



Communal Buildings of Condominium Housing

The case of Gofa Mebrat Haile condominium, Addis Abeba

Chair of Housing and Sustainable Development (MSc.)

**In partial fulfilment of Master of Science in Housing and Sustainable
Development**

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June 2015

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The case of Gofa Mebrat Haile condominium, Addis Abeba

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DECLARATION

I the undersigned, declare that this thesis is my original work and has not been presented for a degree in any other university and that all sources of reference materials used for this thesis have been fully acknowledged.

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Abstract

Since 2004/5 the IHDP (Integrated housing development programme) has been implemented by Ethiopian government to alleviate the severe housing problem in urban areas. The programme led to the development of condominium houses in Addis Abeba. The condominiums especially those built previously were G+4 walk up blocks with exterior stairs and circulation. These blocks came in contrast to the previous mud and single storey houses where majority of low and middle income group have lived with high attachment to ground level and traditional way of life. In order to make residents adapt to the new way of life and perform extensive household activities communal buildings have been introduced but these blocks had many problems around the management and use for communal purpose.

In general the objective of this thesis was to investigate how the provision of communal buildings responded to the space needed for extensive traditional activities such as, slaughtering, hand washing clothes, drying clothes, spice drying etc. In order to achieve objectives of the study first the use and function of communal buildings has been studied. Second the thesis tries to investigate to what extent they are being used. Finally how and where residents perform extensive household activities have been studied.

In order to answer these questions three case study communal buildings were selected from *Gofa Mebrat Haile* condominium. The data have been collected from interviews with 45 residents. Furthermore interview with condominium association officials and gatekeepers has been conducted.

The finding indicates that even though communal buildings are not given legally to residents still the buildings have been used for different functions such as storage, office and shop. The condominium residents rarely use communal buildings in non-formal arrangements with the association but 75% of respondents had never used them at all. Furthermore the finding indicates communal buildings are not used for their intended purpose fully. Majority of the communal blocks are abandoned without clear responsible body which led to their current bad sanitary condition. In contrast to communal buildings residents use corridors and open spaces for extensive household activity which supposed to happen on communal buildings. Generally lack of strong administration and facility management has been also found.

In order to achieve better living condition in condominium housing, communal buildings have to be maintained and used fully to betterment of the community. Increasing public participation through different mechanism and finally integrating communal facilities in condominium blocks based on the need and residents way of life should be considered in the design of condominium housings.

Key words: *Condominium Housing, Communal buildings*

Acknowledgement

First, I would like to express my sincere gratitude for my thesis advisor Dr. Elias Yitbarek for providing me with genuine and stimulating professional advice from the beginning to the final development of the study.

I am also especially indebted to those people who sacrificed a great length of their valuable time in providing me with the necessary data through interview and discussions. Finally would like to thank everyone who is involved on the research directly or indirectly especially my families and friends.

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Local terms :

<i>Gofa Mebrat Haile :</i>	The case study condominium and its name is derived from big compound of Ethiopian electric corporation adjacent to the condominium.
<i>Idir/ Edir :</i>	Local traditional social organization involved in mutual aid in times of hardship.
<i>Injera/ Enjera :</i>	Traditional flat bread eaten with <i>Wet</i>
<i>Kebele :</i>	The smallest administrative unit in Ethiopia
<i>Wet :</i>	Stew which is eaten with <i>injera</i>
<i>Wereda :</i>	Administrative unit above <i>Keble</i> and below sub city
<i>Yeshemacoche maheber souk:</i>	Public shop which sells goods at affordable price

PART I: INTRODUCTION

1.1 Introduction

Ethiopia is currently undergoing big transformation in urbanization and urban development. Even though the level of urbanization is low the urban population of Ethiopia is growing more than four percent annually (CSA 2007). Since urbanization is one of the inevitable outcome of the globalized world. Ethiopia is urbanizing fast even the growth is projected to be higher in the future. Urbanization comes with the cost of developing infrastructure, housing and other public facilities. These create big pressure on developing countries with limited resource and capital to cope with the rapid urbanization. This eventually led to the development of slums and poorly developed neighbourhoods.

Addis Abeba is the biggest and the capital city of Ethiopia with population more than 3 million. Addis Abeba is currently in big transformation every day due to redevelopment and expansion. Slums and old neighbourhoods in the city centre are being cleared out to make way for new development.

Condominium housings are currently widely used as housing solutions for middle and low income society. The condominiums come as new trend compared with the old housing. This new developments can affect society life in both negative and positive way. Since getting new condominium house solve the housing problem. In the other end eviction and relocation to new condominiums constructed in another places especially in the out skirts are the greatest threat to most low income and slum dwellers. The main reason behind is that relocation means an end to their former settlements, which includes cheap affordable housing at a convenient location and a loss of an interdependent community life style.

The IHDP(integrated housing development programme) is proven to be working in solving Addis Ababa's housing problem in terms of housing quantity produced and thousands of jobs created. Its modernist nature however, has some draw backs on the traditional way of life of the residents. The IHDP by some scholars is assumed to be failed in terms of meeting the social and other urban objectives of the city (Alazar E., Tigran H. 2011 and Angelil & Hebel,2009). If we look at the condominium housing by eliminating communal buildings it is just a stock of housing built without any consideration to the social and cultural life of many low and middle income Ethiopians. Architects and planners try to solve this problem by simply putting communal buildings unevenly thorough out condominium neighbourhoods rather than critical look in to majority low and middle income group way of life and space usage. Due to cultural trends most Ethiopians tend to consume unprocessed products rather than using semi processed products. Such as slaughtering Chicken or goats rather than buy meat at the super market, preparing '*Enjera*' or bread from cereal rather than buying baked foods (Tobias Kurtz 2009). Some people may prefer buying semi processed food at the

super market but when the size of family is big it's usually costly to buy those things at the super market.

Majority of low and middle income groups have been living in single story houses with the most affordable and traditional way of life. For instance using charcoal and wood as energy source instead of using electricity as energy source, hand washing and drying clothes instead of using laundry machines is the most preferable way to them. To perform activities such as washing clothes and preparing extensive foods bigger space is needed, which is not available in condominium units. This create misalignment between the space provided and the existing situation around condominium housing.

Today in many condominium neighbourhoods extensive household activities usually happens around the condominium block or in the communal buildings. Generally communal buildings were provided to solve this problem and let the residence of condominium houses perform space extensive household activity such as, slaughtering goats, washing clothes, cooking extensive meals and etc, in which the unit cannot incorporate . Currently in many condominium sites communal buildings are not serving communities to their full potential. The motivation for this research came from practical problems in which the researcher experienced through personal experience and observation living in condominiums. The researcher find this problem interesting to know the difficulties behind and understand current trend. The main aim of this research revolves around on how residents use communal building how they are performing space extensive household activity. Issues around communal administration and condominium association has been also discussed in this research.

1.2 Objective of the study

- ✓ To understand how communal buildings are being used in condominium housings and to examine the reason why inhabitant use communal buildings.
- ✓ To study how resident perform space extensive household activity and to examine the challenge behind.
- ✓ To investigate how much space for extensive household activities is integrated or neglected in communal buildings and condominium housings.
- ✓ To identify the weakness and strength of existing communal buildings so as to understand the current practice.
- ✓ To investigate the role of condominium units owners association and the public in managing communal buildings.

1.3 Scope and Limitation of the Research

Scope

The research has been conducted in Addis Abeba where major developments of condominium housing is taking place. Since *Gofa Mebrat Haile* condominium is one of the biggest condominium site in Addis Abeba it has been selected as the general case study area. Future three sub-case study communal buildings had been selected for detail analysis. The focus of this research revolves mainly around the issue of communal buildings in condominium housing. Even though the main focus is on communal buildings it also discusses related issues such as: the role of condominium association in condominium neighbourhood, socio-spatial relationship with the residents and how residents perform their household activity outside their house. Since communal buildings are constructed for the purpose of performing extensive household activity, how resident perform household activity outside the unit has been also studied.

Limitation

The issue of communal buildings include many different aspect of the pre-construction and post-construction issue of the buildings. The pre-construction includes the design and planning issues around condominiums and communal buildings. The post-construction issues encompass form the management up to participation and responsibility of users. In order to understand every aspect of the problem in detail both the above issues need be studied. However the focus of the research is mainly on the spatial aspect and on how inhabitant perform their extensive household activity, but administrative issues which have direct relation to the main them of the research has been included. The researcher recommends other researchers' to study further the administrative and management issue around communal buildings. This could be valuable input when put together with the spatial aspect to understand the whole setting.

In order to get variety of data on how communal buildings work it's better to take different case study in Addis Abeba. Due to constraint of time and resource, the data collected for this study was limited to *Gofa Mebrat Haile* condominium . The research rather focus on every aspect of the selected case study area. Unavailability of organized written document was also major limitation the researcher faced, from the condominium association level to the main housing development office. In addition to this the willingness of some informants were also problem during data collection stage.

1.4 Research questions:

1. How do residents use communal buildings in condominium Housing?

1.1 For what purpose residents use communal buildings?

1.2 Why do residents use communal buildings?

2. To what extent communal buildings are being used for their intended purpose?

2.1 Are the communal buildings fit to be used for their intended purpose at their current state?

2.2 What is their current function and their intended function?

2.3 What are the constraints behind the effective use of communal buildings?

3. How do residents carry out their extensive household activities other than communal buildings which supposed to be carried out at communal buildings?

3.1 What kinds of household activities happen in which the condominium units cannot incorporate?

3.2 Where do household activities happen in which the units cannot incorporate other than communal buildings?

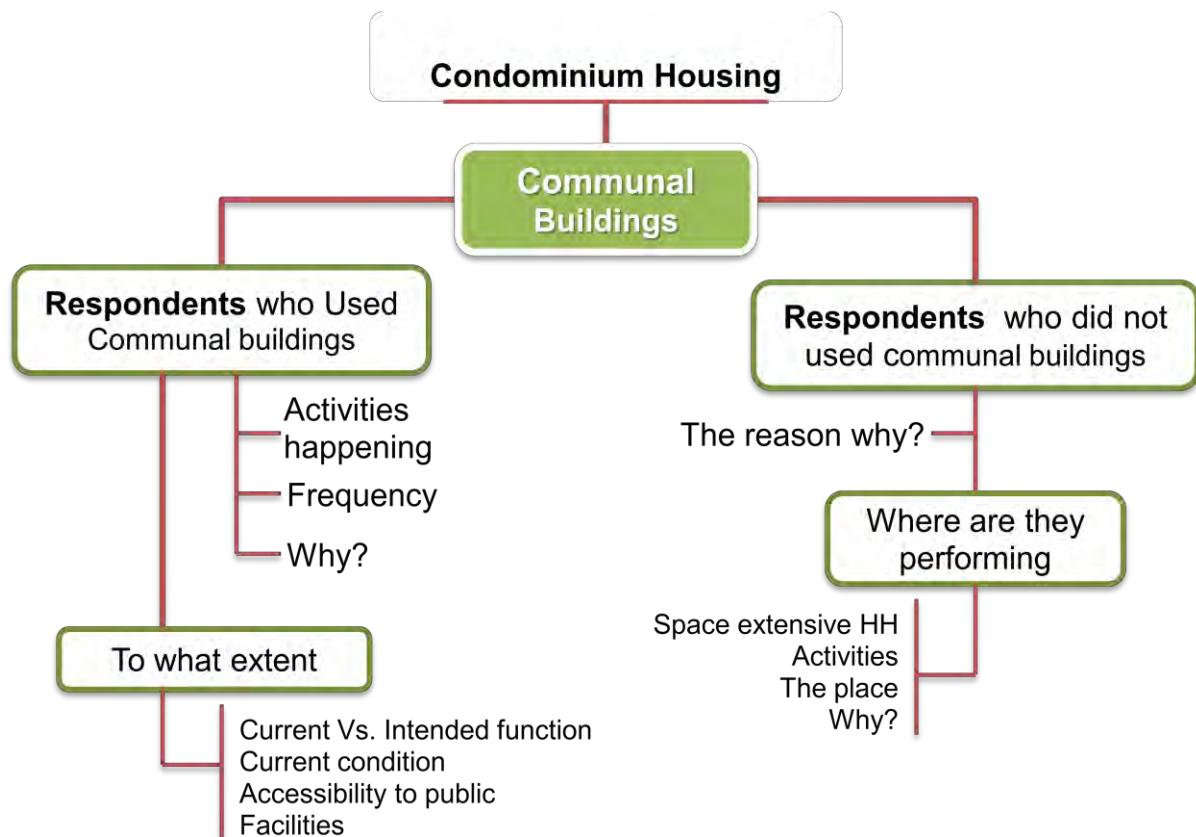


Figure 1.1 Conceptualization of the thesis

1.5 Research Methodology

The research will be conducted in qualitative research techniques by taking sample case study. Questionnaires are used to collect surveying data in addition to other data collection methods. Other than data's from officials and residents, semi structured interview with block

representative was conducted. Samples have been taken randomly because any subject in the population has an equal probability of being in the sample due to its similarity in physical conditions and housing typologies. In order to achieve the objective of the study and answer the research questions three case study communal buildings have been selected from Gofa Mebrat Haile condominium (see fig. 1.2).



1. Case study-1 around Block 43
2. Case study-2 around Block 24
3. Case study-3 around Block 163

Figure 1.2: Location of selected case study.

The fieldwork is based on the data collected through questionnaires, semi structured interviews and observation in the study area. The data were collected from three different communal buildings found in different parts of the compound (see fig 1.2). The households were chosen randomly both from blocks near and far from the communal buildings to avoid biases and include everyone in the quota.

First, a pilot test has been done to find the use and accessibility of communal buildings and also to check the reliability of the questionnaire. During the pilot test it's found out that there are total number of 5580 households living in 180 blocks. The household number differs in different blocks from 30 - 40 in one block. To address many parts of the condominium samples have been taken from 2 up to maximum 5 interviews from one block.

To get more reliable results it is necessary to conduct more interviews. However, due to lack of time, the target of this study was to interview approximately 45 households (see table 1.1 and appendix- 3).

No.	Communal building selected	Sample blocks taken	No. of household interviewed
1	Around Block 43/38	3	15
2	Around Block 24	3	15

3	Around Block 139	3	15
Total	3 Cases	9	45

Table .1: Number of interviewed households from all three case studies

Since the study is about communal buildings and their relationship with residents, households with close proximity to communal buildings are given priority. This is mainly due to uneven number of communal buildings throughout the neighbourhood. Residents far from communal buildings are also included in the data collection.

During field work the interviewer filled up the questionnaires while visiting the condominium units. Open-ended questioners were asked to the family members and especially to women to get more reliable data. Because women are the one who mostly involved in the household issues than men.(see table .2) Beside questioners other informal questions regarding way of life and interaction with different spaces were asked in a friendly conversation.

Sex of interviewee	No.	Percentage
Female	30	67%
Male	15	33%
Total	45	100%

Table .2: sex of interviewees

The respondents have been chosen randomly from different sources in order to get more multi layered and stratified data. Table below shows different layers of the interviewed informants from all three cases.(see table .3)

Source of data	No.
Resident	45
Association officials	4
Block representative	3
Gate keeper	2
Slaughtering person	1
Total	55

Table .3: Interviewed personnel

In order to get more rich and reliable data majority of selected respondents have lived in the area for longer time about 62.5% lived in the area for more than two year. This is because they are the one who knows the neighbourhood well and faced with the living condition for many years in relation to the new ones (see table .4).

Respondent of stay	Length	Frequency	Percentage
0-2 year		17	38%
2-4		8	18%
Above 5 year		20	44%
Total		45	100%

Table .4: Length of stay in the condominium

The design of the questioner has been made in a manner that it collects both general and specific data. In the questionnaire there are both open-ended descriptive and multiple choice ones. The questioners are divided in two questioners for residents and key informants or officials. The questioners for residents are divided in to two parts (see Appendix 1).The first part consist of general information about the households and the second part discusses more on the how and why question related with communal buildings. Finally data's both from interview and observations have been organized and analyzed.

In general the following data collection methods have been used to carry out the research:

- Interviews
- Questionnaire
- Mapping and Sketches
- Photography
- Direct observation

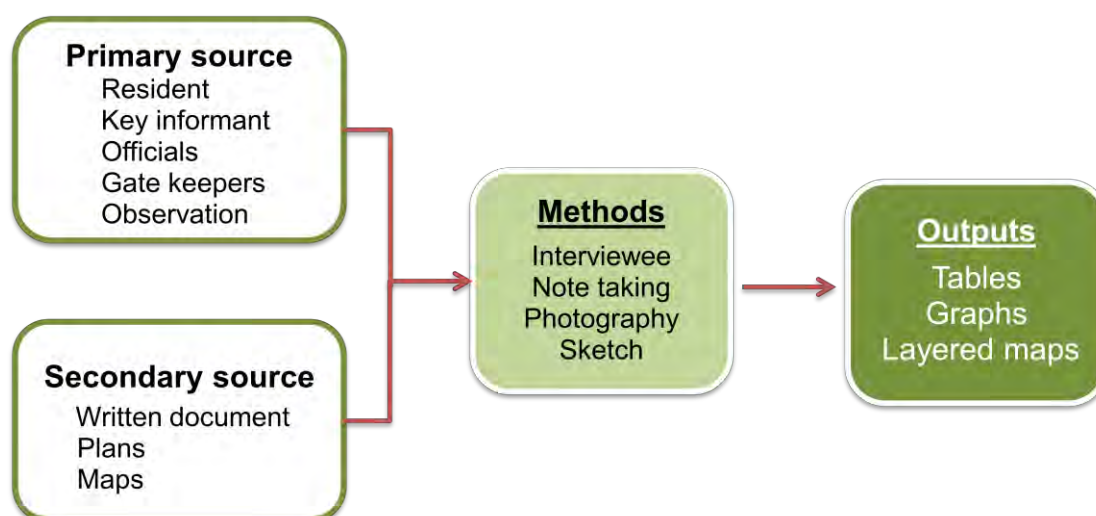


Figure 1: Illustration of data collection, methods and outputs.

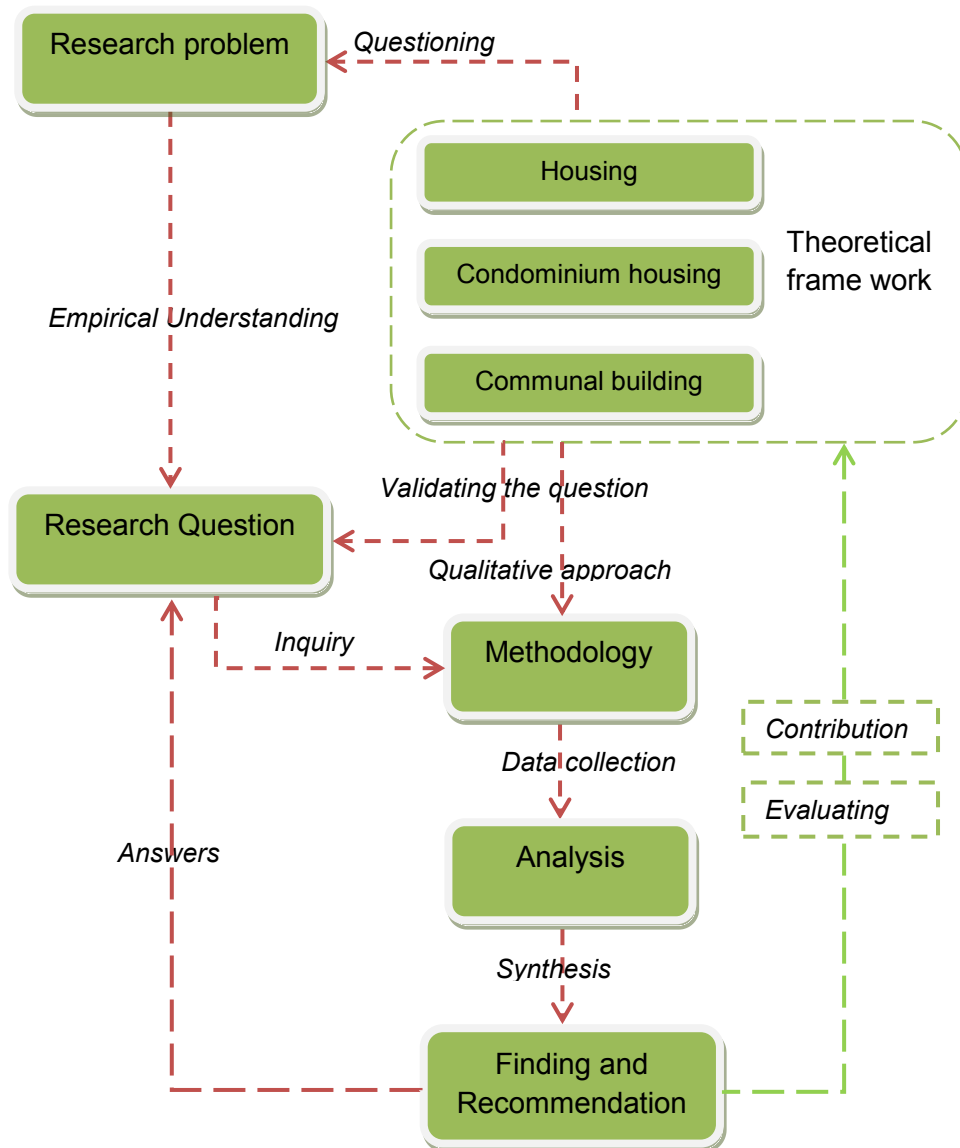


Figure 1.4: Structure of the research

PART III: LITERATURE REVIEW

3.1 Introduction

This literature review explores some of the key issues related to housing in general, condominium housing, communal buildings and communal service. Issues around the difference between communal buildings, shared services and common spaces in condominium housing have been discussed.

Issues discussed in this literature review are not only concerned with communal buildings only but also on the context within which they operate, the overall approach may take the components that might be included in them. It also reviews literature relating to built environments, culture, tradition and life style and the effect of one on the other in the context of condominium housing.

3.2 Operational Definitions and meanings

Housing: Both the stock of dwelling units (a noun) and the process by which that stock is maintained. It is also entirely reasonable to speak about human and social values of housing action and housing processes. (Turner, 1976, p60)

Condominium Housing: *"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."* (UN-Habitat, 2011, p.14)

Communal Building: Communal buildings in this literature refers to the two storey (G+1) or one storey (G+0) buildings built for purpose of performing activities the condo flats don't incorporate especially for washing clothes, cooking extensive meals, and for other communal activity (UN-Habitat, 2011).

3.3 Addis Abeba General Back Ground

Addis Ababa is capital and also the biggest city of Ethiopia, was founded at the end of 19th century by Emperor Menelik II and named by empress Ttayitu Bitul. The name "Addis Abeba" means new flower. There were three main factors that conducted the city to stay as the capital city of Ethiopia (since many cities have been capital cities along the history of Ethiopia): the introduction of eucalyptus (a tree that grows very fast and provides a lot of wood for energy and cooking), the proclamation for legalizing private ownership of urban land in 1907 and the completion, mainly by the French, of the Addis Ababa – Djibouti railway in 1917. Addis Ababa is located almost in the centre of Ethiopia and it is in an altitude of about 2,400 metres above sea level. It had a built up area of 290 square km in 2004 and has an estimated population of 3 million (UN-Habitat, 2007). It is the seat of the United Nations Economic Commission for Africa (UNECA) and the African Union (AU), what makes call

Addis Ababa as the capital of Africa. Addis Ababa is the capital city of the country since 1886. Currently the city continues to attract 90.000 to 120.000 new residents every year, mainly due to net immigration (UN-Habitat, 2007).

As an indigenous urban settlement, Addis Ababa initially expanded without any formal planning or control. The earliest settlements developed haphazardly around the king's palace and the camps ('Sefers') of his generals ('Rases') and other dignitaries. It appears that just like the king, the generals preferred to live surrounded by the ranks and of their subordinates (Bernard L. 1970, Elias Y. 2008)

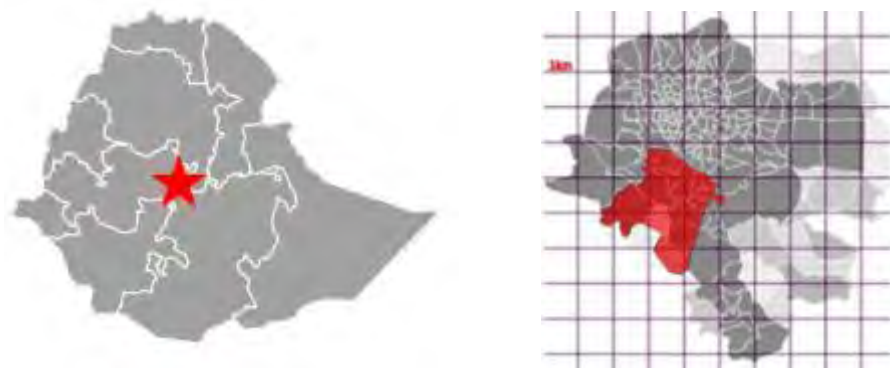


Figure 3.1 Location map of Addis Abeba.

Ethiopia's urban centres are characterised by a poorly developed economic base, high levels of unemployment and incidence of poverty and slum habitation. Urban unemployment is estimated to be 16.7% - and up to 28.6% in Addis Ababa (CSA 2007). Available data also indicate that nearly 40% of the nation's urban dwellers live below the poverty line. An indicator of the magnitude of urban poverty is the proportion of the urban population that lives in slums – about 70% of the urban population is estimated to live in slum areas (ibid). It should be noted however that Ethiopian cities are not characterized by segregated settlement pattern and slums form an integral part of the city. Achieving Millennium Development Goal 7, Target 11 – improving the quality of lives of slum dwellers is a major challenge in Ethiopia. Studies made in the last five years conclude that is currently a housing shortage of between 900,000-1,000,000 in urban centres, and only 30% of the existing urban housing stock is in good or fair condition (ibid).

3.4 Housing

Housing (shelter) is permanent shelter for human habitation. It includes the whole system and space used by the family's every day, including living spaces, courtyards for cooking sleeping, play ground and etc, used by whole community (Correa, 1999), see Fig. 3.2



Figure 3.2: Hierarchy of space in housing. (Correa, 1999)

Because shelter is necessary to everyone, the problem of providing adequate housing has long been a concern, not only of individuals but of governments as well. Thus, the history of housing is inseparable from the social, economic, and political development of humankind. Housing is one of the most basic and oldest developments of mankind. Because of its necessity and importance, it has evolved tremendously over time. Due to rural – urban migration, mass housing has become an inevitable part in the development of cities. Most significant of the development of the idea of mass housing are:

(1) The industrial Revolution, which brought about a massive movement of people from rural to urban areas in search of jobs to earn a wage or salary, and

(2) The World War, after which a large number of houses were to be built quickly and economically to shelter immigrants in search of shelter, and also to make up for the destroyed or damaged housing developments in the affected areas. Mass housing during these periods became an important part of urban development.

These mass housing developments which came as a solution to shelter an ever growing population unfortunately came along with physical, socio – cultural and economic problems. While the above reasons are true for many developed countries, but for most developing countries, such as Ethiopia the need for mass housing is mainly due to migration to urban areas and rapid urbanization. In the previous time the migration is mainly in search of jobs other than in the industry sector, but in current case the industry sector has also some contribution to urban employment and need for housing in urban areas.

The incompatibility of modernist housing solutions with the lifestyles and aspirations of the poor has been a persistent concern among architects and planners for many years. While direct government provision of low-cost housing does exist in most countries in the Global

South, these programmes generally fail to meet the social and cultural needs of the poor. For example, most policies and programmes are insensitive to the diverse needs of target groups, which are often too broadly defined (Turner, 1980; Hamdi, 1991). Despite the volume of studies and arguments made against the modernist housing model, the approach continues to persist across housing practices and policies. This results in a continuation of the misalignment between the physical form of the housing and the lifestyles of major segments of the inhabitants. The relationship between space and 'social morphology' is extensively discussed in Oliver's *Encyclopaedia of Vernacular Architecture of the World* (Oliver, 1999). New social structures often demand new spaces, and adaptation in order to live in harmony with the new way of life (Castells, 1996), and in a similar manner, new spaces may facilitate or discourage existing social relations or may initiate the development of new ones. Nevertheless, politicians and planners often do not take lifestyles into consideration, or assume that lifestyles will adapt to the built environment. However, studies have shown that behaviour does not always change easily, or that, even when it does change, quality of life is not improved (Holston, 1989).

3.5 Condominium (Mass) Housing in Ethiopian context

Definition;

The term "condominium" is variously used to refer to the underlying concept, the building, or the individual unit. In a condominium, each owner holds ownership title to his/her unit directly.

"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." (UN-Habitat, 2011, p.14)

The idea of condominium housing is a new phenomenon in Ethiopia. It is just as old as the IHDP. It emerged as a strategic response to rapid urban population growth, high prevalence of urban poverty, and urban unemployment in major Ethiopian cities; because only 30% of the urban house stock was regarded to be in fair condition; and the housing shortage is being estimated to be between 900,000 and 1,000,000 (MWUD, 2006, IHDP 2008). The condominium housing project thus aims at meeting the elements of Millennium Goal 7 on Environmental Sustainability, target 11 which seeks to achieve a significant "improvement in the lives of at least 100 million slum dwellers" In Addis Ababa city more than 70% of the population lives in slums and the houses are made predominantly from mud and straw (IHDP 2008). Table 3.2 below shows transferred condominium houses in Addis Abeba.

The condominium houses in Ethiopia are mainly G+4 blocks. Each block contains from 30 to 45 housing units which differ based on block typologies and Variety of units (see table 3.1). Every housing unit contains sleeping area and bathroom and kitchen or (cooking space for studios) .Most of the blocks facing the main roads has commercial units at the ground floor. Every unit owners own undivided fractional shares in the common areas of his or her neighbourhood as tenants in common. Management and maintenance of these common facilities are performed by an owners' association, which may be incorporated or unincorporated.

Unit type	Floor Area(m ²)	Percentage in each block
Studio	<20	20%
1- Bed	20-30	40%
2- Bed	30-45	20%
3- Bed	>50	20%

Table 3.1: Breakdown of unit typologies in each condominium block (source: *UN-Habitat, 2011*)

3.6 Integrated Housing Development Programme IHDP

Since 2005, Ethiopia has been implementing an ambitious government led low and middle-income housing programme. The programme involves a radical shift from the single-storey detached housing typology (government owned rental housing) to a new condominium typology (private homeownership).

3.6.1 The Major Objectives of the IHDP

- a) Provide adequate housing both in terms of quality and quantity;
- b) Reduce slum dwelling;
- c) Reduce urban unemployment and poverty;
- d) Enhance and build the capacity of the domestic construction industry:
 - Enhancing the capacity of the domestic construction industry and thereby, continuously improving construction designs to ensure affordability, social mix and mixed use in settlement planning and development;
 - Capacity building for improvement of building materials, including improved use of local materials, development and use of alternative cost-effective construction materials and building technologies and promotion of production capacity of domestic firms.
- e) Promote urban areas as engines of economic growth by increasing their contribution to GDP growth and strengthening urban-rural linkages;
- f) Promote development of the private sector.

3.6.2 The Major Goals of the IHDP

Thus the major Goals set by the IHDP for the plan period 2006-2010 are:

- a) Construct 400 thousand housing units (100,000 Per annum)
- b) Create 200 thousand Jobs and thereby contribute significantly to the national target of reducing urban unemployment by half.
- c) Promote the development of 10,000 small enterprises on a sustainable basis in the construction industry.
- d) Deliver 6000 hectares of serviced land per annum for Housing & other investments;
- e) Enhance and building the capacity of contractors, consultants, engineers and foremen as well as suppliers of construction materials:
- f) Support private sector to produce 125,000 Per annum through provision of land and infrastructure and conducive legal and policy framework.

No	Rounds/ year	1st round	2nd round	3rd round	4th round	5th round	6th round	7th round	8th round	9th round	Total
.	Housing Typologies	2005	2006	2008	2009	2009	2010	2011	2012	2012	
1	Studio	4118	2592	2965	2799	3088	1255	2952	1326	2570	23393
2	1Bed Room	5677	5070	3679	6755	4719	4467	3594	4665	4423	43049
3	2Bed Room	6548	6263	3626	4108	2028	2747	433	2952	2330	31035
4	3Bed Room	2645	1106	735	1372	934	1531	321	1155	934	10733
Total		18988	15031	11005	15034	10769	10000	7300	10098	10257	108,482

Table 3.2: Condominium housings transferred in Addis Abeba source AAHDPO.

3.7 Culture, Tradition, and Condominium Housing

3.7.1. Culture

One can say that Culture is mainly about a group of people who share a set of values, beliefs, a world view and symbol system which are learned and transmitted. An important interpretation of culture applicable to the sustainable development perspective is that "culture is the means by which man adapts to his environment and secures things that he needs for his survival" (Schusky and Culbert, 1973:45). Therefore, the culture of a place is also inseparable from the natural environment and it certainly has a role to play in the pursuit of environmental sustainability of a place. Culture is a broad concept and its definition as drawn from the literature on culture, cover three major dimensions (Schusky and Culbert, 1973; Thaman, 2002).

1. The first is its aesthetic and artistic dimension; This covers fine arts, music, popular culture, performing arts, and so on.

2. The second aspect refers to the cultivation of mind and spirit; It includes knowledge, belief, religion and ideologies.

3. The third dimension is the anthropological perspective; the way of life; and it pertains to the social aspect of human behaviour.

Generally culture influences the built environment that, in turn, affects individual behaviour. The organizational values are integrated into the design of the built environment and facilitate desired behaviours. When cultural changes (national, political or governmental) occur, old buildings may be adapted to new ways of living, and new buildings may be altered in form to accommodate them (Oliver, 1987, p. 10).

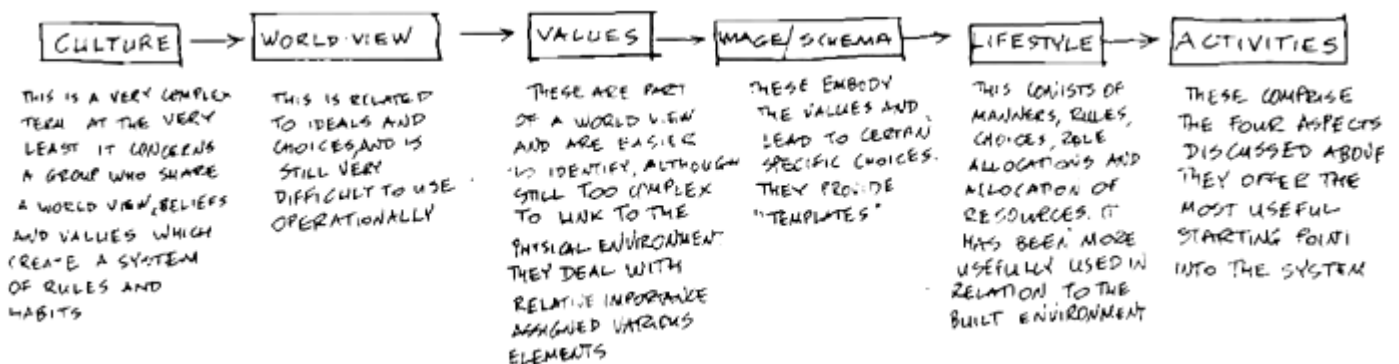


Figure 3.3: The relationship between culture and built environments, source Rapoport, 1977, P.20.

Culture, values, world view, etc. embodied in Lifestyle can help us understand more how people act in environment how they make choices around their built environments and in the cities as well (see Fig. 3.3). Rapoport propagates since 1977 (Rapoport, 1977) a definition of lifestyle that was put forward by Michelson and Reed (1970) in an unpublished paper in which lifestyle is defined as the result of choices on how to allocate resources.

Contemporary British sociologists (Chaney, 1996) share this view. Chaney (1996) considers that lifestyles are based on the way in which people use means and resources they have, rather than the means and resources themselves, and puts that this is the reason why lifestyles are seen as a distinctively modern form of status grouping. Architecture is manifestation of culture that meets the human needs to shelter and artefacts and provides close relationship with culture. As a social phenomenon, architecture is originated from culture and it affects on culture and reflects human thoughts from space and aesthetics view point.

3.7.2. Tradition

Tradition can be defined as the creative processes through which people interpret past knowledge and experiences to face the challenges and demands of the present. The word "tradition" has been derived from the Latin word 'tradere' or 'traderer', meaning to transmit or to hand-over. As in tradition we are talking about passing of belief or behaviour to the next generation; it is clear from this statement that this is to retain these beliefs and behaviours in some or the other form. It reminds of the past as the tradition is related to the things in past and thus the current generation gets the chance to re-connect with the beliefs of the past. Traditions do not remain same forever, they may change or the better term to use in this context is that they evolve.

Key Difference between culture and tradition: Tradition is the passing of beliefs or behaviours from one generation to the next generation, whereas culture reflects the characteristics that describe a society at a particular time; and the culture is mostly associated with the art forms. (Gregory Tench 2014)

3.7.3. Definition and Scope of the Built Environment

An articulated historian and English Prime Minister, Sir Winston Churchill, once express his thought like this *"We shape our buildings; there after they shape us."*

The built environment refers to human-made spaces that we live and work in. A built environment is designed with a purpose, typically to meet some optimal set of organizational, customer, and employee needs. These needs often contradict each other and complicate decision making about the built environment. The built environment is the result of design and organization, specific need put into the space. Because of the central role of design in the built environment, the designed environment may be a more useful term.

The built environment is certainly pervasive but both the term and its reach and implications are elusive, more comprehensive, and far-reaching than most of us realize, even though we live in it every day (Bartuska et al.1994). It may be helpful, then, to start simply and define the built environment by four interrelated characteristics.

First, it is extensive; it is everywhere; it provides the context for all human endeavours. More specifically, it is everything humanly created, modified, or constructed, humanly made, arranged, or maintained.

Second, it is the creation of human minds and the result of human purposes; it is intended to serve human needs, wants, and values.

Third, much of it is created to help us deal with, and to protect us from, the overall environment, to mediate or change this environment for our comfort and well-being.

Last, and often forgotten characteristic is that every component of the built environment is defined and shaped by context; each and all of the individual elements contribute either positively or negatively to the overall quality of environments both built and natural and to human-environment relationships.

3.8 Human Values as Manifested in the Built Environment

The built environment is an expression not only of human attempts to fulfil personal and societal needs and wants, but also of personal and collective values and aspirations. Human values may be more abstract than needs, but a general understanding of them can enhance our sensitivity to the attitudes people have about the built environment. Value-formed attitudes manifest themselves in the way we relate to our surroundings, the way we solve problems, and consequently are expressed in the intrinsic characteristics of culture. Human values are subjective they deal with beliefs, opinions, and attitudes. They influence the setting of priorities and are analogous to the value or the price we are willing to pay for something. In objective terms, money can serve as a measure of value, but some objects, concepts, or places may be difficult or impossible to measure in economic terms. How can the value of beauty, quality, freedom, equality, a mountain range, the ocean, or even an ecosystem be assessed objectively. Many attempts have been made to assign prices in such areas, but their value remains subjective and elusive.

3.9 The Meaning of Communal Life and Neighbourhood Identity

When people have a shared culture, that is, shared norms of behaviour and values, it generates the symbols of group identity. Each person wants to be treated as a unique and valuable individual but also have a simultaneous need to belong to something greater than him; something more than one; and feelings of something greater than self occur in the experience of community. A healthy community has a sense of where it should go, and what it might become. A positive and future oriented role image provides direction and motivation for its members (Manning, Curtis and Mc Millen, 1996).

Communal-life of neighbourhoods is important as they are changing drastically parallel to the substantial economic changes in many cities. This communal life is also changed for migrants, those who are in continuous process of changing their way of life in an urban

setting. People have lived in communities since prehistoric times and the survival functions of communities in contemporary times is much more complex than in the past and in many ways is less understood. Affiliation and bonding of community members with one another within a neighbourhood is important and one way of acquiring identity. Because neighbourhood today serves many of the functions of the communal life in the past (although they do not house closely-knit communal groups), in many neighbourhoods, especially poor ones, reliance on neighbours may be essential in times of need, which for some is a daily demand. The notion of communal life differs among developed and developing countries and represents many activities and human relationships. When communal life is determined by ghettos of ethnic groups in the developed countries, the income usually determines where to live and which particular communal life to choose for the people of developing world. The way people construct meanings around the places in which they live in, and the way designers make decisions about the residential needs of others, is necessary to conceptualize the communal life as having meanings that transcend the physical boundaries of a shelter (Altman and Werner, 1985). The meaning of neighbourhood is also blended with communal life. While neighbourhood refers the physical setting, activities, and boundaries, the communal life refers the norms, values and common beliefs of a group of people. Neighbourhood can be defined in many different ways and each definition fixes an essential characteristics, such as, the presence of local institutions, official recognition, the type of housing they contain, the pattern of social interaction and organization that they exhibit, the ethnic, socio-economic, and demographic makeup of residents, a network of social acquaintances, a visually distinctive district, or a clearly bounded geographical area (Brower, 1996; Altman and Wandersman, 1987).

As different definitions serve different interests, the neighbourhood may be seen as a source of place-identity, an element of urban form, or a unit of decision-making. Similarly, Chaskin (1997) points out that neighbourhoods are recognizable and definable and they provide at least potential units of identity and action. They are, however, open systems in which membership and commitment is partial and relative, and the delineation of neighbourhood boundaries are negotiated and often driven by political considerations. Although there exists a mere difference between the concept of a community and a neighbourhood, Davies and Herbert (1993) differentiated them by size and mentioned that a community is a group of neighbourhoods. Abughazzeh (1996) pointed out that neighbourhood spaces in many contemporary communities, particularly in the 'Third World cities', often has the appearance of no man's land. So people's participation in designing neighbourhood space is about giving people a genuine involvement in shaping and developing their communities. As neighbourhoods are geographical locations in which people live side by side in a wide range of physical arrangements, the spatial proximity inevitably produces certain kinds of intrusions

or annoyances among the neighbours that share the space. What Rivlin (1987) means by neighbourhood's life is nothing different than communal life within the miniature social systems that are part of a larger social order with cultural background. The social organization of the neighbourhood creates patterns of authority and channels of communication. A neighbourhood defines its social identity, the shared rules of neighbourhood life, and the traditional means of dealing with proximity problems. In the classification of neighbourhoods, Brower (1996) defined neighbourhood simply as open and closed and by determining the interaction with physical and social aspect. On the other hand, Warren's (1977) classifications based on three basic characteristics (see Table 3.3). namely the type and amount of interaction among the residents; the sense of identity that residents have; and the amount of connection between the residents and the outside world. However, it is difficult to say if the western classification fits the neighbourhoods of the "Third World" cities like Addis Abeba. Because from the beginning majority of Addis Abeba's neighbourhoods are not planned well compared to its western counterparts. Currently much of the city neighbourhood is changing day to day due to redevelopment or upgrading. In addition to this its mixed characteristic of both modern and traditional neighbourhood makes it unique. But it can contain one or more of the characteristics from Warren's classification.

Types from three Dimensions	Identity sense of belonging	Interaction Active behaviour	Linkage outside contact
1. Integral(Integrated: Internally and Externally) Active with face to face contacts among the residents; Residents also maintain connection to the larger community outside the neighbourhood.	Yes	Yes	Yes
2. Parochial (Localized) High interaction neighbourhoods that have little involvement with the outside world	Yes	Yes	No
3. Diffuse (Inactive and Poorly Connected) Neighbourhood lacking informal social interaction in which residents vary in their degree of connection to the outside world.	Yes	No	No
4. Stepping-Stone (Short-term Stay) Neighbourhood made up entirely of people whose allegiance is to outside groups.	No	Yes	Yes
5. transitory (Residual and Mixed) Neighbourhood characterized by low interaction, a complete lack of identity, and high turnover	No	No	Yes
6. Anomic (Disorganized) Disorganized neighbourhood in which residents have no connection to each other or to outside groups.	No	No	No

Table: 3.3: Neighbourhood Characteristics based on three ideals (Source: McAndrew, 1993: 223)

It has been documented that the contemporary neighbourhoods are lacking social interactions with neighbours, firstly, because of heterogeneity in occupation and secondly, due to the occupation and income as in many respects decide where to reside and whom to interact. Chaskin (1997) opposed this idea and claimed that it is not necessarily the income or occupation, rather the physical form of a neighbourhood. The physical form and design of a neighbourhood is important in understanding the degree of interaction among neighbours. It is possible to increase or to decrease the social interaction of neighbours by designing physical spaces in a neighbourhood. To emphasize the importance of physical forms, Erman (1997) pointed out that, neighbourhoods consisting of multi-storey apartments are less cohesive and have weaker sense of community than neighbourhoods with single family dwellings. Unger and Wandersman (1983) pointed out that an un preferable neighbourhood is a settlement where the households' turnover is higher, not stable, and lower-quality housing is prevalent, which ultimately decreases the territorial marking, residential satisfaction, and the appearance of control. On the other hand, a preferable neighbourhood must provide support systems, social outlets, and an enhanced sense of security. However, a strong sense of community is positively related to length of residence, satisfaction with the community, and the number of neighbours one can identify and these are positive attributes for achieving a neighbourhood identity.

The idea of neighbourhood identity suggests that people attach psychological, social, and cultural significance to specific space and they thereby bond themselves to an environment. Thus, identity implies certain bonding or mergence of a person and place such that the place takes its identity from the dweller and the dweller takes his or her identity from the place. However, attachment to a particular neighbourhood may help to achieve an identity but the attachment takes undefined time for an individual. To explain the components of identity, Proshansky, Fabian, and Kaminoff (1983) pointed out that, *"People's place attachment goes directly with space interaction in any residential area of an individual while identity refers to memories, ideas, feelings, attitudes, values, preferences, meanings and conceptions of behaviour and experience which relate to the variety and complexity of physical setting that defines existence of every human being"* (ibid 1983: 59).

Unlike high income, middle and low-income households in our contemporary neighbourhoods show a high degree of interaction among neighbours. In the case of Addis Abeba's condominium housing peoples are moved in to condominiums from their previous places where they already developed the idea of neighbourhood. Building communal life in newly developed housing area is very important means to develop socially sound community. Building communal building and facilities without building positive communal life can contribute negatively to the whole setting, because the users tend to be less responsible to facilities and in general to participate in betterment of the neighbourhood. As discussed

above when people tend to bond with environment they eventually develop sense of belongingness. This is valuable factor for each community member to participate and develop a sound communal life.

3.10 Communal buildings of condominium housing

Definition;

Communal buildings in this literature refers to the two storey (G+1) or one storey(G+0) building built for purpose of performing activities the condo flats don't incorporate especially for washing clothes and cooking extensive meals (*UN-Habitat, 2011*).

The condominium resident will live independently in their own flat or in shared housing, but will have need of some communal support facilities on site or nearby mainly due to the space shortage on their own flats. As the users will all have their own accommodation, the use of the communal facilities in some cases will be entirely optional. But, for some user groups the communal facilities may be used to provide daily activities especially in the old "kebele" houses where kitchens and toilets are entirely common. However, in condominium sites the use of communal buildings is different from one condo site to the next due to many reasons. As the research goes on we will discuss further on the use and role of communal buildings in condominium sites.

Every unit owner directly becomes the member of condo association, which also has an elected board. The association serves to enforce bylaws, handles maintenance and repair issues, and deals with disputes with developers (the government in Ethiopian context), or between unit owners. The condo association is the governing body which is responsible for the administration of common areas, facilities and communal buildings. The association consists of elected representative from residents and other officers, who make the decision on what to do with the communal buildings whether using it for communal purpose or rent it for other activity.

3.11 Common space and shared services in buildings.

According to Webster's Dictionary, "Common" is defined as "Belonging to or shared by two or more individuals or by all members of a group". Common Area in housing is often thought of as space that is used by or benefits more than one tenant or resident, on floors of a building containing multiple tenants. (William B. 2006)

Examples of building common area include,

1. Corridors, lobbies,
2. Stairways,

3. Parking lots, spots, ramps, or other such areas,
4. Washing machines or laundry room,
5. Public toilets
6. The roof of an apartment building,
7. Elevators,
8. Washrooms in lobby area,
9. Driveways, and
10. Store rooms
11. Fire control rooms

Communal facilities may be in a building separate from the user's house or flat and some users may benefit in having to 'go out' to them. But such an arrangement is unsuitable for users who have mobility problems or elderly who need internal access between their living accommodation and the communal areas, particularly if these include meal provision on a daily basis.

The purpose, form and extent of communal facilities will vary depending on the level and type of support to be provided. The facilities will range from being no more than a contact point to meet other residents, through to more extensive facilities which include the provision of some or most meals on a daily basis.

3.12 Shared Community Facilities

Shared facilities can be defined as a physical asset that is:

- Owned, funded or leased by government or the community
- Used by more than one group
- Used for a range of activities that share buildings, rooms or open spaces at the same time (concurrently) or at different times (sequentially).

Integrated community facilities play a vital role in creating healthy communities, enhancing wellbeing, building social networks and providing a resource for training, employment and personal development. The activities supported by these shared facilities are wide ranging and can include neighbourhood houses, community hubs, youth groups, public meeting spaces, emergency services, community health and aged care services, libraries, schools and recreational facilities.

3.13 Governance of Shared Community Facilities

Every shared community facility has one or a number of governing bodies. A governing body is the legal entity responsible and accountable for decisions in relation to:

- Ownership and management of the physical asset
- Operations, programs and activities that take place within the building
- The operations of a shared community facility are in turn managed by people employed or acting on behalf of the governing bodies through recorded agreements.

Good governance community facility in general involves sound decision making and accountability mechanisms. Further A Guide to Governing Shared Community Facilities which is published by Department of Planning and Community Development of Melbourne (September, 2010) has identified eight principles of good governance for shared facility partnerships:

Transparency: decisions are based on clear criteria and are able to be inspected

Accountability: responsibilities are clearly allocated to each partner

Participation: each partner and other stakeholders have input into the operation of the partnership and the facility

Consensus-oriented: there is a shared understanding of the objectives and management of the partnership

Responsiveness: the partnership is able to respond to new circumstances

Effectiveness and efficiency: the project matches the available resources and achieves the best possible result

Integrity and stewardship: the project is delivered legally and ethically

Leadership: all partners are responsible for the leadership and delivery of the project.

Contributors to success While good governance is a critical factor in the sustainability and management of shared community facilities, a range of other factors also contribute to high-quality shared facilities: sound land use and integrated planning good building design clear service and community planning sustainable funding strong partnerships.

PART IV: CASE STUDIES

4.1 General description of the case study area

The selected case study area of this study is *Gofa Mebrat Haile* condominium which is one of the many large condominium sites in Addis Abeba. It's located about 3Km south from Mexico square on the road to *Lafto*. *Gofa Mebrat Haile* condominium site is now home to many people with different back ground, ethnic group and different income level since its opening in 2009 G.C. Currently it comprises of 180 blocks and 5580 units without the communal buildings and other mixed use buildings. One block can accommodate form 30 units smallest to the biggest block consisting of 45 units.

The neighbourhood is not just living place but also it's also intertwined with social and economic activity. Outside cafe restaurant and bars are main character of *Gofa* condominium main roads. There are also enough services, such as: min markets, shops, internet cafe, beauty salons, drug store and etc. In addition to this there is space left on the neighbourhood design assigned for mixed use activity and social services like kindergarten, health centre and youth centre. These spaces are still vacant and looking for developers.

Residents within close distance from the entrance walk to their block. But those who lives on farthest side can use Bajaj at the entrance of neighbourhood which transport people inside the neighbourhood only. Major and minor roads are well constructed with Asphalt and cobblestone. But the roads don't have any speed break which allows cars to move with high speed within the neighbourhood which is probable treat to pedestrian.



Figure 4.1: Partial view of the streets in Gofa Mebrat Haile condominium

4.2 Primary data

The administrative hierarchy of *Gofa Mebrat Haile* condominium is under *Nifas Silk Lafto* sub-city, *Wereda 06* and *Keble 09/14*. Currently it consists of 180 blocks and 5580 units/households. Majority of residents are relocated people from *Lideta* and *Arat Kilo* redevelopment sites. In addition to that people from every part of Addis Abeba who won the lottery ticket and renters are also part of the existing population. In general resident of *Gofa* condominium can be classified in to the following categories:

- Lottery winners placed by governments.
- Displaced peoples from *Lideta* and *Arat Kilo* redevelopment sites.
- Renters rented from unit owners.
- Owners who bought house from lottery winners.
- Resident family and relatives.

The condominiums have two types of use for residential and commercial purpose. Commercial units are on the ground floor of blocks which faces the main roads (see fig.4.2) Currently the total number of communal buildings are 10 which is 1 communal buildings per 558 households. According to the key informants it was planned to build 49 communal blocks but only 10 was built out of this 6 are G+1 buildings and 4 are G+0.



Figure 4.2 Location of communal buildings in *Gofa Mebrat Haile* Condominium.

○ Selected Case studies ○ Other communal buildings on the site ↑ Access roads

4.3 General Introduction about the Condominium Association

The condominium association plays key role in solving every day problem around condominium neighbourhoods. Its them main responsible body to manage the neighbourhood communal open space, protect peace and security of the compound, negotiate disputes between residents and etc. In another condominium sites in Addis Abeba the association manages communal buildings but since they did not accept it yet they acts like a mediator between housing development office and the residents. The association consists of elected members committee from the residents and full time workers hired to carry out the day to day office work. Every unit owners and legal representative who is willing to accept the goal and mission of the association can become the member of the condominium association. In addition every member is required to have ability to pay any payments related to registration and monthly fee. The administrative structure of the association consists of elected member of representatives from residents and four sub sections to carryout different tasks see the figure below.

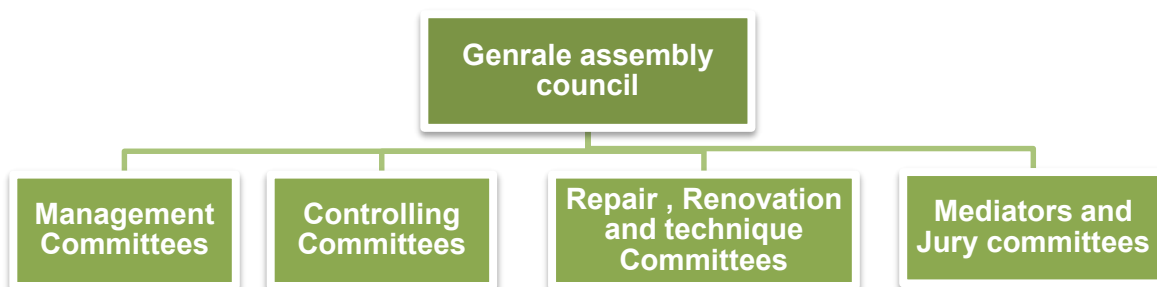


Figure 4.3 Administrative structure of condominium association

The association is the legal representative of residents established to protect the rights and property of the communities. The property of the community is the one which is owned by two or more residents. This includes common spaces in the condominium buildings , open spaces and communal buildings. Even though the members have their share of ownership on the communal property they are required by law to use and handle it with care. The association will protect and make sure that residents acts accordingly in order to create a good living environment in condominium neighbourhoods.

Generally every member have a say in every activity around the association by raising issues, ideas and electing or being elected though meetings. But there are specialized committees who handle specific tasks in the neighbourhood (see Fig. 4.3). For example repair and renovation committee is the one who acts in case of natural disasters such as flood or manmade disasters such as fire. The committee does not act only in time of

hardship but, it also facilitates and encourage social gatherings and activities like *Idirs* and *Iqubs* which will further strengthen the bond between residents. As its name indicates this committee is responsible for any repair and renovation done in the condominium neighbourhood. Its involvement is in terms of giving permission and controlling in case of illegal construction or constructions which disturb the overall image of the neighbourhoods.

In General the role of condominium association is summarised as follows :

- **Collecting money from the residents:** Resident will pay 15 birr every month for the purpose of security and garbage collection and the money is collected through official receipt of the association. There is penalty on those who do not pay their monthly payment on time. Also there is 10% payment when agreement is made between condominium flat owners and renters.
- **Funding and developing the community:** The money collected through different mechanisms will be used for communal purpose only. It is administered through the association in case of any kind of development the association will fund and control the activity.
- **Security of the compound:** There are security posts in the compound in different selected posts which will control the neighbourhood 24 hour with two shifts.
- **Garbage collection:** Garbage's are collected every morning through garbage collectors. There are some known nearby collecting places for garbage coming from every residence. Once garbage is collected at known places the garbage will be taken out side by garbage truck.
- **Managing disputes in the compound:** When local dispute happened in relation to the house like noise pollution, sanitary leakage, use of corridor, first they will try to solve by themselves if not the mediators and jury committee will enter to solve the problem.
- **Executing policy rules and regulation of the compound:** Residents are not allowed to change their house without getting permit first from the association.
- **Gardening and greening:** Planting trees, grass, garden flowers and beautification of the compound.
- **Managing communal buildings, spaces and open spaces:** The association will manage and renovate or repair communal facilities, in addition to making sure that residents use responsibly and handle with care and the communal facilities.

4.4 Guide line filters used for analysis

Several data's have been gathered in order to get multi-layered understanding of the subject matter and answer the research questions. To do this the following filters derived from the research questions have been used. The filters used for different question is different even

though the filters for question number 1 and number 2 looks similar but the focus is different. The first one focus only on how communal buildings are being used. But the filters for question number 3 is focused on how residents perform extensive activities other than communal buildings and outside the condominiums units especially on communal spaces such as corridors and open spaces.

1. How do residents use communal buildings in condominium Housing?

Uses of communal buildings.

- List of activities happening
- Frequency of use
- Reason for using communal building

2. To what extent communal buildings are being used for their intended purpose?

State of their current condition

- Physical condition of the communal building
- Availability of facilities
- Sanitary condition
- Willingness to clean communal building
- Accessibility to public

Current function vs. The intended functional analysis

3. How do residents carry out their extensive household activities other than communal buildings which supposed to be carried out at communal buildings?

Household activities that suppose to be carried out at communal buildings.

- List of the extensive activities
- Place of the activities
- The reason behind
- Needed for communal building

4.5 Case study-1 analysis

The first case study communal building is located at the second parcel from the main entrance around Block-43 and Block-38 see figure 4.4. This building is chosen because of its proximity to the main entrance of the neighbourhood and activeness of the surrounding

blocks due to commercial activities. Currently part of the building is used as *consumer association* shop or "*Yeshemacoch Mahber Souk*" and as storage house for local *Idir*. Even some residents used slaughtering room to cook extensive meals with firewood. Other than these activities the whole building is vacant space sometimes used as illegal toilet by outsiders who came to the neighbourhood for labour work and other purpose.



Figure 4.4: Location of cases-1



Figure 4.5: Ground floor plan of case-1 communal building

Figure 4.6: First floor plan of case-1 communal building

Uses of communal buildings

Even though communal buildings are not given legally residents still use them for some purpose (see table 4.1). This actually happens in non-formal manner without the consent of the association. They are still in negotiation with AAHDPO (Addis Abeba housing development project office) about the communal buildings.

During an interview it's found out that about 31% of respondents have used communal buildings for household activity at list once, the other 69% have never used them at all. Table 4.1 below shows for what kinds of activity residents used them, portion of communal building they used, and frequency of use.

Table 4.1: Uses of communal building around B/43

No.	List of activities	The space	Frequency of use
1	Preparation of local beverage	Slaughtering room	Twice a year
2	Weeding food preparation	Slaughtering room	Once
3	Birth day food preparation	Slaughtering room	Once a year
4	Holiday food preparation	Slaughtering room	Once a year
5	<i>Idir</i> Store	Office at G. floor	Permanent
6	Shop	Store a G. floor	Permanents

The reason for using communal buildings

Like every other part of the society, residents of *Gofa Mebrat Haile* condominium have social, traditional or religious holidays. Holidays or celebration usually comes with preparing foods and drinks in large quantity. The preparation is difficult in condominium unit mainly because of the space required for such activity is usually bigger than the day to day household activity. In addition to this it is very difficult to perform such activity in small condominium kitchen. Due to this reason respondents used communal buildings for extensive household activity. Based on the data form interviewe100% of respondents reason for using communal buildings is the shortage of space for preparing extensive traditional food and drinks in the condominium units.

Communal buildings and their intended purpose

State of their current condition

Before answering whether communal buildings are working for their intended purpose or not. We will try to see whether they can be used for any purpose at their current state. The

communal buildings in the study area are built within the same year along with condominium blocks. Generally speaking the communal building is in good physical condition. Most of the spaces can be used for their intended purpose at their current state or with small renovation (see table 4.2).

Table 4.3: Availability & Accessibility of Facilities in communal building around B/43

Availability & accessibility of facilities

In any types of communal building or facility the availability and accessibility of facilities can encourage or discourage the users. Major facilities in case-1 communal includes toilet, hand washing laundry basin and storage areas are also available. But there is no water or electricity supply which makes it difficult to perform any kind of activity. Even though these

Table 4.2: Physical Condition of communal building around B/43

No.	Structural Elements	Material	Current Condition		
			Good	Need small renovation	Need big renovation
1	Outside Wall	Properly plastered and painted HCB wall	☑	--	--
2	Inside wall	Roughly plastered concrete wall	--	☑	--
3	Floor	Concrete floor finish	--	--	☑
4	Roof	CIS	☑	--	--
5	Windows	Glass with Iron frame	--	☑	--
6	Doors	GIS panel and Iron frame	--	☑	--

facilities are available in some part of the building they are not accessible to the public.

No.	Facilities	Availability	Accessibility to Residents
1	Toilet	☒	☒
2	Hand wash laundry basin	☒	☒
3	Water supply	☒	--
4	Electricity	☒	☒
5	Sanitary fixtures	☒	--
6	Wood stove place	☒	--
7	Communal storage spaces	☒	☒

Sanitary condition

Generally Case-1 communal building is in poor sanitary condition but the condition is different from one room to the other, if used as it is can be hazardous to health. (see table 4.4). Rooms which has closed doors and controlled space has the better the hygiene. Whereas rooms with least control and unlocked doors have worst hygiene. When respondent asked why the sanitary condition their communal building is bad. They pointed out that outsiders are the one who are doing more of the damage. Recently when the sanitation gets very worse residents from block 43 and 44 have collected 5 birr from every resident of the two blocks and get them cleaned. But within days it become dirty again. Other than paying money about 81% of respondents are willing to clean communal building (see table 4.5).

Table 4.4: Sanitary Condition of Communal Building Around B/43

No.	Rooms	Clean	Moderate	Unhygienic
1	Hand washing laundry	--	☒	--
2	Store	☒	--	--
3	Office at G.floor	☒	--	--

4	Office at 1 st floor	--	--	☒
5	Common Toilet	--	☒	--
6	Slaughtering room	--	--	☒
7	Multipurpose hall	--	☒	--

Table 4.5: Willingness of residents to clean communal building

Willingness to clean communal building	No. of respondents	Percentage
Yes	13	89%
No	2	11%
Total	15	100%

Current function vs. The intended functional analysis

The design and location of communal building favours the use of spaces for shop and storage purpose other than for traditional working spaces. Only 17.8% the spaces are being used for shop and storage (see table 4.6). Even though the problem lies in the administration, the appropriateness of design, residents sense of responsibility majority of respondent (see table 4.7) blamed the lack of good administration for the problem around communal building.

Table 4.6: Functional analysis of communal building around B/43

No	Intended function	Current function	Accessibility	Usable Area	Percentage of space	Remarks
1	Hand washing laundry	--	Not	59m ²	19.2%	Only 17.8 % of the communal space are being used.
2	Store	Shop	Yes	41m ²	13.3%	
3	Office at G.floor	Idir store	Yes	14m ²	4.5%	
4	Office at 1 st floor	--	Not	70m ²	22.8	
5	Common Toilet	--	Not	9m ²	3%	
6	Slaughtering room	Illegal Toilet	Partially	30m ²	10%	
7	Multipurpose hall	--	Not	87 m ²	28.2	
Total				307 m ²	100%	

Table 4.7: Problems of communal building

Major problems of communal buildings in resident's eye.	No. of respondents	Percentage
Lack of good administration (A)	5	33%
Not enough facilities inside (B)	2	13.3%
Lack of responsible resident (C)	3	20%
A&B	2	13.3%

A&C	--	--
B&C	1	7%
A,B&C	2	13.3%
Total	15	100%

Household activities that suppose to be carried out at communal buildings

In this section we will discuss about how residents are solving the problem of communal building. Based on primary data and onsite observation during pilot test majority household activity happens on the condo block or on the open space around the block. Since many of communal buildings are closed we will try to see how do residents perform space extensive household activity outside their house.

Corridors around case-1

Corridors on condominium blocks are major place of performing household activity outside the flats. Corridors around block 43 are not just for circulation they have also household purpose. More than 80% of residents have used corridors for household activity on daily bases or occasionally. During the field one of the main scene is women Preparing 'wet'/stew on charcoal stove. Since charcoal has toxic gas when used in confined space residents preferred to use it outside the house. Another reason is that charcoal is less pricy compared to electricity. In addition to this hand cloth washing, drying and storing personal objects are extra activity on corridors see table below.

Table 4.8: List of Household activity on corridor

List of Household activity Happening	On the corridor	
	Frequency	Percentage
Washing cloth	7	43%
Drying cloth	6	37.5%
Preparation of small meals	8	50%
Growing small garden	2	12.5%
Temporary store	6	37.5%
Spice drying	3	19%
Slaughtering	--	--

Open spaces around case-1

Another contested space with household activity is the open space. The open spaces are assumed to be mainly garden and recreation. In addition to this major activities on open space are car parking, Clothesline drying and spice drying. Slaughtering in all *Mebrat Haile* condominium is performed at open spaces because there is no dedicated space for slaughtering. Activities like spice drying is totally performed either on open space or on corridors because sun light and extra spaces is needed to prepare the spice (see table 4.9).

Table 4.9: Household activity on open space

Household activity happening outside the house	On the open space	
	Frequency	Percentage
Washing cloth	2	12.5%
Drying cloth	11	69%
Preparation of small meals	--	--
Growing small garden	1	6%
Temporary store	--	--
Spice drying	1	6%
Slaughtering	4	25%

The major reason of respondents for using both corridors and open spaces are mainly the shortage of space in condominium units. About 68% of respondents reason for performing extra household activity on corridors and open spaces was the shortage of space in the kitchen. The condominium kitchen especially for larger family is too small for preparing and storing traditional foods. However respondents who do not perform household activity on corridors were single or small households (see table 4.10).

Table 4.10: Reason for using corridor & open spaces

Reasons	Frequency	Percentage
Shortage of space in kitchen	11	73%
Shortage of space in general	2	13%
Not used corridor or open space for household activity	2	14%
Total	15	100%

Even though the communal building provided it's not functioning properly. About 87% of residents are interested in having fully functional communal building to perform space extensive house hold activity (see table 4.11).

Table 4.11: Need for communal building

Do you need communal building?	No. of respondents	Percentage
Yes	13	87.5%
No	2	12.5%
Total	16	100%

Pictorial analysis of case-1



Slaughtering at open space

Washing and drying clothes at corridors

Figure 4.7 Different activities on communal buildings and condomunium bolcks

4.6 Case study-2 analysis

The second case study communal build which is located around block 24, with relatively close proximity from Case-1 communal building see figure 4.8. This communal building is chosen by putting in mind that there are two types of communal building(G+1 and G+0) and to include it in the analysis. In addition to this it's also well bounded by blocks and rivers located in less active area. Currently part of the building is used as storage area by the residents. Other than this activities the whole building is vacant space without any use. (see pictorial analysis in Fig.4.10.



Figure 4.8: Location of Case study-2 communal building

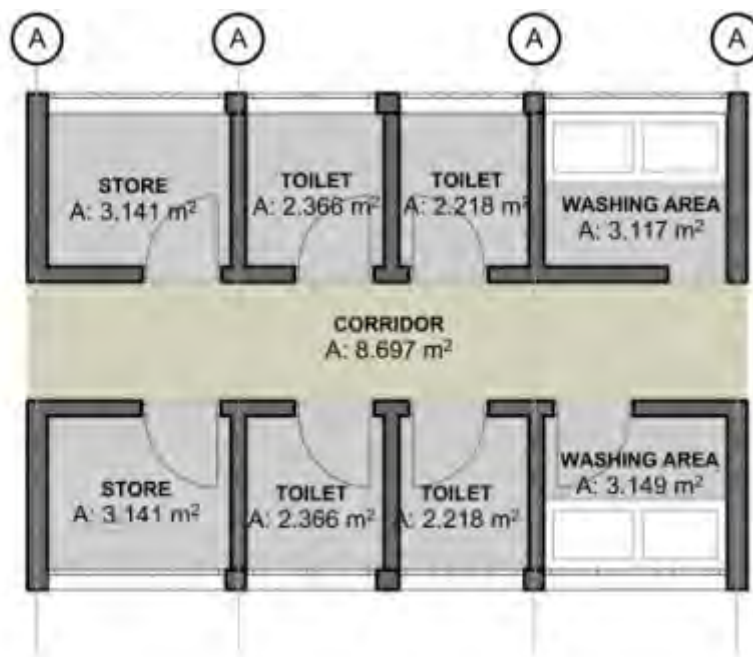


Figure 4.9: Ground floor plan of communal building around block 23

Uses of communal buildings

The Case-2 communal building is single storey shed with total area of 21 square meter. Based on the data indicated in table 4.12 the communal building is hardly used for communal purpose it's simply storage area for discarded objects. The black smoke stained on the wall of the middle room indicates that it has been used for extensive cooking purpose see the pictorial analysis in Fig. 4.10. Currently the rooms are locked down by representative from block-24 assigned by the association committees as controller. They using it as storage space for personal belongings.

Table 4.12: Uses of communal building around B/

No.	List of activities	The space	Frequency of use
1	Preparation of local beverage	Store	Once a year
2	Holiday food preparation	Store	Once a year
3	Store	Washing area	Permanent

State of their current condition

Communal buildings and facilities especially in housing area need proper administration and control to be used for the intended purpose. In this section we will try to answer whether communal buildings are working for their intended purpose or not. Before that the buildings have to be in good physical and sanitary condition. Generally speaking the communal buildings are in good physical condition on outside. Even though many of them are locked down without any service some of them are still giving service. The sanitary condition is different from room to room. Its accessibility and control of space greatly affects its sanitary condition .

Table 4.13: Physical Condition of communal building around B/24

No.	Structural Elements	Material	Current Condition		
			Good	Need small renovation	Need big renovation
1	Outside Wall	Properly plastered and painted HCB wall	☒	--	--
2	Inside wall	Roughly plastered concrete wall	--	☒	--
3	Floor	Concrete floor finish	--	☒	--
4	Roof	CIS	☒	--	--
5	Windows	None	--	--	☒
6	Doors	GIS panel and Iron frame	--	☒	--

Availability & accessibility of facilities

Communal building cannot be fully functional unless facilities are installed and residents get full access to it. For instances toilets facilities are installed in this communal building but there is no water supply and it's not accessible to the residents. Hand washing laundry is available and open to public it's not used for washing cloth because there is no water supply at all (see table 4.14).

Table 4.14: Availability & Accessibility of Facilities in communal building around B/24

No.	Facilities	Availability	Accessibility to Residents
1	Toilet	☒	☒
2	Hand wash laundry basin	☒	☒
3	Water supply	☒	--
4	Electricity	☒	--
5	Sanitary fixtures	☒	--
6	Wood stove place	☒	--
	Storage spaces	☒	☒

Sanitary condition

The building is an abandoned building without any proper sanitary condition to perform any kind of activity. Like the rest of the cases this communal sanitation is affected by inappropriate use of the space and lack of control over the spaces. (see table 4.15)

Even though the current condition is bad the resident attitude is positive for cleaning communal building about 93% says yes but they need someone to facilitate and direct them (see table 4.16).

Table 4.15: Sanitary Condition of Communal Building Around B/24

No.	Rooms	Clean	Moderate	Unhygienic
1	Hand washing laundry	--	☒	--
2	Storages	--	☒	--
3	Common Toilet	--	--	☒

Table 4.16: Willingness to clean communal building

Willingness to clean communal building	No. of respondents	Percentage
Yes	14	93%
No	1	7%
Total	15	100%

Current function vs. The intended functional analysis

The communal are not function for its intended purpose it's even hard to say that they are functioning properly at all. Generally about 57% of the space is used for storage purpose.

The rest is abandoned without any purpose (see table 4.17).

Lack of administration and responsible resident are major problems identified by residents for existing situations of communal buildings (see table 4.18).

Table 4.17: Functional analysis of communal building around B/24

No.	Intended function	Current function	Accessibility	Usable Area	Percentage of space	Remarks
1	Hand washing laundry	Store	Yes	6m ²	28.5%	Only 57% of the space are being used.
2	Storages	Store	Yes	6m ²	28.5%	
3	Common toilet	--	Not	9m ²	43%	
Total				21 m²	100%	

Table 4.18: Problems of communal building

Major problem of communal buildings in resident's eye.	No. of respondents	Percentage
Lack of good administration (A)	6	40%
Not enough facilities inside (B)	2	13.5%
Lack of responsible resident (C)	3	20%
A&B	1	6.5%
A&C	1	6.5%
B&C	--	--
A,B&C	2	13.5%
Total	15	100%

Household activities that suppose to be carried out at communal buildings

In this section we will analyze how residents are using corridor and open space for household activity to fulfil their space needed for extensive traditional household activities. Since many of communal building are closed down we will try to see where residents perform space extensive household activity. This will help us to understand the current existing trend how residents use of spaces for extensive household activities in the case area.

The use of corridors around Case-2

Corridors around case-2 are being used for many purposes in comparison to the communal existing communal within 10 meters distance from the condominium block. Washing clothes, drying clothes, growing small garden and preparing small meal are major activities (see table 4.19). As a result this activities creates inappropriate use of corridors and creates problem in circulation and cleanness around communal spaces.

Table 4.19: List of Household activity on corridor

List of Household activity Happening	On the corridor	
	Frequency	Percentage
Washing cloth	8	53%
Drying cloth	6	40%
Preparation of small meals	4	27%
Growing small garden	5	33%
Temporary store	4	27%
Spice drying	4	27%
Slaughtering	--	--

The use of open space around Case-2

Open space is one part of communal space designed to accommodate circulation, recreation, parking and etc. In addition to this household activity happens side by side. About 87% percent respondent dry their clothes on open space. Slaughtering is totally performed on open space because communal are not accessible and fully equipped to perform slaughtering. About 40% of respondent have performed slaughtering at list once on open space. Garbage and leftovers are usually damped on open spaces (see table 4.20).

Table 4.20: Household activity on open space

Household activity happen outside the house	On the open space	
	Frequency	Percentage
Washing cloth	3	20%
Drying cloth	13	87%
Preparation of small meals	--	--
Growing small garden	2	13%
Temporary store	--	--
Spice drying	5	33%
Slaughtering	6	40%

The major reason for using corridors and open spaces for household activity is due to shortage of spaces in the flats see table 4.21. Another reason for using corridors and open spaces are freedom to work on open spaces. Security is also another reason pointed out by residents to work around their blocks for instances when washing and drying clothes are performed on corridors or nearby open spaces because it's easier to control.

Residents need for communal building is high about 93% of respondents need communal buildings for extensive household activities. At list they wish they had fully functional communal building which can be used for communal purpose (see table 4.22).

Table 4.21: Reason for using corridors and open space

Reason for using corridor & open space for household activity	Frequency	Percentage
Shortage of space in kitchen	12	80%
Shortage of space in general	2	13%
Not used corridor or open space for household activity	1	7%
Total	15	100%

Table 4.22: Need for communal building

Do you need communal building?	No. of respondents	Percentage
Yes	14	93%
No	1	7%
Total	15	100%

Pictorial analysis of case-2



Figure 4.2: Different activities on communal buildings and condomunium bolcks

4.7 Case study-3 analysis

The third case study communal building is found around block 139. It's relatively far from the main entrance see figure 4.11. This communal building is chosen because it contains many different activity including the association office, community police station and multipurpose hall. Currently part of the building is used as storage area by the residents. Other than these activities the whole building is vacant space without any use.

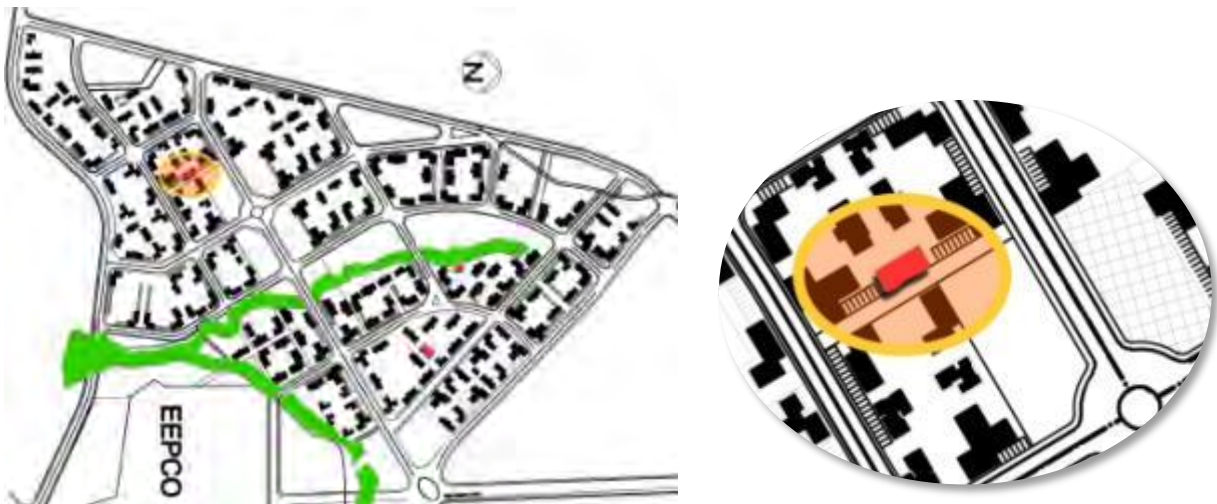


Figure 4.3: Location of Case-3 communal building



Figure 4.4 Ground floor plane of communal building around block 139



Figure 4.13 First floor plane of communal building around block 163

Uses of communal buildings

This communal building is more functional and useful to the community compared to the previous two case studies. The reason behind this is mainly because the condominium association uses the storage spaces as an office. It's also has open multipurpose hall on the first floor, during the field work it was being used as vaccination centre (see table 4.23). Beside from this it also includes a community police office in small room. Other than the above activity the whole building is vacant space.

Table 4.23: Uses of communal building around B-163

No.	List of activities	The space	Frequency of use
1	Condo. association office	Store at ground floor	Permanent
2	Community police centre	Office at ground floor	Permanent
3	Multipurpose hall	Washing area	Permanent
4	Store for association equipment	Slaughtering room	Permanent

State of their current condition

In order to answer whether the communal the building are working for their intended purpose or not. We have to investigate the physical and sanitary condition. Generally it can be said that the Case-3 communal buildings are in better sanitary and structural condition compared to the previous two cases. Although many of the rooms are locked down without any service some of them are still giving service. But the unlimited accessibility of the slaughtering room at the back makes the room easy for inappropriate use for storage and other purpose.

Table 4.24: Physical condition of communal building around B

No	Structural Elements	Material	Current Condition		
			Good	Need small renovation	Need big renovation
1	Outside Wall	Properly plastered and painted HCB wall	☒	--	--
2	Inside wall	Roughly plastered concrete wall	☒	--	--
3	Floor	Concrete floor finish	--	☒	--
4	Roof	CIS	☒	--	--
5	Windows	Glass with Iron frame	--	☒	--
6	Doors	GIS panel and Iron frame	--	☒	--

Availability & accessibility of facilities

Table 4.25: Availability & Accessibility of Facilities in communal building around B-163

No.	Facilities	Availability	Accessibility to Residents
1	Toilet	☒	☒
2	Hand wash laundry basin	☒	☒
3	Water supply	☒	--
4	Electricity	☒	☒
5	Sanitary fixtures	☒	--
6	Wood stove place	☒	--
7	Storage spaces	☒	☒

Sanitary condition

The sanitation of this communal is better than the previous two case studies. About 90% of the spaces are in better sanitary condition (see table 4.26). This makes it preferable place to work in. There are two main reasons behind this fact. The first is that the communal is found in active location in the neighbourhood and the second fact is that about 56% of the space is used for some purpose including the association office (see table 4.28). This makes it easier to control over activity around the building. Even though majority of the spaces are in clean and moderate sanitary condition the slaughtering room is in bad sanitary condition. Residents response towards communal building were positive 93 percent were willing to clean and use it for extensive activity if given the chance see table 4.27.

Table 4.26: Sanitary Condition of Communal Building Around B-163

No.	Rooms	Clean	Moderate	Unhygienic
1	Hand washing laundry	--	☒	--
2	Store	☒	--	--
3	Office at G.floor	☒	--	--
4	Office at 1 st floor	--	☒	--
5	Common Toilet	--	☒	--
6	Slaughtering room	--	--	☒
7	Multipurpose hall	☒	--	--

Table 4.27: Willingness to clean communal buildings

Willingness to clean communal building	No. of respondents	Percentage
Yes	13	93%
No	2	7%
Total	15	100%

Current function vs. The intended functional analysis

This communal building is used in useful way for many activity in comparison to the above two communal buildings, about 56% of the communal are being used for functional purpose. The rest 44% of the space has no purpose at all (see table 4.28).

Even though this communal has many functions and has good condition another communal within 50meter distance is completely vacant without any purpose (see Appendix 2). The main problem around communal building in respondents eye is lack of good administration about 33% says it's the major reason why complication are not solved. Lack of responsible residents to ask and initiate are also problems identified by residents (see table 4.29).

Table 4.28: Functional analysis of communal building around B

No	Intended function	Current function	Accessibility	Usable Area	Percentage of space	Remarks
1	Hand washing laundry	--	Not	59m ²	19.2%	Only 56% of the communal are being used.
2	Store	Association office	Yes	41m ²	13.3%	
3	Office at G.floor	Police Station	Yes	14m ²	4.5%	
4	Office at 1 st floor	--	Not	70m ²	22.8%	
5	Common Toilet	--	Not	9m ²	3%	
6	Slaughtering room	Store	Partially	30m ²	10%	
7	Multipurpose hall	Multipurpose hall	Yes	87 m ²	28.2%	
Total				307 m ²	100%	

Table 4.29: Major problems of communal building

Major problem of communal buildings in resident's eye.	No. of respondents	Percentage
Lack of good administration (A)	5	33%
Not enough facilities inside (B)	2	13.5%
Lack of responsible resident (C)	3	20%
A&B	1	7%
A&C	3	20%
B&C	1	6.5%
A,B&C	--	--
Total	15	100%

Household activities that suppose to be carried out at communal buildings

The discussion in this section will be similar like the previous case studies. We will try to see how residents are solving the problem of communal building. Since many of communal buildings are closed we will try to see where residents perform space extensive household activities. Based on the data and onsite observation many activities which supposed to be performed on communal building are actually happening on corridors and open spaces. Due to this reason we will see them how are they being used for household purpose separately.

The use of corridors around Case-3

The use of corridors for household activity in *Mebrat Haile* condominium including case-3 area have similar trend. Hand washing clothes and drying clothes are major activities on corridors in addition to this growing small garden and preparing small meals on charcoal stove are done side by side (see table 4.30).

Table 4.30: List of Household activity on corridors

List of Household activity Happening	On the corridor	
	Frequency	Percentage
Washing cloth	10	67%
Drying cloth	8	53%
Preparation of small meals	4	27%
Growing small garden	5	33%
Temporary store	3	20%
Spice drying	4	27%
Slaughtering	--	--

The use of open space around Case-3

The use of open space is broad concept but due to the scope of this research it's limited to household activities on open spaces. Cloth drying is the major activity around block 139 about 80 percent of respondents use the open space around their block. By default there are places dedicated for this activity due to the clotheslines. Spice drying is also main activity on open space since sun light and free space is needed to dry the spice see table 4.31 below.

Table 4.31: Household activity on open space

Household activity happen outside the house	On the open space	
	Frequency	Percentage
Washing cloth	2	13%
Drying cloth	12	80%
Preparation of small meals	--	--
Growing small garden	2	13%
Temporary store	--	--
Spice drying	7	47%
Slaughtering	6	40%

The reasons for using corridors and open spaces are different based the person, sex, size of household income level and background. But majority 80 percent agreed on the smallness the kitchen to perform especially extensive household activity see table 4.32. In addition to this 20 percent responded there is shortage of spaces in condominiums units generally.

Table 4.32: Reason for using corridors and open spaces

Reason for using corridor & open space for household activity	Frequency	Percentage
Shortage of space in kitchen	10	80%
Shortage of space in general	5	20%
Not used corridor or open space for household activity	--	--

In general when the question of communal buildings raised those who are in close distance don't use them fully the other residents without communal building doesn't even have communal building at all. But the demand for communal building in both of case are high 93% says they need communal buildings (see table 4.33).

Table 4.33: Need for communal building

Do you need communal building?	No. of respondents	Percentage
Yes	14	93%
No	1	7%
Total	15	100%

Pictorial analysis of case-3



Communal building around block 163



Police office on Communal building



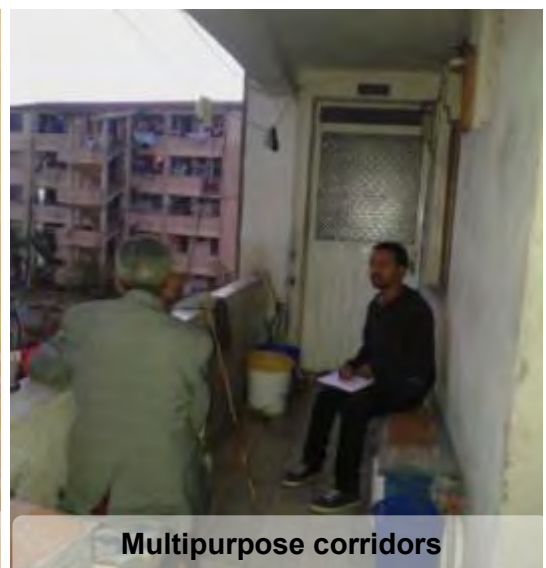
Upper floor used as vaccination centre



Store at slaughtering room



House hold activity at ground floor



Multipurpose corridors

Figure 4.14: Different activities on communal buildings and condomuniums around bolcks 163

PART V: FINDINGS

5.1 Introduction

The finding of the study will focus mainly in answering the research questions. It's divided in three parts derived from the research question, uses of communal building, communal buildings & their intended purpose, and resident solution to space extensive household activity. In the last topic will try to answer how residents are performing their household activity supposed to be carried out at communal buildings.

5.2 Research Questions

(1.) How do residents use communal buildings in condominium Housing?

Uses of communal buildings

- List of activity happening
- Frequency of use
- Reason for using communal building

(2.) To what extent communal buildings are being used for their intended purpose?

State of their current condition

- Physical condition of the communal building
- Availability of facilities
- Sanitary condition
- Willingness to clean communal buildings
- Accessibility to public

Current function vs. The intended functional analysis

Main problem of communal building in residents eye

(3.) How do residents carry out their household activity that supposed to be carried out at communal buildings?

Household activities that suppose to be carried out at communal buildings.

- List of the activity
- place of the activity
- The reason behind
- Needed for communal buildings

5.3 Equivalent Statement of the Research Questions

1. **Uses of communal buildings** in condominium housing.
2. **Communal building and their intended purpose** in condominium housing.
3. **Residents solution to space extensive household activity** in condominium housing

5.4 Uses of communal buildings

Communal buildings in *Mebrat Haile* condominium are not legally given to residents. But residents use them in non-formal agreement with the association. The use of communal building is limited to the store at the ground floor and the slaughtering room. The most frequently used part of the communal building by the resident is the slaughtering room. It's mainly because, it can be easily accessed from outside. Sometimes the whole building is locked down without any proper use. Residents usually use communal buildings for preparation of traditional foods and drinks which happens occasionally once or twice a year. This activity usually happens at the slaughtering room using fire wood. Even though slaughtering room is built for the purpose of slaughtering none of the communal buildings in the study area are used for slaughtering purpose because it not fully equipped to perform slaughtering, rather open space is used for slaughtering purpose. Slaughtering in open space during holidays are large in number. The garbage and leftovers are dumped in open spaces where children's play and many activities happen. This causes serious threat to health and cause bad smell all over the neighbourhood.

Based on the data from three case study about 25% of respondents have used communal buildings for household activity at list once, the other 75% have never used them at all.



Figure 5.1: Left: Association office picture and Right: Ground floor plan showing the most frequently use part.

Generally Residents use communal buildings for the following purpose:

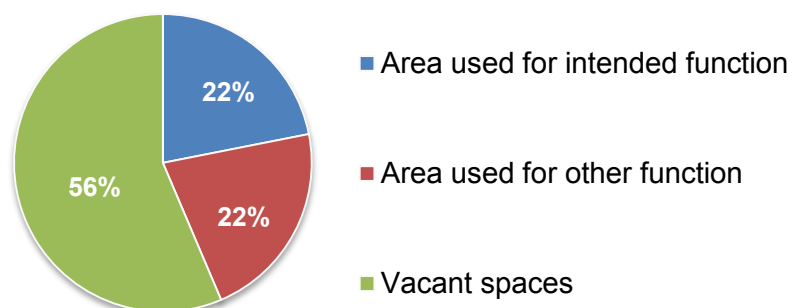
- Preparation of local beverage
- Weeding food preparation
- Birthday food preparation
- Holiday food preparation
- *Idir* Store
- As shop or office

5.5 Communal buildings and their intended purpose

Currently as some literature shows and previously discussed in this paper residents demand for communal buildings is high (UN-Habitat, 2011). In some part of the city residents use communal buildings for both commercial and traditional space extensive activity. Even though it was planned to serve as hand washing laundry, cooking extensive meals and for office use in many places communal buildings are rented for commercial use and other purpose. In return income from the rent is used for running the association and other social activity. But in case of *Mebrat Haile* site this doesn't seems to work in any way.

According to the data gathered in this thesis communal buildings are not functioning for their intended purpose. On average around 44% of the total space of communal buildings are being used and out of this half of their uses are just for the purpose of storing building material and other discarded objects. The rest more than 56% spaces of the spaces are vacant without any function(see Fig 5.2).

The major reason behind this is the fact that they are not fully given to the condominium association. The main reason behind this complication is that the association believe the communal buildings are not enough for the whole neighbourhood and they are built randomly without considering every block. As discussed in the previous section it was planned to build 49 communal buildings but only 10 were built for 100 blocks. Such as: Private store & shop. These complications create tension between the condominium association and Addis Abeba housing development project office (AAHDPO). These led to the abandonment of the communal buildings without any responsible body. In the middle of this problem the resident are left without any choice for traditional space extensive activity which led some residents to use corridors and open spaces improperly, and communal building without permission. Majority of the respondents indicates the problem arise from lack of good administration, absence of enough facility and lack of responsible residents. In current condition the communal buildings are in good physical condition can be used for any purpose with little renovation and facility installation, which will require strong participation from both residents



and the association.

Figure 5.2: Current use of communal buildings in percentage area. **5.6 Residents solution to extensive household activity**

In previous sections we have seen that communal buildings are not fully functional, even though residents needed them for space extensive household activity. This will pose a question on how residents managed to live and work their day to day household activity without communal buildings. The answers to this questions as confirmed in the data below is corridor and their surrounding open spaces (see Fig. 5.3). The main reason behind the use of corridor and open space by residents are shortage of space in the units & smallness of kitchen. In addition to this unavailability of properly functioning communal buildings which actually built for performing space extensive household activity. About 91% of respondent from three case study says communal buildings is needed for some activity and the other 9% whom majority of them are singles says they don't need communal buildings at all.

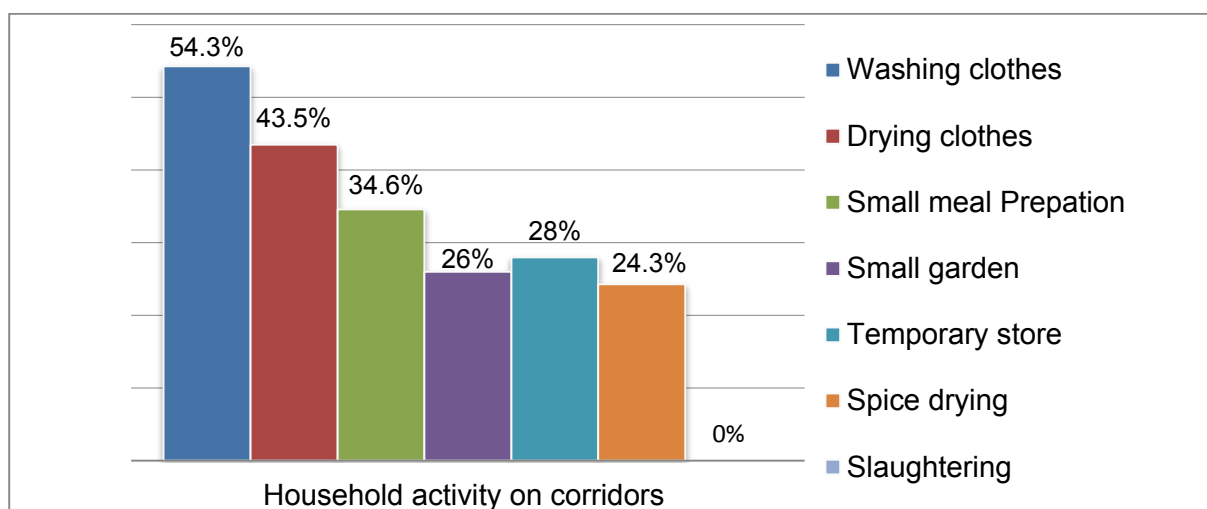


Figure 5.3 Graph showing and average percentage of respondents vs. use of corridors

Corridors in Gofa condominiums are not just a circulation space it's extensively used as kitchen and store for household purpose. Corridors used as extended spaces from inside of the living quarters especially preparing stew 'Wet' and coffee on charcoal stove seems to be corridors main purpose other than circulation. Some residents have also benches on one side of the corridors as outside sitting and interaction area. Resident usually uses corridors and open space extensively rather than communal buildings. Generally household activities usually carried out on corridors include the following:

- Washing clothes
- Drying clothes
- Preparation of small meals
- Growing small garden
- Temporary store
- Spice drying

These create inappropriate use of corridors and make circulation difficult and contribute negatively to cleanness of condominium common spaces.

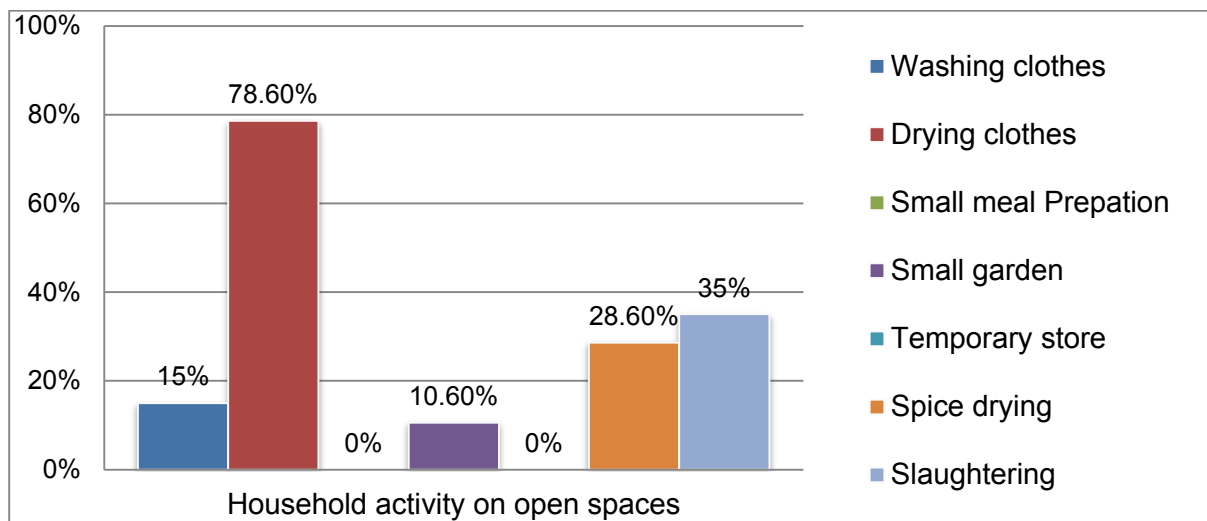


Figure 5.4 Graph showing and average percentage of respondents vs. use of open space

Corridors are not the only spaces used for extensive household activity. Open spaces are also used for household activity especially when larger space is needed. Major activities happening on open space are clothesline drying and spice drying (see Fig. 5.4). Some of the open spaces have dedicated space for common clotheslines but in other place individuals built themselves. All the slaughtering in *Mebrat Haile* condominium is performed on open spaces without any waste management mechanism. In return these create smell pollution and health hazard. Generally activities happening on open space include the followings:

- Washing clothes
- Drying clothes
- Growing small garden
- Spice drying
- Slaughtering

PART VI: RECOMMENDATION

6.1 Improving management of communal facilities and communal buildings

Based on the findings in the previous section there exists lack of strong administration who facilitate activities within the communities and negotiate with government. Even though there is still negotiation with the governments the existing communal buildings should be maintained and used for communal purpose especially for slaughtering and holiday food preparation. The current trend of slaughtering in open space should be controlled and stopped. Empty spaces on the upper floors can be used as a multipurpose hall as suggested by some respondents could be used for wedding hall or birthday celebration hall which will generate income to further maintain and develop other community facilities.

Maintain and make use of the public toilet at the communal buildings for outsiders and labour workers in the neighbourhood, in order to stop the illegal use communal buildings and open spaces. Facility maintenance is an important part of the responsible governance of shared community facilities. Facility operation and maintenance encompass all that broad spectrum of services required to assure the built environment will perform the function for which facility was designed and constructed.

6.2 Increasing public participation

Public participation needs to be considered for all parts of the governance and operations of shared community buildings and facilities. Better community participation helps shared facilities become a part of the fabric of community, rather than being just a place to conduct meeting or obtain services.

- The administrative bodies should give the community on information on how they need to participate and should show the way forward. Working together with the community will increase sense of responsibility toward community facilities. In addition to this administration should consider and acknowledge the community feed back in a meaningful way. In order to enable the public participate well the following personnel's and events should be used as strategies: Block or parcel representative
- Using *Idir* for community development and awareness creation
- Committee members
- Encouraging volunteers form community
- Using monthly payment time when residents pay for infrastructure and garbage collection to inform about community developments.
- Engaging employed personnel's

6.3 Improvement on conceptual design

Architects, planners and decision makers should consider the socio-cultural trend and inhabitants' way of life. The housing designs have to consider vast social class of inhabitants ranging from the upper to lowest income group such as;

- High income
- lower high income
- Middle income
- Lower middle income
- Middle poor and,
- Poorest of the poor.

Typologies should be broad enough not to use 'one size fits all' solutions for different economical and cultural back ground. Based on the data from this thesis about 78% of residents reasons for using open space and corridors for household purpose is shortage of spaces in the kitchen and unavailability of communal buildings. The appropriate kitchen size should be studied and increased in size especially for bigger households. Introducing storage space could be considered in condominium flats.

6.3.1 On the design of communal blocks

Specific location of communal buildings in condominium neighbourhood should lie in between intersection areas of semi public and private spaces at equidistance or radius from every beneficiary house. These houses have to be designed to be flexible in use and needs sufficient light and ventilation. Spaces for extensive cooking should be provided in detail with ventilation and smoke outlet mechanisms. In addition to this current affordable and energy efficient trend of hand washing clothes and clotheslines drying should be encouraged in housing designs. Furthermore future communal facility should be integrated in the design of the and become part of condominium block. Innovative designs based on inhabitants need and way of life should be considered in as another housing design housing design solution.

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Building Construction and City Development
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Appendix 1

This Questioners will be used for educational purpose only!

Objective of the study

- ✓ To understand the role of communal building in condominium neighbourhoods.
- ✓ To identify the weakness and strength of existing communal buildings so as to understand well the current practice.
- ✓ To investigate how much space for cultural activities is integrated or neglected in the housing projects.
- ✓ To understand the role of condominium units owners association in managing communal building.

PART - I

1). Name (□□) _____

2). House no. (□□□ □□□) _____

3). Age (□□□) 1) 18-29 2) 30-59 3) 60 & □□□

4). Employment situation (□□□ □□□□) _____

5). Estimated monthly Income in Birr (□□□□ □□ □□) 1) □□□1500 2) □2000-3000

3) □3000 □□□

6). Marital status (□□□□ □□□) 1) □□□ 2). □□□□ 3) □□

7). Tenure status (□□□□ □□□) 1) □□□□ 2) □□□□

8). Length of stay (□□□□ □□) 1) 0-2□□□ 2) 2-4□□□ 3) □5□□□ □□□

9). Types of housing units (□□□ □□□□) 1) □□□□ 2) □□ 1□□□ 3) □□ 2□□□ 4) □□ 3□□□

10). Size of the household (□□□□□ □□□) 1) 1-2 2) 3-4 3) □5 □□□

PART - II

Q1. Have you ever used communal buildings? (□□□ □□□□□ □□□ □□□□□□□□ □□□□?)

A. yes (□□) B. No (□□□□ □□□□□)

Q2. If yes for Q1. for what purpose: (□□ □□□ □□□ □□□ □□□□□ □□□□□□)

No.	List of Activity (□□□□□□□□ □□□□)	Frequency of use (□□□ □□□□□)	Reasons for using communal buildings: (□□□□□□□□ □□□□□)
1			
2			
3			
4			

Q3. If the answer for question Q.1 is NO Why? (□□□□ □□□□□ □□□ □□□)

A. Distance(□□□) B. comfort (□□□□□) C. Not enough Facilities(□□□□□ □□□□□)

D. The design(□□□□□ □□□) E. The habit of use(□□□□□ □□□)

E. Other reasons _____
(□□ □□□□□ □□) _____

Q4. Do you feel comfortable in using communal buildings? (□□□ □□□□□ □□□ □□□□□ □□□□□?) A. Yes(□□) B. No.(□□□□□□) C.

Because(□□□□□□) _____

Q5. Are you willing to clean communal buildings? (□□□ □□□□□ □□□□ □□□□□ □□□□ □□□ □□?)

A. Yes(□□) B. No(□□□□□□) C. Somebody has to clean it(Λ□ □□ □□□□□□□□)

Because(□□□□□□) _____

—

Q6. What do you think is missing from communal buildings? (□□□ □□□□□ □□□ □□□□□□□ □□□□□□?) A. Good administration (□□ □□□□□□) B. Responsibility of residents (□□□□□□ □□□□□ □□□□) C. Facilities (□□□□□ □□□□□)

D. Other □□ □□□□□ □□

Q7. Do you think communal building is needed at all? (□□□ □□□□□ □□□ □□□□□ □□?)

A.Yes. (□□)

Because(□□□□□□) _____

B.No. (□□□□□□□)

Because(□□□□□□) _____

Q8. What difficulties do you face on day to day household activity? (□□□□□ □□ □□□

□□ □□ □□ □□ □□□ □□□ □□□ □□□□□□?) _____

Q9. What types of activity do you perform on the corridor? (□□□□ □□ □□□□□□ □□□ □□ □□□□□?)

No.	List of Activity(□□□□□□□ □□□□)	Frequency of use (□□□ □□□□□)
1		
2		
3		
4		

Q10. What kinds of activity do you perform on the open spaces? (□□□ □□ □□ □□□□□□ □□□ □□ □□□□□?)

No.	List of Activity(□□□□□□□ □□□□)	Frequency of use (□□□ □□□□□)
1		
2		
3		

Q11. Where do you wash clothes? (□□□ □□ □□□□□□?) _____

Q12. How do you wash clothes? (□□□ □□□□ □□ □□□□□?)

1) Laundry machine (□□□□□) 2) Hand washing (□□□ □□ □□□□□□)

Q13. Where do you dry clothes? (□□□ □□ □□ □□□□□□ □□ □□ □□ □□□□□□?) _____

Q14. Where do you prepare extensive meals? (□□□□ □□□□□ □□ □□ □□□□□□?) _____

Q15. Where do you slaughter goats and dispose the garbage? (□□ □□ □□ □□□□□□?) _____

Q16. Write if you have anything to add (□□ □□ □□□□ □□□ □□?)

PART - III

Questioners for Condo. Association representative



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 - ✓ To understand the role of condominium units owners association in managing communal building.
-
-

- 1) Name of the key informants
- 2) Ranks and responsibility at the association
- 3) What is the mission and goal of the association?
- 4) Who are the members of association?
- 5) Who administer communal buildings?
- 6) What is the administrative structure of communal buildings?
- 7) Who is responsible for renovation and changes in communal buildings?
- 8) Where does the fund come from?
- 9) Who collects the money and how it's collected and how much is it collected?

10) How do residents participate in decision makings?

THANK YOU!

Appendix 2

Communal building around Block-103

The communal building around block 103 is in good physical and sanitary condition. The building is currently in better sanitary condition compared to other communal buildings in the neighbourhood. The reason is mainly due to its strong security the building is guarded 24 hour with two shifts. The whole building is vacant without any function.



Figure A2.1: Pictorial analysis of communal building around Block 103

Communal building around Blcok-89

The communal building around Blcok-89 currently the building is in worst sanitary and physical condition due to lack of control and inappropriate use. Most of the door are locked down and windows glasses are broken as it can be seen in pictures below. Currently the building have no use at all but ashes left from cooking extensive food using fire wood indicates it has been used previously.



Figure A2.2: Pictorial analysis of communal building around Block 89

Appendix 3

Table A1.1: List and general information of Interviewee

No.	Name	House No.	Sex	Tenure status	Length of Stay	Types of Housing Units	Size of the Household	Used Communal Building
1	Aberash Bekele	B-24/11	F	Owner	Above 5 yr.	1 Bed	3	No
2	...	B-31/18	M	Renter	0-2 yr.	2 Bed	2	No
3	...	B-24/24	F	Renter	0-2 yr.	1 Bed	4	No
4	Birtukan Abera (maid)	B-24/25	F	Renter	0-2 yr.	Studio	1	No
5	Teshale G/michael	B-38/09	M	Owner	Above 5 yr.	2 Bed	4	No
6	...	B-24/08	F	Owner	Above 5 yr.	1 Bed	3	Yes
7	...	B-38/02	F	Renter	Above 5 yr.	Studio	3	No
8	...	B-48/01	F	Owner	Above 5 yr.	2 Bed	4	Yes
9	Azmera Mengistu	B-38/06	F	Renter	2-4yr	1 Bed	3	Yes
10	...	B-44/14	M	Owner	Above 5 yr.	2 Bed	5	No
11	...	B-47/07	F	Owner	2-4 yr.	2 Bed	4	Yes
12	Amarech Leggese	B-47/08	F	Owner	0-2 yr.	1 Bed	3	No
13	...	B-38/24	M	Owner	2-4 yr.	Studio	2	No
14	...	B-30/08	M	Owner	Above 5 yr.	2 Bed	6	Yes

15	...	B-30/15	F	Renter	0-2 yr.	1 Bed	4	No
16	...	B-52/11	F	Renter	0-2 yr.	Studio	2	No

No.	Name	House No.	Sex	Tenure status	Length of Stay	Types of Housing Units	Size of the Household	Used Communal Building
17	Lamrot G/Senbet	B-52/05	F	Renter	Above 5 yr.	2 Bed	5	No
18	...	B-52/	F	Renter	...	2 Bed	4	Yes
19	Ejigayehu Tadesse	B-52/13	F	Owner	Above 5 yr.	1 Bed	3	No
20	...	B-52/14	M	Owner	0-2 yr.	2 Bed	4	No
21	...	B-53/ 17	M	Renter	2-4yr	1 Bed	2	No
22	...	B-53/ 05	F	Owner	2-4yr	2 Bed	2	No
23		B-53/ 22	F	Renter	0-2 yr.	1 Bed	5	No
24	...	B-53/ 02	F	Renter	0-2 yr.	2 Bed	4	Yes
25	Rumano Mehamed nure	B-53/ 18	F	Owner	Above 5 yr.	1 Bed	3	Yes
26	...	B-54/16	F	Renter	2-4yr	2 Bed	3	No
27	...	B-54/04	F	Owner	...	1 Bed	2	No
28	...	B-54/ 13	M	Renter	0-2yr.	Studio	1	No
29	Anwar Negash	B-54/25	F	Renter	0-2 yr.	1 Bed	3	No
30	...	B-54/ 09	F	Owner	Above 5 yr.	2 Bed	6	Yes

No.	Name	House No.	Sex	Tenure status	Length of Stay	Types of Housing Units	Size of the Household	Used Communal Building
31	Meselech Hidego	B-139/04	F	Renter	0-2 yr.	2 Bed	4	No
32	Teumay bezabeh	B-139/ 09	M	Owner	Above 5 yr.	2 Bed	5	No
33	...	B-139/ 11	F	Renter	...	2 Bed	3	No
34	...	B-139/ 15	M		2-4yr	2 Bed	3	No
35	...	B-139/ 20	F	Renter	0-2 yr.	2 Bed	4	Yes
36	...	B-146/ 10	F	Owner	Above 5 yr.	2 Bed	4	No
37	Mehamed husean	B-146/ 17	F	Renter	2-4yr	1 Bed	3	No
38	...	B-146/ 18	F	Owner	Above 5 yr.	2 Bed	5	No
39	...	B-146/ 21	M	Renter	2-4yr	1 Bed	1	No
40	...	B-146/ 05	F	Owner	...	1 Bed	3	No
41	Tigest Tefera	B-145/ 09	F	Renter	...	2 Bed	4	No
42	...	B-145/ 12	M	Renter	0-2 yr.	1 Bed	3	No
43	...	B-145/ 18	F	Owner	Above 5 yr.	2 Bed	5	Yes
44	...	B-145/ 17	M	Renter	2-4yr	2 Bed	4	No
45	...	B-145/ 24	F	Renter	0-2 yr.	2 Bed	4	No

