, and library also have their own designated places.
Variety of activities and purposes.	-Homegrown quality, vibrancy, fun, originality, specialness, realness, sustainability, affordability, utility, celebration, and indigenoussness	The majority of activities contribute to these attributes, but the inhabitants are unwilling to engage in them because of a lack of space and upkeep.	Real and long-lasting social connections amongst the inhabitants are greatly facilitated by the space that is offered.
Comfort and Amenities	-Physical features like seating areas -additional street furniture and tangible artifacts, trees, shade, and shelter, wide sidewalks, a high degree of articulation with nooks and corners, -landscape elements like planters and ledges -Cleaning, greenness, walkability, sit ability, spirituality, beauty, safety, charm, and historical elements	Due to the fact that most communal outdoor areas have been abandoned, this particular issue cannot be taken into consideration at all.	The inhabitants' responses and observations indicate that the spaces offered are sufficiently comfortable and equipped, despite the fact that all of the precise things stated in this aspect are not present at this location.
Social variables	The socio-demographic characteristics of a neighborhood affect how neighbors interact with others, - How they use shared outdoor spaces. - Factors such as respondents' stage in the lifecycle (including age, marital status, and presence of children at home),	Although most of the socio-demographic characteristics of the people are comparable, they are unable to form and maintain strong social bonds because of the previously	The socio-demographic characteristics of this area suggest that residents are more likely to be relatable and engage in numerous

	-owner-renter status, length of residence, educational attainment and annual income are relevant socio-demographic characteristics presumably associated with social interaction	described mistakes in common outdoor places.	activities that foster strong social relationships.
Rule and Regulation	- Presence of Governing rule for shared outdoor space. - Indication of the role and power of the associations - Amendment of Rules and by laws	They follow their own set of local regulations and ordinances.	They follow their own set of local regulations and ordinances.
Management system	-Participation of government bodies and home owner Associations on the preparation of regulations -Participation of all members of association during meeting and decision making. -There should be energetic and goal-oriented managers, creative and initiator, flexible in new situations, and responsible. -The manager Should be fast at planning, should be able to organize and delegate work, Motivated - The managers should have critical thinking, communication skills, decision making methods and techniques, teamwork skills. The manager should control the performance, and collaborate with others.	-The lack of communication and understanding between committees and residents is demonstrated by the committees' decision to rent the common buildings without the residents' agreement. - A common trait among managers is their unwillingness to take responsibility for any harm that occurs inside the common outdoor space. - Committees don't accept accountability for meeting residents' needs; instead, they abuse their position to extract money by making the inhabitants make foolish decisions.	-People in the community have a custom of choosing their own committee members so that they are able to communicate with them more readily. -The managers welcoming demeanor and assured presentation of the area demonstrate their belief in the enjoyment of its residents via their services. - The majority of responders express satisfaction with the leadership they get, and some of them even provide suggestions for how to behave better personally.

Source: Field work by the Author

## **CHAPTER FIVE:- FINDINGS, DISCUSSION AND RECOMENDATION**

### **5.1 Introduction**

The analysis of the context and each case has separately delivered some findings and the findings are described in this chapter in relation to addressing the research questions which mostly focuses on the policies and regulations that govern shared outdoor space of condominium housing, how shared outdoor spaces managed in condominiums and Who owns what and who has what kind of right on which shared space?, Who manages them?, the challenges on management of shared outdoor spaces in condominium housing and finally the effect of the existing policies and management of shared outdoor spaces on social ties of residents. The Equivalent statements for the research questions are as follows:

- Management of shared outdoor space
- Challenges on managements of shared outdoor spaces in condominium housing
- The effect of existing policies and management systems of shared outdoor spaces on the strength and quality of social ties among condominium residents, thereby uncovering potential pathways for fostering stronger community connections.

### **5.2 Management of shared outdoor spaces**

As explained above, the written regulations on shared outdoor spaces of the condominium cover the management of shared spaces within the two designated sites, the authority of the management body, the type of power, and the accountable body. There are specific rules for managing shared outdoor areas that are written on the internal regulations of the associations, and those rules may only be executed by the association's elected management body. Despite the fact that there are particular rules for using shared outdoor spaces, none of the shared outdoor areas at the LAFTO DESET condominium are administered in accordance with those laws.

The collected data shows that the majority of residents in Lafto deset condominium are dissatisfied with the shared outdoor area management system. Not only were they dissatisfied, but they were also complaining about the entire management system. Residents who use the playground and parking are the ones who are most dissatisfied with the management system, and they were attempting to explain the problems they encountered during their stay inside the compound. According to the gathered data, 93.3% of the society are dissatisfied with the committees that led

and oversee the management system of shared outdoor areas. The following are the shared outdoor spaces that are experiencing management issues.

**Parking:** there are leftover spaces which are firstly designated for parking purpose and the roads are the one which are giving services as a parking.



*Fig 13. Left: space provided for parking purpose and Right: current parking space*

*Source: Field work by the Author*

**Play ground:** There were three playgrounds in the compound, but only one was operational during the research period. Those two playgrounds have been closed since 2010 E.C, and the management body has said that they are attempting to rehabilitate them.



*Fig 14. The current state of the playground*

*Source: Field work of the Author*

**Roads:** While the road provides parking, the inhabitants, particularly the youngsters of the LAFTO DESET condominium, are experiencing distress and car accidents.

**Open spaces:** Traditional foods are prepared in the open areas of the neighborhood during holidays and mourning since the common facility designed for this purpose is rented by the compound's management body. These factors contribute to the area to being sick, dirty, and the worst place to live.

**Slaughtering area:** Despite the fact that slaughtering rooms are established in communal buildings for the purpose of slaughtering, none of the common buildings in the Lafto Deset condominium are utilized for slaughtering since they are rented; instead, open space and roads are used for slaughtering by the community. As compared to the Lafto Deset condominium site, data from Ayat Arenguadew Mender demonstrates that the inhabitants of the complex are quite satisfied with the management system of shared outdoor spaces so the living condition and social interaction within the AYAT neighborhood is far superior to LAFTO DESET condominium site.

The following table summarizes the findings of the study on residents' satisfaction with the management system of shared outdoor areas at both sites:

Table 24. Comparison of satisfaction level on the management system across the two cases

Satisfaction level		LAFTO DESET		AYAT ARENGUADEW MENDER	
		Frequency	Percentage	Frequency	Percentage
Poor		28	93.3	0	0
Fair		2	6.7	8	26.7
Good		0	0	22	73.3
Total		30	100.0	30	100

Source: Field work by the Author

## By laws

Laws and regulations about shared outdoor places are evident from the aforementioned sample example, specifically concerning the management bodies' responsibilities in overseeing the condominium community, particularly shared outdoor areas. The Chinese rules and regulations provide more detailed information on assigning duty for the management bodies, for those who lead by the rules and regulations, and for the usage of such shared outdoor places, based on the examples from both countries. All three nations offer sufficient regulations for their condominium complexes, especially with regard to their shared outdoor areas, with the exception of providing more specific information on assigning responsibilities for the management bodies and those who utilize the common outdoor areas. Although they attempted to

mention in general, both our nation and Rwanda must include some particular roles for the management bodies; nonetheless, it would be more useful if they provided more specifics. Ethiopian internal regulations, drafted by associations, allocate responsibilities and regulations to management bodies based on their respective roles. However, the main issue is that these bodies refuse to implement the written documents in practice and do not even follow the laws as written. That explains why residents of the Lafto Deset condominium experience these issues.

### **5.3 Challenges on managements of shared outdoor spaces in condominium housing**

One of the study's goals is to identify the challenges in managing shared outdoor spaces in condominium housing. As previously stated, the management system of the site has failed because the living environment of the compound is unsafe, and residents are dissatisfied with the entire management system. The association's weak management structure is to blame for this hazardous and unsatisfying environment.

**The major challenges on the management system of the selected site are listed as follows:**

**Corruption:** According to the data acquired from residents, one of the biggest causes of poor management is corrupted members of management bodies who utilize the money received from residents for personal gain.

**Waste of resource:** There are numerous resources available for the maintenance of shared outdoor areas such as playgrounds, roads, and new projects, but due to the association's bad management system, those resources are being wasted.

**Budget constraint:** The association's only source of income is the monthly money collected from residents, rental money from common buildings, income from parking lots, and other tiny fines and payments that cannot afford to provide further services or restore the broken shared areas.

**Lack of commitment:** Some members of the management bodies are unwilling and uncommitted to properly lead the association; instead, they generally abscond from their offices and waste their time dealing with personal concerns; their poor guest handling is also observed during study time.

**Lack of communication:** Despite the fact that the management bodies and members meet regularly to discuss current concerns and solutions, there is no actual contact between the management bodies

and members. In addition, there is a lack of effective administration to promote community activities and communicate with government agencies.

**Inappropriate design:** The design and placement of some of the neighborhood's shared outdoor spaces are tough to use and maintain.

#### 5.4 The effect of the existing policies and management of shared outdoor spaces on social ties of residents

Within a condominium community, the only area for residents to connect is in communal outdoor spaces. In addition to providing a clean and secure environment, appropriately managing public outdoor areas fosters neighborhood social bonds. The shared outdoor area management system is quite important. The degree of social interaction among residents at both study locations reflects the effectiveness of respective management systems. There is significant social engagement among inhabitants when there is a competent management system of shared outdoor space, and there is weak social interaction when there is a poor management system. The data acquired from the Lafto Deset condominium site indicates that the community has poor social contact as a result of the existing bad management system of shared outdoor areas. In contrast, data obtained from the Ayat Arenguadew mender site suggests a strong link between inhabitants as a result of the neighborhood's effective management system on shared outdoor space. Furthermore, the management bodies of Ayat Arenguadew mender condominium provide services on communal outdoor places such as vegetable gardens, animal shelters, GYMs, and mill homes, which assist the community to create social connection. Having a nice location to talk, play, and amuse with others necessitates well-managed outdoor spaces. It also has an impact on the community's health.

The contrast between the effects of excellent and bad shared outdoor space management on both locations is seen below.

Table 25. Comparison of level of social interaction across the two cases

Level of social interaction	LAFTO DESET		AYAT ARENGUADEW MENDER	
	Frequency	Percentage	Frequency	Percentage
Weak	18	60	7	23.3
Strong	12	40	23	76.7
Total	30	100.0	30	100

Source: Field work of the Author

## **5.5 Conclusion**

This study has examined the management, challenges, and social impacts of shared outdoor spaces in condominium housing, with a focus on the Lafto Deset and Ayat Arenguadew Mender sites. The findings indicate that while both condominiums have written regulations concerning the management of shared outdoor spaces, the implementation of these regulations is notably ineffective, particularly at Lafto Deset. The management system at Lafto Deset faces significant challenges such as corruption, resource waste, and a lack of commitment, leading to dissatisfaction among residents. In contrast, Ayat Arenguadew Mender demonstrates a more effective management system, resulting in better social interaction and a higher level of resident satisfaction.

The analysis also highlights the role of well-managed shared spaces in fostering social bonds. At Lafto Deset, poor management has led to weak social ties, while effective management at Ayat Arenguadew Mender has resulted in stronger community connections. The study underscores the need for more comprehensive policies and regulations, effective management bodies, and better-designed spaces that promote social interaction. However, the study is limited by time constraints and a lack of access to comprehensive documents, which could have provided a deeper understanding of the issue. Future research could explore the long-term effects of management systems on social interaction in other condominium sites across different regions.

The findings suggest several recommendations for improving the management and design of shared outdoor spaces. These include the establishment of institutional structures with clear roles for managing shared spaces, regular evaluations of management bodies, and design improvements that prioritize comfort and safety. Additionally, training for management committees and increased community engagement are essential for creating a more efficient and harmonious living environment in condominium communities.

## **5.6 Recommendation**

Based on the data gathered and interpretation, the researcher made the following recommendations to the government body and on the study sites.

### **5.6.1 In terms of policies and regulations**

- There should be institutional structures for associations with specified norms and regulations that are especially intended for shared outdoor spaces, and employed administrators to

successfully oversee and manage them.

- The process of establishing rules and regulations should include the participation of the association's committees, condominium neighborhood inhabitants, and the government body in order to fully understand the needs and difficulties of condominium neighborhood residents.
- There should be a regulation to penalize members of the management body who use their power to wrongfully lead the condominium neighborhood association, who use the money received from the members of the association for their own personal gain, and who are not devoted to their position.

### **5.6.2 In terms of the management body**

- The election of the condominium association's management body should be devoid of bias.
- Management bodies should be evaluated on a regular basis based on their amount of function and responsibility for shared outdoor space.
- There should be a responsible person or entity between the association and the agencies that enable, communicate, and report on the neighborhood's monthly condition.
- There should be frequent training for committees on how to manage shared outdoor space, how to be committed, how to utilize money efficiently, and how to use resources wisely.
- The management body should provide additional option of money making way for the maintenance and construction of shared outdoor spaces.
- The Lafto Deset condominium, like the second study site, should include additional facilities such as a mill house, GYM, Sport area, Study area, garden for edible plants, and clean greeneries for the inhabitants of the community.

### **5.6.3 In terms of design**

- According to the findings, certain shared outdoor places are challenging to maintain because of their location. The design team should examine the area in terms of the inhabitant's comfort and safety.
- A design team should be formed to address the existing design issues of shared outdoor space in the community. Greeneries and parks, as well as edible gardens, should be incorporated into the neighborhood plan.

- There should be an accountable entity for residents to report any issues with the use of the allocated shared outdoor areas.
- The design should also examine how to improve the community's social interaction. As a result, individuals of various ages may utilize the public outdoor space.
- Because there are elderly and disabled residents in the condominium, the design should involve them in the utilization of shared outdoor areas. They can give furnishings within the greeneries as well as a ramp in certain messy places.

## References

- AACPPO (2017), *Addis Ababa City Structure Plan Draft Final Summary Report*
- Belay File (2017), *Housing development program, Ethiopia, Addis Ababa*
- Bandara W., Rathnayake R., Mahanama, S., & Wickramaarachchi, N. (June 2020). *An investigation on community spaces in condominiums and their impact on social interactions among apartment dwellers concerning the city of Colombo, University of moratuwa, Sri lanka.*
- Chen, Y., Tao, L. and Weibin, L. (2016). *Increasing the use of large-scale public open spaces: A case study of the north central axis square: Shenzhen, China*
- Clare Cooper Marcus Professor. *Shared Outdoor Space and Community Life Department of Architecture and Landscape architecture, University of California. Berkeley.*
- Clarke, Andrew ; Dornfeld, Michael J. (1994). *Case Study No. 19 Traffic Calming, Auto-Restricted Zones and Other Traffic Management Techniques - Their Effects on Bicycling and Pedestrians, United States. Federal Highway Administration: 400 Seventh Street, S.W. Washington, D.C. 20590*
- Donnelly, P. G. (2010). *Newman , Oscar : Defensible Space Theory Newman , Oscar : Defensible Space Theory.*
- Drucker Susan, & Gumpert Garry. (1998). *Public Spaces and the Right of Association. Hofstra University*
- Farida Naceur (2013). *Effects of outdoor shared spaces on social interaction in a housing estate in Algeria. Frontiers of Architectural Research,*
- FDRE (2003). *Proclamation No. 370/2003 Condominium Proclamation*
- Gayane Tovmasyan (2017) *The Role of Managers in Organizations: Psychological Aspects PhD, Researcher at “AMBERD” Research Center of the Armenian State University of Economics, Professor at the Public Administration Academy, the Republic of Armenia*
- Glaeser Edward, Laibson David, & Sacerdote Bruce (2002). *An economic approach to social*

*capital.oxford, UK.*

*Golicnik, B., & Thompson, C. W. (2010). Emerging relationships between design and use of urban park spaces. Landscape and Urban Planning, a Urban Planning Institute of the Republic of Slovenia, Ljubljana, Slovenia*

*HazzeH, Tawfiq Mabu (1999). Housing Layout , Social Interaction, and the Place of Contact in Abu-Nuseir , Jordan the university of Jordan Department of Architecture. Jordan.*

*Ifasuziella Ibrahim, Zahari Wan, Yusoff Wan., & Bilal Kamalludin. (2012). Space Management : A Study on Space Usage Level in Higher Education institutions. faculty of Technology Management Business and Entrepreneurship Unversity Tun Hussein. Malaysia.*

*Jan Gehl, ( 2011) LIFE BETWEEN BUILDINGS : Using Public Space Translated by Jo Koch Island Press, Suite 300, 1718 Connecticut Ave., NW, Washington,*

*Matthew Carmona (2018). Principles for public space design, planning to do better: London, UK*

*Official, Gazette 2010, Law N°15/2010 Of 07/05/2010 Creating And Organizing Condominiums and Setting Up Procedures For Their Registration Rwanda*

*Pamela Baxter, & Susan Jack (2008). Qualitative Case Study Methodology : Study Design and Implementation for Novice Researchers Qualitative Case Study Methodology : Study Design and Implementation*

*Real Right Law of the people's Republic of china, (2007)*

*Robert.k.Yin (2003). Case study Research\_Design and Methods. Sage Publications international educational and professional Publisher. California*

*R Sendi and B Golicnik Marusic (2012), Neighborhood Design: Public Spaces. Urban Planning Institute of the Republic of Slovenia, Ljubljana, Slovenia*

*Seema Hiregoudar, & Dr. G. Vani (2018). Qualities of Good Leadership for Effective Organisation, Assistant Professor & Research Advisor, PG & Research Department of Management, Rajagiri Dawood Batcha College of Arts & Science, Papanasam, Tamil Nadu, India*

*UN HABITAT (2008), Ethiopia: Addis Ababa Urban Profile, United Nations human settlement Programme: Nairobi, Kenya*

*UN HABITAT (2011), Condominium Housing in Ethiopia: The Integrated Housing Program, United Nations human settlement Programme: Nairobi, Kenya*

*UNECE (2019) GUIDELINES ON THE MANAGEMENT AND OWNERSHIP OF CONDOMINIUM HOUSING UNITED NATIONS, Geneva*

*Victoria Ateca & Esperanza vera- Toscano(2008). The determinants of housing satisfaction: relevance of social interaction (unpublished document)*

*Vikas Mehta. (2013). Evaluating Public Space, School of Architecture and Community Design, Journal of Urban Design, University of South Florida, Tampa, FL, USA*

*Vincent Powoh Techo (2016), Research Methods-Quantitative , Qualitative , and Mixed methods DOCTORATE IN BUSINESS ADMINISTRATION ( DBA ) Assignment submitted by : TECHO VINCENT POWOH COURSE : FACILITATOR : Horizons University Paris*

*Williams, J. (2006). Designing Neighbourhoods for Social Interaction : The Case of Cohousing ,UK*

*Zaidah Zainal (2007). Case study as a research method.Faculty of Management and human ResourceDevelopment University Technology Malaysia*

*Zhang,W. and Lawson, G. (2009). Meeting and greeting: Activities in public outdoor spaces outside high-density urban residential communities. School of Design, Faculty of Built Environment and Engineering, Queensland University of Technology Brisbane QLD 4001, Australia*

## Appendix A: Interview

### Interview 1: In-depth interview with the condominium association

This interview was prepared by Addis Ababa University Ethiopian Institute of Architecture and Urban Development student to help study the administrative system and management of communal areas to collect information from Lafto and Ayat Condominiums. Thank you very much for your cooperation.

1. Name \_\_\_\_\_
2. Your authority and responsibilities in the condominium association. \_\_\_\_\_
3. Where is your condominium association located? \_\_\_\_\_
4. When was the association established? \_\_\_\_\_
5. How many homeowners and tenants are there in the association? \_\_\_\_\_
6. How many common areas are managed by the association? \_\_\_\_\_
7. Who owns the common facilities in the neighborhood? Who manages it? Does it have a bylaw? Who made the rules?
8. Are the residents in the neighborhood aware of these rules and regulations? \_\_\_\_\_
9. How are the common facilities in the neighborhood managed?
10. What services do the common facilities provide? Why do you use these services and when?
11. Is there a service that you would like to use by the association or members, but you have been denied? why? \_\_\_\_\_
12. What activities are permitted in common Shared outdoor areas? \_\_\_\_\_  
How to obtain permission for these activities? \_\_\_\_\_
13. What are the problems that the association faces while managing these common shared outdoor areas? \_\_\_\_\_
14. What adverse or beneficial effects have the mode of management of common shared outdoor areas had on residents' use and overall lives? \_\_\_\_\_

### Interview 2: Semi-structured interview for key informants and selected families

1. Biography
2. Family number
3. Length of stay
4. Type of possession
5. What kinds of activities were they unable to perform?

6. Where do you perform those tasks? What kind of permission is required? Who do they get permission from?
7. Shared outdoor area options
8. Problems encountered when using shared outdoor areas

## Appendix B: Questioner

This questioner was prepared by Addis Ababa University Ethiopian Institute of Architecture and Urban Development student to help study the administrative system and management of communal areas to collect information from Lafto and Ayat Condominiums. Thank you very much for your cooperation.

### Part-I Statement of the respondent

1. Name of Respondent: \_\_\_\_\_
2. Gender \_\_\_\_\_ A. male B. Female
3. Age \_\_\_\_\_
4. Marital Status \_\_\_\_\_ A. married B. Unmarried
5. Education level: A. No formal education B. 1st – 4th grade C. 8th grade D. 9th – 10th grade E. after 10th F. (preparatory/ 11–12, or technical and vocational) G. first degree H. second degree and above
6. Status of work A. Regular job (paying tax) B. Without job C. Informal (working both regular and non-regular jobs)

### Part-II Family statement

7. Name of the flat / location \_\_\_\_\_
8. Block No. \_\_\_\_\_
9. Floor \_\_\_\_\_
10. Type of house A. Studio B. 1 bedroom C. 2 bedroom D. 3 bedroom
11. Type of Tenure A. Tenant B. Owner C. other \_\_\_\_\_
12. What is the total size of your family? General \_\_\_\_\_, Male \_\_\_\_\_, Female \_\_\_\_\_
13. When did you come to this neighborhood? Month \_\_\_\_\_, Year \_\_\_\_\_
14. Length of Stay? A. Less than 1 year B. 2-3 years C. 4-5 years D. More than 5 years
15. How many of the family members are at which level of education or skill, their number should be stated in the following list. A. He/she is not old enough for formal education: \_\_\_\_\_ B. (kg) \_\_\_\_\_ C. No formal education: \_\_\_\_\_ D. Grades 1-4: \_\_\_\_\_ E. 5 – 8 F. Grade 9 – 10: \_\_\_\_\_ G. After Tenth (Preparatory/11–12, or Technical and Vocational): \_\_\_\_\_ H. First Degree: \_\_\_\_\_ I. Second Degree and above: \_\_\_\_\_
16. Are there people in the family with mental or physical disabilities? A. Yes they are B. No they are not

17. If the answer is yes (specify the number below):

A. How many are mentally challenged? \_\_\_\_\_ B. How many have disabilities that limit their ability to walk? \_\_\_\_\_ C. How many are blind? \_\_\_\_\_ D. How many are deaf? \_\_\_\_\_ E. How many are there other types of disabilities other than those mentioned? \_\_\_\_\_

18. Income status of the family: Average monthly salary A. 1500- 2500 B. 2500-4000 C. More than 4000

### Part-III Common areas

Reminder: Common areas means built and un-built common use areas prepared for the use of residents in the condominium, built common areas include the common use building (communal), stairs, corridors and balconies and un-built include green spaces, children's playgrounds, roads, parking lots, and any unpaved areas, whether fixed or not fixed.

The type of common use space that is Selected for this study is what we call un-built or (shared outdoor spaces). They include green areas, children's playgrounds, roads, and parking lots.

1. Have you ever used common areas?

A. yes B. I do not know

2. If the answer to question 1 is yes, why use it?

Table 26. A list of activities performed by the resident

No	A list of activities you perform	The type of common use		How often you do it	Where you do it		The reason why
					A certain place	Current location	
				Per week/month/year			
2.1							
2.2							
2.3							
2.4							
2.5							
2.6							

3. If the answer to question 1 is I don't know, why? A. Management system status B. Distance C. Lack of adequate facilities D. Usage habit E. Design of the place F. Convenience G. Other Social relationship Reasons

4. Do you think that the prepared common areas are managed properly?
5. What do you think about common areas and social interaction?
6. Do you think you have strong social ties to the community? A. yes B. don't have
7. If your answer is I don't have, what do you think is the reason for your poor social relationship with the community? \_\_\_\_\_
8. List the activities you perform in un-built common areas? (Green areas, children's play grounds, roads, Parking lots)
9. Where do you perform these activities? (Alternative locations eg: corridors, open spaces)
10. Are you satisfied with the provided common areas?  
A. yes B. Not satisfied C. I don't want to suggest  
If not satisfied, why?
11. Do you think that the prepared common areas are serviceable?  
A. Yes B. I don't think C. I don't want to suggest  
If I don't think, why? If yes, why?
12. What kind of administrative system is there for the common areas?
13. Who has the authority to govern? \_\_\_\_\_
14. What is their authority to do? \_\_\_\_\_
15. How much do you know about the administrative system of common use areas? \_\_\_\_\_  
If you know them, list them.
16. Are you satisfied with the administrative system of the communal areas?  
A. Yes B. Not satisfied C. I don't want to suggest  
If not satisfied, why?
17. What kind of places do you think should be added? Mention what you think is missing from the common areas provided. \_\_\_\_\_
18. If you could change, what would you change? \_\_\_\_\_
19. If you have a problem due to your gender or age in terms of using common areas.

## Observation

Additional pictures from the site visit

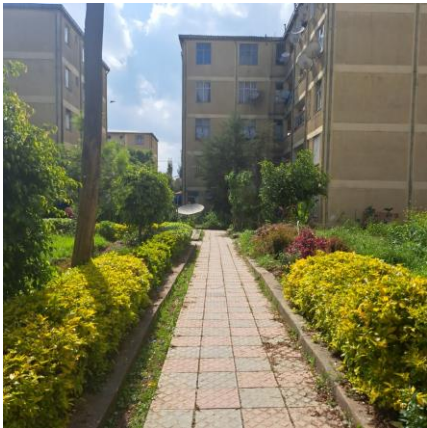
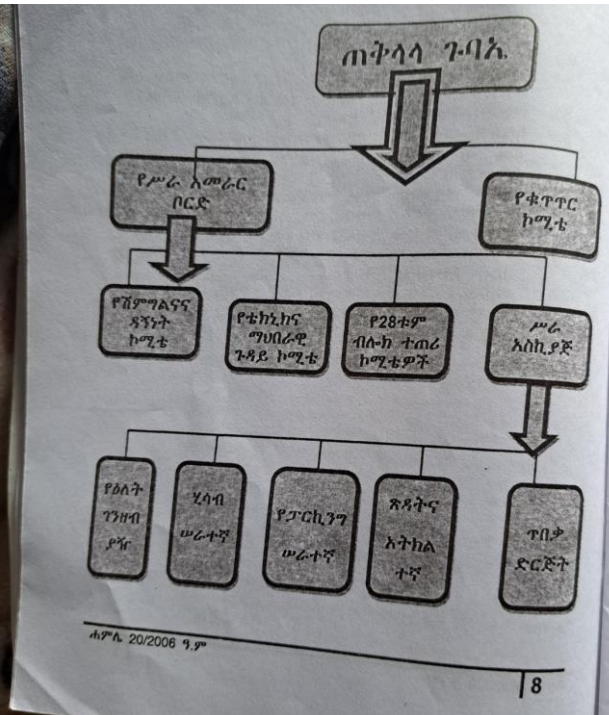
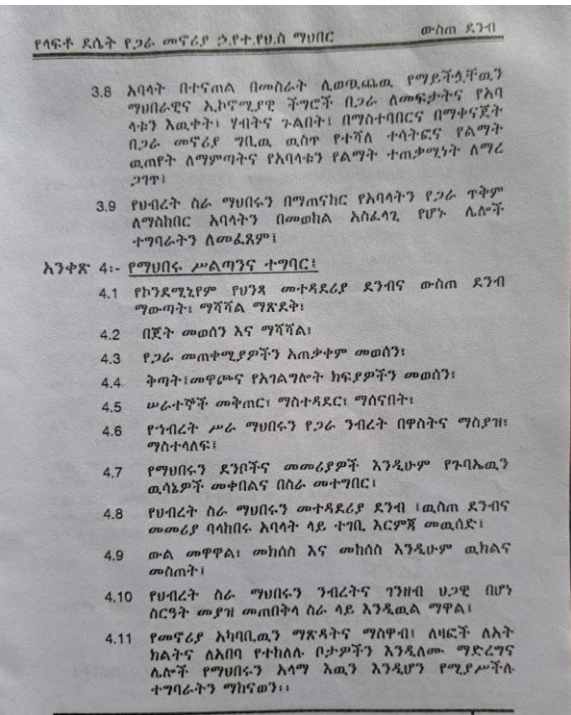
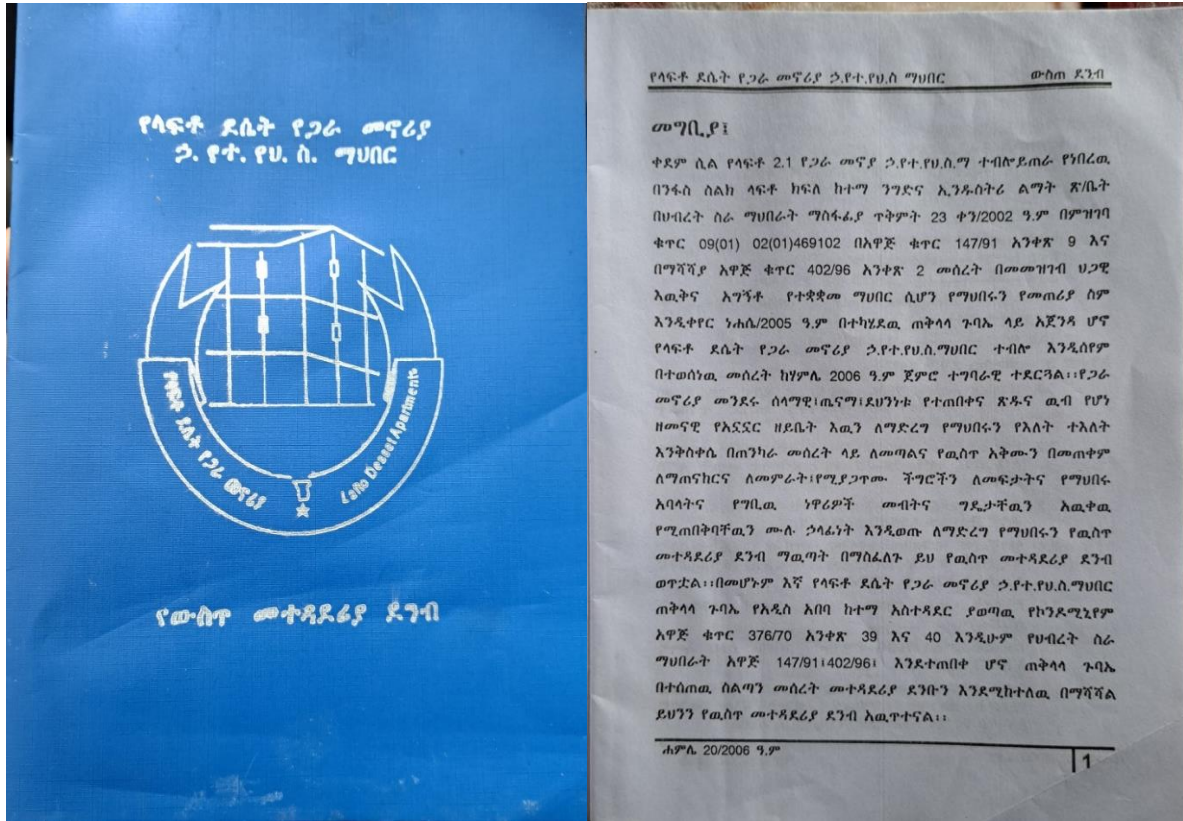


Fig.15 Images taken by the author

## Appendix C: Internal Regulation Document of the Neighborhood





**Appendix D: Journal Article Manuscript**

---

# **Management of Shared Outdoor Spaces in Government Developed Condominium Housing in Addis Ababa**

**The case of LAFTO DESET and AYAT ARENGUADEW MENDER Condominium Sites,**

**Addis Ababa**

Betelhem Demeke-Chair of housing and sustainable development, Addis Ababa University, Addis Ababa, Ethiopia;  
betelhemdemeke2004@gmail.com

Wubshet Berhanu, Chair of housing and sustainable development, Addis Ababa University, Addis Ababa, Ethiopia;  
E-mail: [Wubshet.berhanu@eiabc.edu.et](mailto:Wubshet.berhanu@eiabc.edu.et)

---

## **Abstract**

This study examined the state and management of shared outdoor spaces in condominium housing and their impact on social interaction in Addis Ababa. Since the start of Ethiopia's IHDP program in 2004, poor management and misuse of these spaces have become major issues. Through case studies of two condominium sites, the research evaluated the condition and management of shared spaces, identified challenges, and explored their effects on residents' social ties. Data was collected via questionnaires, observations, and interviews with residents, key informants, and condominium association members. The Lafto Deset condominium faces significant challenges, with 93.3% of residents dissatisfied due to poor management, corruption, resource mismanagement, and neglect. In contrast, Ayat Arenguadew Mender has a well-functioning system that promotes better social interaction and community bonds. The study highlights the importance of effective management in improving quality of life and social ties in condominium communities.

**Keywords:** Shared outdoor space, Social Interaction, Management system

## **INTRODUCTION**

Housing meets various human needs, primarily providing shelter while also serving as a social space for interaction and status. Beyond mere dwelling, it encompasses health services, security, privacy, and access to community facilities (Ateca Vera-Toscano, 2008). In Ethiopia, the Integrated Housing Development Program (IHDP), launched in 2004, addresses housing shortages for low- and middle-income households (UN HABITAT, 2011). Condominium housing allows residents to own individual units while sharing communal areas and responsibilities (Belay File, 2017). This model has transformed urban dynamics, with shared outdoor spaces like gardens fostering community interactions. Effective management of these areas is crucial for enhancing social cohesion. This paper investigates the management systems of shared outdoor spaces in two condominium neighborhoods and their impact on social interaction. By analyzing case studies, the exploration focuses on how different management approaches influence residents' engagement and social networks. Understanding the link between management practices and social interaction is vital for legislators and urban planners. This research

contributes to urban sociology by offering insights into optimizing communal spaces for social benefit and identifying management challenges that affect community ties.

## **METHODOLOGY**

### **Choice of method and sampling techniques**

The research design outlines the plan to answer the research questions. A qualitative approach was chosen for its ability to provide in-depth insights into shared space management in condominiums and its impact on social interaction, focusing on rich, contextual understanding rather than empirical generalization.

### **Sampling techniques**

A pilot test assessed residents' views on shared outdoor space management and the questionnaire's reliability. It identified 1056 households in 28 blocks at LAFTO DESET and 728 households in 24 blocks at AYATARENGUADEW MENDER condominiums. Samples considered factors like block location, age, disability, gender, stay duration, and family size. Based on pre-study results and time constraints, 30 households, three key informants, one committee, and one guard were purposively and snowball-sampled from each site.

**Summary of analysis according to the evaluation framework**

Table 1: Summary of analysis according to the evaluation framework				
Aspects		Criteria	Lafto Deset	Ayat arenguadew mender
sociability		-Friendliness, storytelling, stewardship, neighborliness, collaboration, diversity, and welcomeness.	The response from the residents is that, except from a few minor get-togethers for meetings, weeding, and mourning, there is nothing like.	Owing to numerous mass-participation activities, the residents of Ayat exhibit sociability and possess more social characteristics.
Access	Physical access	- Removal of obstacles and connection to other areas - Ease of access	Certain locations, such as playgrounds, are inaccessible and have deteriorated stonework and splintered wood, which seriously harms the surroundings and the kids.	With the exception of a small amount of upkeep on the common outdoor space, most of these locations are accessible.
	Visual access	- proper visual contact with the location - Being noticeable	Generally speaking, the neglected ness of the majority of common outdoor spaces makes the place noticeable	Since there are so many green plants surrounding the common outdoor space, they can be seen from other locations.
	Symbolic access	- Existence of markers or signs -Physical components and place-specific articulations	None	None
Inclusiveness		-Presence of diverse classes -Presence of people of diverse ages -Presence of people with diverse physical abilities -Presence of people of different genders	Yes Yes Yes Yes	Yes Yes Yes yes
Layout pattern		-Spatial arrangement of a neighborhood	Indeed, common outdoor places are available for some activities; but, there are also many unutilized areas where certain activities cannot take place.	The majority of activities take place in the designated areas, while certain commercial community activities like the mill house, gym, and library also have their own designated

			places.
Variety of activities and purposes.	-Homegrown quality, vibrancy, fun, originality, specialness, realness, sustainability, affordability, utility, celebration, and indigenouslyness	The majority of activities contribute to these attributes, but the inhabitants are unwilling to engage in them because of a lack of space and upkeep.	Real and long-lasting social connections amongst the inhabitants are greatly facilitated by the space that is offered.
Comfort and Amenities	-Physical features like seating areas -additional street furniture and tangible artifacts, trees, shade, and shelter, wide sidewalks, a high degree of articulation with nooks and corners, -landscape elements like planters and ledges -Cleaning, greenness, walkability, sit ability, spirituality, beauty, safety, charm, and historical elements	Due to the fact that most communal outdoor areas have been abandoned, this particular issue cannot be taken into consideration at all.	The inhabitants' responses and observations indicate that the spaces offered are sufficiently comfortable and equipped, despite the fact that all of the precise things stated in this aspect are not present at this location.
Social variables	The socio-demographic characteristics of a neighborhood affect how neighbors interact with others, - How they use shared outdoor spaces. - Factors such as respondents' stage in the lifecycle (including age, marital status, and presence of children at home), -owner-renter status, length of residence, educational attainment and annual income are relevant socio-demographic characteristics	Although most of the socio-demographic characteristics of the people are comparable, they are unable to form and maintain strong social bonds because of the previously described mistakes in common outdoor places.	The socio-demographic characteristics of this area suggest that residents are more likely to be relatable and engage in numerous activities that foster strong social relationships.

	presumably associated with social interaction		
Rule and Regulation	<ul style="list-style-type: none"> <li>- Presence of Governing rule for shared outdoor space.</li> <li>- Indication of the role and power of the associations</li> <li>- Amendment of Rules and by laws</li> </ul>	They follow their own set of local regulations and ordinances.	They follow their own set of local regulations and ordinances.
Management system	<ul style="list-style-type: none"> <li>-Participation of government bodies and home owner Associations on the preparation of regulations</li> <li>-Participation of all members of association during meeting and decision making.</li> <li>-There should be energetic and goal-oriented managers, creative and initiator, flexible in new situations, and responsible.</li> <li>-The manager Should be fast at planning, should be able to organize and delegate work, Motivated</li> <li>- The managers should have critical thinking, communication skills, decision making methods and techniques, teamwork skills.</li> <li>The manager should control the performance, and collaborate with others.</li> </ul>	<ul style="list-style-type: none"> <li>-The lack of communication and understanding between committees and residents is demonstrated by the committees' decision to rent the common buildings without the residents' agreement.</li> <li>- A common trait among managers is their unwillingness to take responsibility for any harm that occurs inside the common outdoor space.</li> <li>- Committees don't accept accountability for meeting residents' needs; instead, they abuse their position to extract money by making the inhabitants make foolish decisions.</li> </ul>	<ul style="list-style-type: none"> <li>-People in the community have a custom of choosing their own committee members so that they are able to communicate with them more readily.</li> <li>-The managers welcoming demeanor and assured presentation of the area demonstrate their belief in the enjoyment of its residents via their services.</li> <li>- The majority of responders express satisfaction with the leadership they get, and some of them even provide suggestions for how to behave better personally.</li> </ul>

Source: Field work by the Author

## **FINDINGS, DISCUSSION AND RECOMMENDATION**

### **Introduction**

The analysis of the context and each case has separately delivered some findings and the findings are described in this chapter in relation to addressing the research questions which mostly focuses on the policies and regulations that govern shared outdoor space of condominium housing, how shared outdoor spaces managed in condominiums and Who owns what and who has what kind of right on which shared space?, Who manages them?, the challenges on management of shared outdoor spaces in condominium housing and finally the effect of the existing policies and management of shared outdoor spaces on social ties of residents. The Equivalent statements for the research questions are as follows:

- Management of shared outdoor space
- Challenges on managements of shared outdoor spaces in condominium housing
- The influence of existing policies and management systems of shared outdoor spaces on the strength and quality of social ties among condominium residents, thereby uncovering potential pathways for fostering stronger community connections.

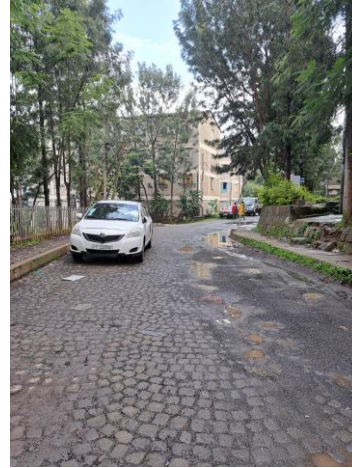
### **Management of shared outdoor spaces**

As explained, the written regulations on shared outdoor spaces of the condominium cover the management of shared spaces within the two designated sites and the authority of the management body, the type of power, and the accountable body. There are specific rules for managing shared outdoor areas that are written on the internal regulations of the associations, and those rules may only be executed by the association's elected management body. Despite the fact that there are particular rules for using shared outdoor spaces, none of the shared outdoor areas at the LAFTO DESET condominium are administered in accordance with those laws. The collected data shows that the majority of residents in Lafto deset condominium are dissatisfied with the shared outdoor area management system. Not only were they dissatisfied, but they were also complaining about the entire management system. Residents who use the playground and parking are the ones who are most dissatisfied with the management system, and they were attempting to explain the problems they encountered during their stay inside the compound.

---

According to the gathered data, 93.3% of the society is dissatisfied with the committees that led and oversaw the management system of shared outdoor areas. The following are the shared outdoor spaces that are experiencing management issues.

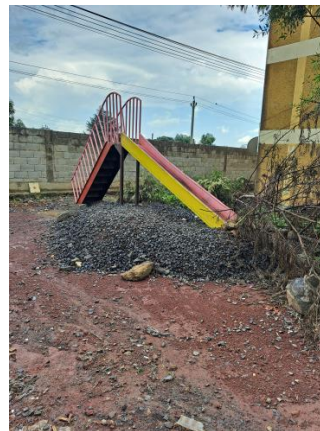
**Parking:** there are leftover spaces which are firstly designated for parking purpose and the roads are the one which are giving services as a parking.



*Fig 1. Left: space provided for parking purpose and Right: current parking space*

*Source: Field work by the Author*

**Play ground:** There were three playgrounds in the compound, but only one was operational during the research period. Those two playgrounds have been closed since 2010 E.C, and the management body has said that they are attempting to rehabilitate them.



*Fig 2. The current state of the playground*

*Source: Field work of the Author*

**Roads:** While the road provides parking, the inhabitants, particularly the youngsters of the LAFTO DESET condominium, are experiencing distress and car accidents.

---

**Open spaces:** Traditional foods are prepared in the open areas of the neighborhood during holidays and mourning since the common facility designed for this purpose is rented by the compound's management body. These factors contribute to the area to being sick, dirty, and the worst place to live.

**Slaughtering area:** Despite the fact that slaughtering rooms are established in communal buildings for the purpose of slaughtering, none of the common buildings in the Lafto Deset condominium are utilized for slaughtering since they are rented; instead, open space and roads are used for slaughtering by the community. As compared to the Lafto Deset condominium site, data from Ayat Arenguadew Mender demonstrates that the inhabitants of the complex are quite satisfied with the management system of shared outdoor spaces so the living condition and social interaction within the AYAT neighborhood is far superior to LAFTO DESET condominium site.

The following table summarizes the findings of the study on residents' satisfaction with the management system of shared outdoor areas at both sites:

Table 2. Comparison of satisfaction level on the management system across the two cases

Satisfaction level	LAFTO DESET		AYAT ARENGUADEW MENDER	
	Frequency	Percentage	Frequency	Percentage
Poor	28	93.3	0	0
Fair	2	6.7	8	26.7
Good	0	0	22	73.3
Total	30	100.0	30	100

Source: Field work by the Author

## By laws

Laws and regulations about shared outdoor places are evident from the aforementioned sample example, specifically regarding the management bodies' responsibilities in overseeing the condominium community, particularly shared outdoor areas.

The Chinese rules and regulations provide more detailed information on assigning duty for the management bodies, for those who lead by the rules and regulations, and for the usage of such shared outdoor places, based on the examples from both countries. All three nations offer sufficient regulations for their condominium complexes, especially with regard to their shared outdoor areas, with the exception of providing more specific information on assigning responsibilities for the

management bodies and those who utilize the common outdoor areas. Although they attempted to mention in general, both our nation and Rwanda must include some particular roles for the management bodies; nonetheless, it would be more useful if they provided more specifics. Ethiopian internal regulations, drafted by associations, allocate responsibilities and regulations to management bodies based on their respective roles. However, the main issue is that these bodies refuse to implement the written documents in practice and do not even follow the laws as written. That explains why residents of the Lafto Deset condominium experience these issues.

### **Challenges on managements of shared outdoor spaces in condominium housing**

One of the study's goals is to identify the challenges in managing shared outdoor spaces in condominium housing. As previously stated, the management system of the site has failed because the living environment of the compound is unsafe, and residents are dissatisfied with the entire management system. The association's weak management structure is to blame for this hazardous and unsatisfying environment.

#### **The major challenges on the management system of the selected site are listed as follows:**

**Corruption:** According to the data acquired from residents, one of the biggest causes of poor management is corrupted members of management bodies who utilize the money received from residents for personal gain.

**Waste of resource:** There are numerous resources available for the maintenance of shared outdoor areas such as playgrounds, roads, and new projects, but due to the association's bad management system, those resources are being wasted.

**Budget constraint:** The association's only source of income is the monthly money collected from residents, rental money from common buildings, income from parking lots, and other tiny fines and payments that cannot afford to provide further services or restore the broken shared areas.

**Lack of commitment:** Some members of the management bodies are unwilling and uncommitted to properly lead the association; instead, they generally abscond from their offices and waste their time dealing with personal concerns; their poor guest handling is also observed during study time.

**Lack of communication:** Despite the fact that the management bodies and members meet regularly to discuss current concerns and solutions, there is no actual contact between the management bodies

---

and members. In addition, there is a lack of effective administration to promote community activities and communicate with government agencies.

**Inappropriate design:** The design and placement of some of the neighborhood's shared outdoor spaces are tough to use and maintain.

### **The effect of the existing policies and management of shared outdoor spaces on social ties of residents**

Within a condominium community, the only area for residents to connect is in communal outdoor spaces. In addition to providing a clean and secure environment, appropriately managing public outdoor areas fosters neighborhood social bonds. The shared outdoor area management system is quite important. The degree of social interaction among residents at both study locations reflects the effectiveness of respective management systems. There is significant social engagement among inhabitants when there is a competent management system of shared outdoor space, and there is weak social interaction when there is a poor management system. The data acquired from the Lafto Deset condominium site indicates that the community has poor social contact as a result of the existing bad management system of shared outdoor areas. In contrast, data obtained from the Ayat Arenguadew mender site suggests a strong link between inhabitants as a result of the neighborhood's effective management system on shared outdoor space. Furthermore, the management bodies of Ayat Arenguadew mender condominium provide services on communal outdoor places such as vegetable gardens, animal shelters, GYMs, and mill homes, which assist the community to create social connection. Having a nice location to talk, play, and amuse with others necessitates well-managed outdoor spaces. It also has an impact on the community's health.

The contrast between the effects of excellent and bad shared outdoor space management on both locations is seen below.

Table 3. Comparison of level of social interaction across the two cases

Level of social interaction	LAFTO DESET		AYAT ARENGUADEW MENDER	
	Frequency	Percentage	Frequency	Percentage
Weak	18	60	7	23.3
Strong	12	40	23	76.7
Total	30	100.0	30	100

*Source: Field work of the Author*

## **Recommendation**

Based on the data gathered and interpretation, the researcher made the following recommendations to the government body and on the study sites.

### **In terms of policies and regulations**

There should be institutional structures for associations with specified norms and regulations that are especially intended for shared outdoor spaces, and employed administrators to successfully oversee and manage them. The process of establishing rules and regulations should include the participation of the association's committees, condominium neighborhood inhabitants, and the government body in order to fully understand the needs and difficulties of condominium neighborhood residents. There should be a regulation to penalize members of the management body who use their power to wrongfully lead the condominium neighborhood association, who use the money received from the members of the association for their own personal gain, and who are not devoted to their position.

### **In terms of the management body**

The election of the condominium association's management body should be devoid of bias. Management bodies should be evaluated on a regular basis based on their amount of function and responsibility for shared outdoor space. There should be a responsible person or entity between the association and the agencies that enable, communicate, and report on the neighborhood's monthly condition. There should be frequent training for committees on how to manage shared outdoor space, how to be committed, how to utilize money efficiently, and how to use resources wisely.

The management body should provide additional option of money making way for the maintenance and construction of shared outdoor spaces. The Lafto Deset condominium, like the second study site, should include additional facilities such as a mill house, GYM, Sport area, Study area, garden for edible plants, and clean greeneries for the inhabitants of the community.

### **In terms of design**

According to the findings, certain shared outdoor places are challenging to maintain because of their location. The design team should examine the area in terms of the inhabitant's comfort and safety. A design team should be formed to address the existing design issues of shared outdoor space in the community. Greeneries and parks, as well as edible gardens, should be incorporated into the

---

neighborhood plan. There should be an Accountable entity for residents to report any issues with the use of the allocated shared outdoor areas. The design should also examine how to improve the community's social interaction. As a result, individuals of various ages may utilize the public outdoor space. Because there are elderly and disabled residents in the condominium, the design should involve them in the utilization of shared outdoor areas. They can give furnishings within the greeneries as well as a ramp in certain messy places.

## **ACKNOWLEDGEMENT**

We would like to express our gratitude to the respondents for their willingness to participate in this research as well as to everyone who assisted in various ways during the data collection process

## **CONFLICT OF INTERESTS**

There is no conflict of interest with any financial, personal, or other relationships with other people or organizations related to the material discussed in the article.

## **REFERENCE**

- Belay File (2017), Housing development program, Ethiopia, Addis Ababa*
- Robert.k.Yin (2003). Case study Research\_Design and Methods. Sage Publications international educational and professional Publisher.California*
- UN HABITAT (2011), Condominium Housing in Ethiopia: The Integrated Housing Program, United Nations human settlement Programme: Nairobi, Kenya*
- Victoria Ateca & Esperanza vera- Toscano(2008). The determinants of housing satisfaction: relevance of social interaction (unpublished document).*
- Zaidah Zainal (2007). Case study as a research method.Faculty of Management and human ResourceDevelopment University Technology Malaysi.*
-