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Characteristics of Mixed Income Neighborhoods in Addis Ababa: The case of Aroge Kera

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**A Thesis Submitted to the chair of the Graduate Program of Housing and Sustainable Development.
Ethiopian Institute of Architecture, Building Construction and City Development in Partial Fulfillment
of the Requirements for the Degree of Masters of Science**

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EiABC, AAU

June 2014

Addis Ababa, Ethiopia

EiABC
(Ethiopian Institute of Architecture, Building Construction City
Development)
Addis Ababa University

MASTER OF SCIENCE IN HOUSING AND SUSTAINABLE DEVELOPMENT

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DECLARATION

I hereby declare that the research entitled Characteristics of Mixed Income Neighborhood: The case of Aroge Kera is my original work.

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 material used for the thesis have been duly acknowledged.

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ABSTRACT

This research is motivated by the existence of different mixed income groups in the city of Addis Ababa where segregation is not seen commonly. Thus, the main purpose of this research is to identify and analyze the characteristics of mixed income neighborhoods in older residential settlements of Addis Ababa. For this, major objectives such as: identifying the socio-economic and spatial characteristics, analyzing the factors and elements that brings mixed-character and investigating the problems and benefits of mixed income neighborhood was set. And case study methodology was used to test and understand real existed situation in a selected study area through primary and secondary data collection techniques. To test the existence of mixed income neighborhood in Addis Ababa, Aroge Kera area which is located in Arada sub-city, *kebele* 01/02 has been chosen for the case study. This area have been investigated in-depth with the life stories of high, middle and low income households based on formulated socio-economic filters such as: sources of income, household income, social interaction, job opportunity, participation in social activity, sharing of household equipment and services. Spatial filters such as: social service and infrastructures, house type, local road, public and private open spaces, compound characters were also used. Then, the data is analyzed both qualitatively and quantitatively. Quantitative issues were analyzed by graphs and descriptions, while qualitative issues were analyzed by maps, tables and descriptions that show comparison and relationships. The major socio-economic findings identified in this research are: the low income people benefited in getting job opportunity and financial support from the middle and high income people when facing problem. The high and middle income households get cheap labor from the low income residents during events like wedding, ceremonies, funeral by preparing *injera*, *wot and tela*. The major spatial findings identified for the existences of mixed income neighborhood are: different house types, private spaces, compound and availability of service for all income level residents. The house type based on area for high income is 120-180m², middle income 60-100m² and 15-3m² for low income households. Compound and front yard for high income one household live in one compound, for middle income 3-6 households live in one compound and for low income 9-13 households live in one compound. As any other neighborhoods the research also identified problems in the neighborhood such as: shortage of children's playground, security problem, and the low income households are more affected by lack of common space in the compound. Based on these findings socially mixed design incorporating spatial elements is suggested and also recommendations and design proposal is forwarded.

ACKNOWLEDGEMENT

First of all, I would like to thank almighty God for helping me to start and complete this work. I express my deepest thanks to my advisor Mr. Yonas Alemayehu, Instructor, Chair of Housing and Sustainable Development, Addis Ababa University (EiABC) for his encouragement, constructive advice and continuous guidance in preparing this thesis.

I would like to acknowledge Ato Moges, planning officer, Arada Sub City, for his support in providing the necessary data and information needed for the research work. I am also thankful to my respondents who gave me their full time, information and life stories with full interest during the research.

Finally, I would like to thank and appreciate my family and my husband Endalk Alemu who gave me strength, advice, support, and encouragement throughout the research work.

Hellom Fantahun Yimam

June 2014, Addis Ababa

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ABBREVIATIONS AND LOCAL TERMS

ABBREVIATIONS

AMI	Area Median Income
ETB	Ethiopian Birr
GO	Governmental Organization
HH	House Hold
HUD	Housing and Urban Development
LDP	Local Development Plan
MSE	Micro and Small scale Enterprise
NGO	Non-Governmental Organization
RHA	Rental Housing Agency

LOCAL TERMS

<i>Ato</i>	Mr.
<i>Atikilttera</i>	A market place around Piassa
<i>Birr</i>	Ethiopian currency
<i>Demera</i>	Ceremony on the cross holiday
<i>Idir</i>	Voluntary burial association
<i>Injera</i>	Ethiopian flat bread
<i>Iqub</i>	Voluntary local money saving association
<i>Sefer</i>	Neighborhood
<i>Kebele</i>	Local government, the smallest administrative unit
<i>Kolo</i>	Traditionally roasted grains
<i>Mahiber</i>	Social activity to celebrate different events
<i>Tela</i>	Traditional alcoholic drink
<i>W/ro</i>	Mrs.
<i>Wot</i>	Traditional Ethiopian food stew

GENERAL NOTES

- For Ethiopian authors, first names are given in the citations of the text: in the reference first names followed by father's name according to the Ethiopian naming system.
- All measurement units in the study are in meters.
- In the study European calendar is used for citation and referencing but only for Ethiopian authors Ethiopian calendar is used.
- Unless specified, all the pictures are taken by the author.
- All the maps in the case study and analysis part are adopted from new line map 2005.
- One Ethiopian birr (ETB) is equivalent to 19.7 US dollars as June 2014

PART I
RESEARCH

CHAPTER ONE

INTRODUCTION

1.1 Motivation

In core areas of the city of Addis Ababa there are neighborhoods with a mix of different income groups and segregation are not seen commonly such neighborhoods still exist having different housing types which are occupied by households of different income groups. Thus, the researcher is motivated to study the characteristics of these mixed income neighborhoods to understand the benefits and challenges experienced by the residents that are attributed to their socio-economic and spatial characteristics. This could be used as background knowledge to design socially sustainable neighborhoods for the future.

1.2 Significance of the Research

The research deals with the characteristics of mixed income neighborhood and the challenges associated with them. It also contributes for the future neighborhood designs by providing knowledge on mixed income housing character. In general, some significances of the research can be summarized as:

- It will provide information about the characteristics of mixed income neighborhoods for policy makers, housing experts, urban managers, designers and, planners, and other professionals.
- It will identify the benefit and problems of mixed income neighborhoods from the points of their socio-economic and spatial characters and provide the findings for various stakeholders in urban development.
- It will give helpful lesson and feedback for future mixed income neighborhood design.
- It will provide valuable information and encourage other researchers for further study.

1.3 Statement of the problem

Many writers had seen the concept of mixed income neighborhood from different points of views and gave their findings and explanations. Although some writers support the idea of mixed income neighborhood and tried to highlight the benefits, there are also oppositions to the idea that emphasize their disadvantage.

Galster (2007) support the concept of mixed income neighborhoods based on the benefits related with place, including: gaining access to more improved services, good quality housing and neighborhood facilities, and a safer environment. Benefits associated with people include accessing instrumental networks through higher-income neighbors and learning from the behavior and lifestyle choices modeled by higher-income neighbors. As higher-income families are assumed to be better or more productive than those of lower-income families they will have influence in the behaviors and lifestyles of their lower income neighbors (Galster, 2007; Joseph, et al. 2007; Popkin, et al. 2000).

The existence of higher income residents should expand social networks and social capital for low-income residents, while also leading to higher levels of accountability to norms and rules among low-income residents (thus increasing order and safety for the entire community). From the research of Chappel (2009) it is found that the presence of social seams such as grocery stores, schools, and parks helps neighborhoods to maintain a mixed-race or mixed-ethnic population. They also hypothesize that social seams serve a similar function in economically diverse neighborhoods. Parks and other social seams in mixed-income neighborhoods may further social networks, cultural and behavioral norms, and social control by facilitating interaction and networking among people from different backgrounds (Chapple, 2009).

Duke (2009) and Kleit (2001), supporters of mixed income neighborhood, mentioned that they assume the lower income groups are beneficiary from the higher families by having access to services and different amenities. Besides the other advantages, Duke also agreed that mixing the different income groups also have a positive outcome in social interaction especially for the lower income families.

Mixed-income supporter assume that spatially integrating low, moderate and higher income residents will provide opportunities for people from different backgrounds to learn about and gain tolerance for people different from themselves (Duke 2009).

Higher-income residents attract quality community services and amenities. When lower-income families live among higher-income households, in housing developments or neighborhoods, they are expected to benefit from the services and amenities such as quality schools and responsive public agencies (Duke 2009; Kleit 2001; and Briggs 1997).

Also Briggs (1997), suggests that mixing residents of varying incomes will improve the lives of middle-class residents through exposure to more diverse populations. Also the higher-income neighbors are assumed to play as role models for lower income residents, demonstrating standards of behavior, housekeeping manners, parenting skills, and other social norms.

In addition, children are also assumed to benefit from living in mixed-income neighborhood in ways similar to adults. From interactions with positive role models and from exposure to socially or culturally diverse people. It is assumed children and youth will develop greater educational and employment aspirations and will have strength to stand for their aspiration (Briggs, 1997).

As there were supporters of mixed income neighborhood, there was also opposition on the concept. Although there is increase in job opportunities for low-income residents moving to income diverse areas, there are no guarantees that these families will be able to access the jobs or that the jobs will offer higher earnings, better benefits, job security, or job innovation (Diane & Zach, 2010).

Other writers such as Joseph and Vale (2006) share the same idea on opposing benefit of mixed income neighborhood. Joseph (2006) suggests that low-income residents in mixed-income neighborhood might benefit from increased informal social control and access to higher quality goods and services, but that they will not be benefited of increasing social interaction. Vale (2006) also argues that the same results, increased social control and access to quality goods and services can be achieved without income mixing through good housing design, good management, and careful tenant selection in entirely low-income housing developments.

In the case of the city of Addis Ababa, Ethiopia, it has historically prided itself on the healthy mix of income levels in most of its neighborhoods. This has resulted from the historic settlement patterns in Addis Ababa. Mixed land use and mixed socio-economic groupings have been common phenomena in most part of the city and become the rule rather than the exception (Addis Ababa city government, 2002). Thus, in its core areas the city has neighborhoods with mixed housing condition and mix of different income groups where segregation is not seen

commonly. However, nowadays, in order to improve housing conditions, new housing strategies are being implemented both by government and private real estate companies (ibid). Even though the majority of these projects, especially the government interventions, were supposed to be economically sustainable, most of them are not being afforded by all income groups, subsequently changing the traditional mixed neighborhood character of the city (ibid).

Therefore, this research assesses the characteristics of mixed income neighborhoods by taking a case study located in the inner city of Addis Ababa commonly known as Aroge Kera. The research focused on elements that contribute for the existence of this neighborhood: socio economic elements such as job opportunity, income, social interaction, sharing house equipment, borrowing and lending money, participating in social activity and spatial elements such as service and infrastructure, house type, local road, back (front) yard, compound and private spaces. Thus, this research will assess the characteristics of a mixed income neighborhoods in accordance with the research questions discussed below.

1.4 The research questions

The research questions are based on the concept that the former neighborhoods of Addis Ababa have mixed character which kept the neighborhoods as they are without segregation. They also include understanding the benefits associated with the mixed income neighborhoods. In addition, the research inquires to identify the factors and elements which can be the socio-economic and spatial elements that help to build the mixed income neighborhoods in Addis Ababa. Other than that, considering the characters and factors, it seeks to draw a lesson which could be essential for the future neighborhood designs. Based on these concepts four main questions are modeled:

- What are the socio-economic and spatial characteristics of mixed income neighborhoods in Addis Ababa?
- What are the major factors and elements which contributed for the existence of mixed income neighborhood in the inner city of Addis Ababa especially in Aroge Kera?
- What is the contribution of existing spatial elements for the mixed income neighborhoods?
- What lessons can be drawn from the mixed income neighborhoods of Addis Ababa for the development of future neighborhoods?

1.5 Objective of the Research

General objective

To assess the characteristics of mixed income neighborhood and to identify the factors and elements which contribute for the existence of mixed neighborhoods.

Specific objective

- To identify and analyze the characteristics of mixed income neighborhood.
- To analyze the factors and elements that brings mixed income neighborhood in Aroge Kera.
- To investigate the problems and benefits of mixed income neighborhood.
- To identify the socio-economic and spatial implications of mixity.
- To design and propose mixed income neighborhood for the future.

1.6 Scope of the research

Thematic scope: among the very many aspects of a neighborhood, this research focuses on the characteristics of mixed income neighborhood from the perspectives of socio-economic and spatial aspects. In each issues the benefits, challenges, and physical elements that contribute for the mixity are included.

Geographic scope: among the many neighborhoods that exist in Addis Ababa, this research focuses on Aroge Kera neighborhood where the existence of mixed income residents is clearly visible. And the general location taken as a case study is found around the central part of Addis Ababa, in Arada sub-city *Kebele* 01/02. To make an in depth study, this research focused on the 17 hectares from the overall Aroge Kera neighborhood.

1.7 Limitation of the research

One of the limitations the researcher faced while doing this research was the Arada Sub-City or *Kebele* 01/02 does not have specific data for the chosen site of the Aroge Kera area. On issues like socio-economic aspects such as: number of population, household size, sex distribution, employment status, amount of income and source of income.

Another limitation faced while collecting data was unwillingness of the community to give the necessary data for the researcher during interview in the case study area (Aroge Kera).

Because most of the residents were not aware about research, it was very hard to get real data from the respondents. This unwilling of the respondent made the researcher to spend a lot of time in elaborating the purpose and benefits of the research. Finally, after repetitive discussions with the respondents, the necessary data was collected.

1.8 Organization of the research

The research is organized in to two parts: Part-I: Research and Part-II: Recommendation & Design Proposal. The first part includes five chapters. *Chapter One* deals with introduction and background of the study, statement of the problem, objective of the study, research questions, significance, scope of the study and limitation. *Chapter Two* describes the research methodology, research design, data source, data collection and data analysis. Under *Chapter Three*, the review of related literatures, various aspects of written documents and articles by different writers are assessed. In addition, in this chapter discussions of previously done case studies of other countries' experience on mixed income neighborhood are included. In *Chapter Four*, the case study is presented which discusses the empirical data that shows the characteristics of mixed income neighborhood from the socio-economic and physical point of view. *Chapter Five* which is final chapter of part one, contains analysis and findings of the research based on the data found from the case study. The second part which has only one chapter: *Chapter Six* presents the implications and recommendations of the assessment in general and schematic design proposals.

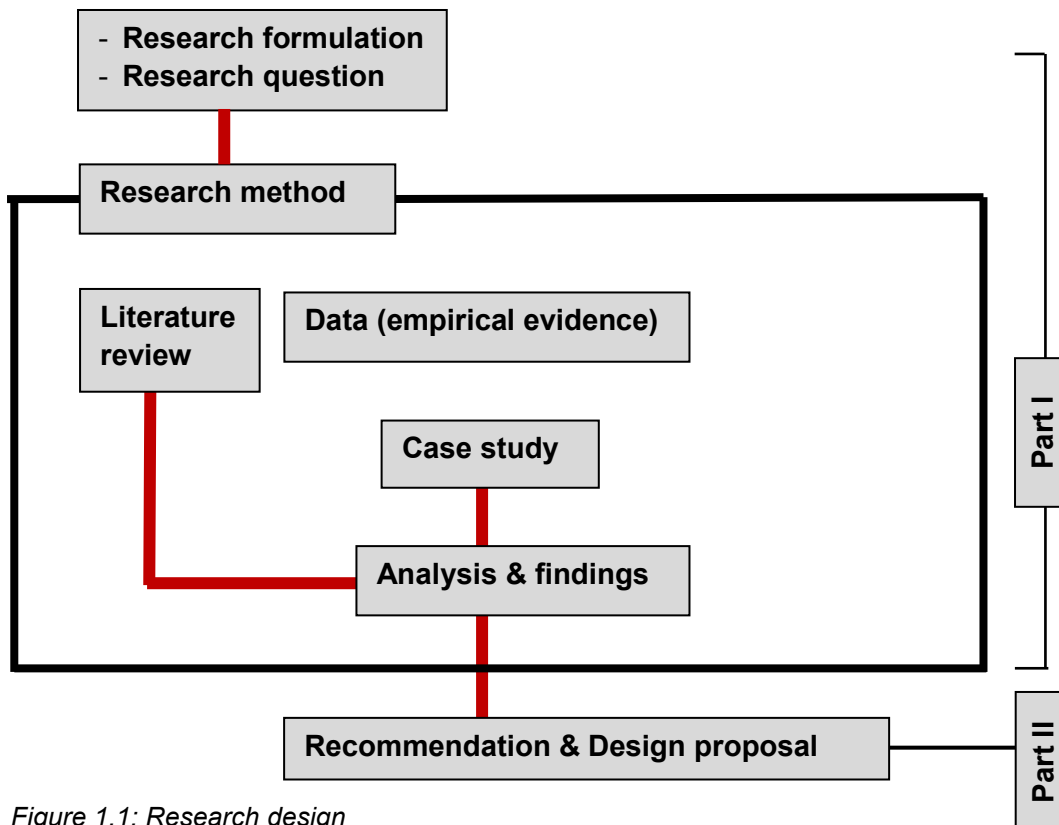


Figure 1.1: Research design

CHAPTER TWO

RESEARCH METHODOLOGY

2.1 Introduction

The purpose of this chapter is to clarify the research methodology used for the research by discussing different points such as: choice of research methodology, selection criteria for the case, purpose of the data collection and research design are discussed. In addition, the data collection techniques used, data analysis technique and validity of the research are clearly presented.

2.2 Choice of Research Method

The research targets to recognize the characteristics of mixed income neighborhoods in Addis Ababa. For this purpose it is important to understand the real existed situation. Therefore, case study is found to be appropriate as a research method. As it is mentioned by Yin (2009) the case study method allows investigating and retaining the holistic and meaningful characteristics of real life events such as individual life cycles, small group behavior, organizational and managerial processes, neighborhood change, etc. As a research method, a case study is used in many situations, to contribute to our knowledge of individual, group, organizational, social, political and related phenomenon (ibid). Yin also described case studies as important to explain the presumed casual links in real life interventions that are too complex for the survey or experimental strategies, and to describe an intervention and the real life context in which it occurred.

In the research a case study area was taken among the neighborhoods of Addis Ababa. By this the research aims to understand the characteristics of mixed income neighborhoods including the element that contributes for the mixity, with these key issues in mind research questions were formulated. As explained by Yin (2009) the importance of differentiating the various research methods is to classify the type of research question being asked. In general “what” questions may either be exploratory (in which case, any of the methods could be used) or about prevalence (in which survey or the analysis of archival records would be favored). Yin also mentioned that defining the research question is probably the most important step to be taken in a research study.

2.3 Selection of cases

From the inner city of Addis Ababa among the 10 sub cities Arada Sub city is chosen as a study area. The area is selected by the recommendation of Arada sub city officers, richness, and availability of data and easy access of information. In addition, from the observation and initial survey made by the researcher, Aroge Kera, *kebele* 01/02 which is one of the oldest settlements in Addis Ababa, is found to be proper sample case study area because of the obvious presence of mixed income residents.

In a summery the following are conceived as selection criteria:

- The existence of mixed income neighborhood
- Location of the area in inner city
- Characteristics of the neighborhood
- One of the oldest settlements in Addis Ababa.

As it is also described by Yin (2009), the resulting data from sample that is actually surveyed are assumed to reflect the entire universe i.e. old neighborhoods in Addis Ababa with inferential statistics used to establish the confidence intervals for which the representation is presumes accurate. For this research in the selected area (Aroge Kera) there are around 350 residents and the researcher took 10% i.e. 35 households. The sample households selected are 12 households from high income, 8 from middle and 15 households from the low incomes.

2.4 Purpose of data collection

The main purposes of the data collected were: to recognize the characteristics of a mixed income neighborhoods, and the benefit and problems the residents face while living in the neighborhoods. This knowledge will help in designing future neighborhoods. And also to distinguish the characters regarding to the socio economic and physical elements which contributes for the mixity.

2.5 Research Design

Research design is a plan that guides the investigator in the process of collecting, analyzing, and interpreting observations. It is a logical model of proof that allows the researcher to draw inferences concerning causal relations among the variables under investigation (Nachmias, 1992).

As Nachmias (1992) also mentioned research design deals with at least four problems: what question to study, what data are relevant, what data to collect and how to analyze the results. Therefore, the researcher used socio economic and physical character as a study device for the research design in such a way that will help to observe, analyze and finalize the research

In addition Yin (2009) stated research design is a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered, and there is some set conclusions (answers) about these questions. He also specified that a research design should indicate what data are to be collected-as indicated by a study's question, its proposition (suggestion), and its unit of analysis. The design also should tell what to be done after the data have been collected and the criteria for interpreting the findings.

Thus in this study, the researcher used characteristics of socio-economic and physical elements as a study mechanism for the research design and the data is planned to be collected from municipality, sub-city and *Kebele*, by going door to door to the sample resident's house and direct observation. Accordingly, data analysis is done in relation from the case study based on the character and elements contribute for the mixed income neighborhood. The research is then concluded by stating the findings from the data analysis and the case study.

2.6 Data Collection Technique

For this study both primary and secondary data collection techniques are used. Primary data is collected through taking pictures, case study, interviewing, direct observation, mapping, sample life story interview. Secondary data collected from books, library, articles, research papers, Aroge Kera local development plan and maps.

I) Primary Data Collection

Primary data is a type of information that is obtained directly from first-hand sources by means of surveys, observation or experimentation. It is data that has not been previously published and is derived from a new or original research study and collected at the source (Jankowicz, 1995). For this research the following techniques of primary data are collected by using:

Interviews: The data is collected through interviewing the key informants from offices like *Kebele* officers, municipality or sub-city. The informants were selected putting in mind that

they were capable of giving different information about the site and can also provide formal data like maps and documents about the site.

Questionnaire: The questionnaires are distributed and collected to the sample respondents house which are the selected 35 households and both open-ended and close ended questions were prepared .Open-ended questions are prepared to get detailed data information and life story of the sample respondents so that the researcher get all necessary qualitative data needed. The open -ended questions: name, age, household income, benefit they get from the mixed income neighborhood, challenges, what contribution did the physical spaces has for the mixed income neighborhood like : the common road, house type, common spaces in the compound, and their opinion on what has to be done for the future neighborhoods design to sustain mixity. The close ended questions contains a yes or no answer like: if the respondents think the neighborhood is mix of different income, if there is cross financing issue in the neighborhood and if they get any economic benefit from their neighbors.

Life stories: In order to study the existence, advantage and factors for the existence of mixed income neighborhood a sample of 12 life story were used in the research. From each income groups four households are taken. The sample respondents are selected according to the willingness of respond and the detailed information (data) they give.

Direct observation: The researcher has done observations on the spatial and activity on the site to check if the existence of the different income groups is visually observed. This will help the researcher to analyze if there is a spatial implication for the mixed income neighborhood in addition to the respondent's opinion or theory of why the mixed income existed.

Taking pictures: pictures were taken to support the research with graphics that show the different income group mixity, physical setting and activity. while taking photos the researcher asked permission to have a picture of the interviewed household, his/her house, and the compound in order to see the characteristics of mixed income neighborhood physically and give depth to the life story by supporting it with pictures.

Mapping: The physical elements, activities and factors that contributed for the mixity are mapped by the researcher. Mapping of the elements such as services, infrastructures,

mixed type of the houses, front yards, compound, common road and the open spaces has helped to reach to the findings.

II) Secondary Data Collection

Secondary data is information that has already been collected and is usually available in printed or electronic form. Secondary data has often been collected, analyzed, and organized with a specific purpose in mind. Some of the advantages of using secondary data for a research include both cost and time savings. Data that has been published by government agencies is relatively readily available and free of charge, while data collected and analyzed by private companies may require permission for use. Secondary data can be found through company reports, government agencies and so on (Salant & Dillman, 1994).

For this research various relevant materials and documents are collected, referred and used as a secondary data. For the data collection, the sources used were books, different articles, research papers, Aroge Kera local development plan and maps from Arada sub city.

2.7 Data Analysis techniques

As it is also mentioned by Elias (2008), there are four level of analysis. Thus, the researcher used one of the comparison method which is same case analysis in order to analyze the key filters (issues) discussed in the case study. Same case analysis implies information from the same case is analyzed in comparison to the key issued (Elias, 2008).

According to Yin (2009) case study allows studying or exploring the overall existed case, data, character of individual life stories, society behavior, and neighborhood change. By using case study as one of research method the researcher can analyze the data by mixed method design which is mixing both same case analysis of qualitatively and quantitatively approach.

For this research on the process of data analysis, both qualitative and quantitative analysis techniques are used. For qualitative analysis method was chosen to analyze the data by comparing the different income residents based on the filters such as: local road, house types, front yard and compound. In general the detailed descriptions of events such as: life stories of the respondents, situations and interviews, discussions and observations as well as some open-ended opinions are analyzed qualitatively by comparing.

The quantitative analysis method used percentages, graphs and tables for comparing and analyzing the countable data of different income groups. The analysis is made based on the filters such as: the employment status, income per month, length of stay, benefit of mixed income neighborhood (such as: financial benefit, social interaction, job opportunity and service available), participation in social activity, and ownership status.

2.8 Validity and Reliability

The reliability of this research mainly focuses on the response of the residents (life stories). But it is very challenging to get reliable data and reach a conclusion. Thus, it is important to cross check the data from other sources of evidence using triangulation. According to Yin (2009), triangulation is a rationale for using multiple source of evidence. A major strength of case study data collection is the opportunity to use many different sources of evidence. The use of multiple source of evidence in case studies allows an investigator to address a broader range of historical and behavioral issues (ibid). Triangulation is important technique of making the result of a case study valid (Elias, 2008). Therefore, by using triangulation the collected data which are from: Arada sub city, LDP study, the residents and *Kebele* officials (who lives in the neighborhood) are cross checked to get a valid source of evidence.

CHAPTER THREE

RELATED LITERATURE REVIEW

The aim of this chapter is to discuss the various literatures reviewed regarding the characteristics of mixed income neighborhood from different points of views. This section specifically focuses on the concept of mixed income neighborhood, its socio-economic and physical character, its benefit, and success and challenge in an urban setting. In addition, it also discusses other countries practices.

3.1 Introduction

Mixed-income neighborhoods can be defined by the degree of income diversity that is present in an area or the percent of poor households that exist within, regardless of the width of income mix (Diane, 2010). For example, Galster, et al. (2008) characterizes areas in terms of four degrees of income diversity: high diversity, moderate diversity, low diversity, and not diverse.

In the book *Mixed Income Housing: Unanswered Questions*, Schwartz and Tajbakhsh (1996) stated that mixed income housing means different things to different people and varies by housing market. For example, these writers categorize mixed-income housing based on whether it is mixed at the project level or the neighborhood level and whether the sponsors/owners are public, private, or a combination of the two. Another researcher, Tunstal (2011) from his study in England defined the idea as a tool to achieve social mix through housing and renewal policy, and a main indicator of social mix.

Other writers, such as Brophy and Smith (1997), define mixed-income as the deliberate effort to construct and/or own a multifamily development that has the mixing of income groups as a fundamental part of its financial and operational plans. And they concluded that, a mix of incomes is planned because of the community desire and need, housing market conditions in the surrounding area, and the availability of financing and subsidies. Smith (2002) stated that to a great extent mixed-income housing has become a preferred means of developing affordable housing. A mixed-income approach can potentially provide both higher-quality units that lack any social stigma, and an encouragement to maintain the development to a high standard.

Besides the concept and definition of mixed income neighborhood, Schwartz (1996), tried to classify the type of mixed income neighborhood in different ways; because the term mixed-

income neighborhood can refer many different kinds of housing. He also stated that mixed income developments vary in the number of income groups included, the amount of income mixing that occurs, and the quality of housing occupied by various income groups. Sometimes each building—or even each floor—of a mixed-income development includes households from every income group. The type of mixed income neighborhood can be categorized as: the income groups occupy different sections of the development, with lower income households positioned apart from higher income residents (Schwartz, 1996). Similarly, some developments provide the same quality of housing—in terms of size and amenities—for residents from all income groups, while others offer smaller, less-standard homes for lower income households. Mixed-income housing has been sponsored by public, nonprofit, and for-profit organizations and can include homeowners as well as renters (Schwartz, 1996).

Fernandez (1997) who studied “The Social Integration Project as a Part of Chilean Housing Policy”, mixed housing was described as a major objective, not only oriented to get a more diverse typologies of houses or not only mixed type of housing. The main concern was to promote ‘mixture’ (mixed housing), trying to mix people and houses in the same development.

Generally, the term mixed income neighborhood does not carry a formal definition in the housing field and there is no commonly accepted definition. But as it is discussed by different writers it can generally be defined as mixture or mixed housing with mix of different income people and houses in the same development.

3.2 Characteristics of Mixed-Income Neighborhoods

One of the writers that explained the concept of mixed income neighborhood Newman (2007) identified three important characteristics that indicate the features of mixed income neighborhood: (1) meaningful social interaction between high- and low income residents; (2) both residents and management must strongly implement rules and norms; and (3) successful developments must provide employment training and placement services for low income residents.

1. Social Interaction - Some researches shows that meaningful social interaction between high- and low-income residents—for instance, interactions that becomes makes them very intimate may low income residents to have job opportunity (Smith, 2002). Perhaps the more mixed-income developments physically integrate high- and low-income residents; the more these income groups will interact with one another.

2. Enforcement of Rules and Social Norms - After reviewing the existing research and interviewing mixed-income housing developers (where and when), Smith (2002) concluded that management's strict enforcement of rules has more to do with reducing low-income residents' negative social behaviors in mixed-income housing developments than does the income mix of the residents.

3. Employment Training and Provision of Services - Based on their study of mixed-income developments, Brophy and Smith (1997) concluded that income mixing alone is not sufficient if the goal of developments is to help low-income residents achieve upward mobility. To achieve that goal, they assert that developments must provide employment training and service provision.

Other researchers, Schwartz and Tajbakhsh (1996), proponents of mixed-income developments, suggest that the character of mixed income neighborhood affects the social networks and norms of their residents. The presence of higher income residents should expand social networks and social capital for low-income residents, while also leading to higher levels of accountability to norms and rules among low-income residents (thus increasing order and safety for the entire community). They have also explained that, in order to maintain and develop mixed-income housing; proponents seem assume that the benefit of socio economic and physical characteristics of mixed income neighborhood can be defined as:

- Increased social interaction between the low-income moderate and high income.
- Institutional maintenance and support of the management by high and moderate-income groups, through participation in volunteer programs and support of rules and rule enforcement by management.
- A positive effect on the employment rate of low-income residents.

As it is described in the book, *Providing affordable family housing and reducing residential segregation by income* Anderson (2010) the social-economic and physical characteristics of neighborhoods are increasingly recognized as having both short- and long-term consequences for residents' physical and psychological well-being. And they mentioned that mixed neighborhood qualities are associated with residents' socioeconomic characteristics (e.g., poverty rate, level of welfare participation, percentage of workers with professional or managerial jobs) have an effect on individual social, economic, and health outcomes that is either independent of, or interacts with, individual-level factors. The "neighborhood character" arise from socioeconomic status tends to reflect, social cohesion, the availability of employment

opportunities, the availability and quality of neighborhood services, and the quality of the physical environment.

In their research they have tried to develop conceptual models used to evaluate the effectiveness of mixed-income housing developments. And they considered among the environmental factors the most significant are neighborhood physical and social conditions; the quality and availability of public services in a neighborhood; opportunities for employment, access to goods and services, and other benefits provided by economic activity within the neighborhood; and the adequacy of the local housing supply in providing affordable housing for the different income households (ibid).

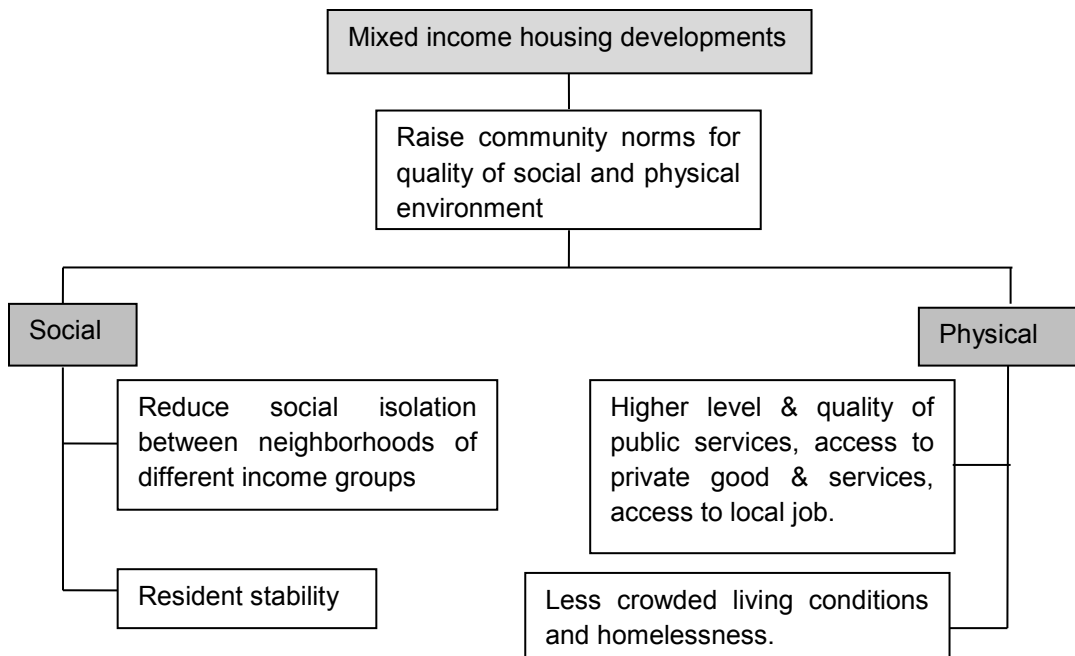


Figure 3.1: Analytic framework used to evaluate the effectiveness of mixed-income housing developments.

Source: Adapted from Laurie (2010) *Providing affordable family housing and reducing residential segregation by income*

Furthermore, Brunson (1998) suggests that the formation of neighborhood social ties between different income groups may substantially depend on the informal social contact which occurs in neighborhood common spaces and that in inner-city neighborhoods where common spaces are often barren no-man's lands, the presence of trees and grass supports common space use and informal social contact among the mixed neighbors. It appears that trees and grass play an important role in attracting people to neighborhood common spaces in inner-city neighborhoods.

If informal social contact among neighbors is a key factor in the development of neighborhood social ties, and the level of vegetation in neighborhood common spaces is a key factor in the shared use of those spaces (and hence, opportunities for informal social contact), perhaps the level of vegetation in such spaces can ultimately affect the development of neighborhood social ties (ibid).

Brunson also suggest that the use and characteristics of physical element such as common spaces, outdoor spaces, trees may neighborhood social ties are the glue which makes a collection of unrelated neighbors into a neighborhood—a source of social support and sense of community. Therefore Brunson concluded from his research that a physical element which is considered as common space in his research is one element that that gives rise to stronger neighborhood social ties for the mixed neighborhood. In addition the presence of social interaction which may lead to good social intimacy and job opportunity describes the characteristics of mixed income neighborhood.

Other researchers also indicated that characteristics of high- and low-income neighborhoods are different. The characteristics of high income neighborhoods are associated with higher-quality educational resources such as schools, teachers, libraries, literacy programs, and museums. They also typically have plenty of parks, community centers, and organized social and recreational activities, such as sports, art, and theater programs (Rumberger, 2005). On the other hand low- to moderate-income neighborhoods have limited access to most, if not all, of these resources. When education or recreational programs are present in lower-income communities, they tend to have smaller and less experienced staffs, less support from parental volunteers, and fewer books and toys that encourage learning (Gould and Austin 1997). Similarly, they have found that poor urban communities typically lack high-quality services. These include physical, social, recreational, childcare, educational, mental health, and job training services.

Thus, incorporating good quality services of high income neighborhoods and upgrading services of low income neighborhood can promote suitable living condition for all income groups in mixed income neighborhood.

3.3 Benefit of Mixed Income Neighborhoods

Physical concentration of poor households in multifamily neighborhood causes severe problems for the residents, including joblessness, drug abuse, and welfare dependency (Brophy, 1997). According to this theory, a mixture of income levels will reduce the social pathology caused by concentration. Expected results of mixed-income housing include the following (Ibid):

- The behavior patterns of some lower income residents will be altered by emulating those of their higher income neighbors. The quality of the living environment, not housing quality alone, leads to upward mobility.
- Nonworking low-income tenants will find their way into the workplace in greater numbers because of the social norms of their new environment (for example, going to work/school every day) and the informal networking with employed neighbors.
- The crime rate will fall because the higher income households will set a ground rules for the community.
- Low-income households will have the benefit of better schools, access to jobs, and enhanced safety, enabling them to move themselves and their children beyond their current economic condition.

Diane and Zach (2010) identify four ways in which mixed-income neighborhood is thought to improve the socioeconomic positions of poor people. Mixed-income environments are believed to:

- improve social networks whereby poor people expand their job-search,
- improve social control, where the presence of higher-income people leads to higher levels of accountability to established norms and rules followed by increased order and safety,
- recommend behavioral effects in which higher-income residents model alternate lifestyles and norms, which bring behavioral change and increased self-efficacy among low-income residents
- Improve the political economy of place, where the presence of higher-income residents will create new market demand and effective political pressure that will lead to higher-quality goods and services for all residents.

The University of Chicago, School of Social Service Administration, has made a research on the mixed income neighborhood of Chicago (University of Chicago, 2012). And when some

residents were asked the benefit of having mixed neighborhood, they focused on the benefit of the presence of higher income neighbor's contribution to the improvement of the environment. The lower income residents might gain from interacting directly with the higher income neighbors including access to job networks and other resources (Ibid). The research further reveals that:

Among residents of mixed-income neighborhood, people across income levels have reported benefits. A number of studies have found that residents across income levels agree that housing quality and the location of mixed-income neighborhoods are good. There is considerable agreement that mixed-income neighborhoods are relatively safe and well managed and maintained. Lower-income families also have reported benefits associated with moving to mixed-income neighborhoods in terms of employment, mental health, and educational opportunities (University of Chicago, 2012).

3.4 Success and Challenges on Creating Mixed-Income Housing

Blake and Freiberg (2007) has discussed about reasons for challenges faced and achieved successes by different project which worked on creating mixed income housing in low poverty areas in Carlsbad, CA (San Diego County). In this case the writers took creating mixed income housing in low poverty area as one option to develop a successful mixed neighborhood but there were both reasons for success and challenges on creating mixed income neighborhood. In their study "low-poverty area" is defined as a neighborhood with low poverty rate which is an area with already existed high performing school, job growth, and quality municipal services including transportation.

3.4.1 Reasons for successes

As Blake and Freiberg (2007) argue in their research, some projects have succeeded in creating mixed income housing in low poverty areas. The major reasons for these successes are:

Conscious choice by developer: in order to choose the development team either, 1) looked for and identified a site in a low-poverty area for the purpose of building mixed-income housing, or 2) obtaining an opportunity to build in a low poverty area, decided to create a mixed-income housing development. Then the developers will report that they made a commitment to expand

housing opportunities and offer new choices to low-income tenants that had not previously been available within certain housing markets.

Site selection: when the housing sites is selected it should consider the availability of the infrastructures, public transportation, recreation space, retail services, and other residential amenities, employment opportunities etc...

Uniquely combined adaptable funding sources: Developing mixed-income housing in low-poverty areas helps to bring together a creative and wide selection of adaptable federal, state, local, and private financial resources. Co-operation between for-profit and nonprofit developers helped to facilitate the process of uniquely combining funding sources. Incorporating adaptable local and regional resources and developing new public/private partnerships also strengthened the development team's ability to raise funds for the initial development, as well as for ongoing management of each site.

Local and state government participation: Contribution of number of local and state policy interventions to the development of several of the mixed income housing.

Site design: In order to attract and maintain renter of different incomes, the developers should consider and design the site's common use elements. Designated parking spaces, garages, landscaped grounds, and private unit entrances are common features at many of the sites. Communal amenities such as swimming pools, picnic areas, club houses, fitness rooms, and playgrounds. These amenities provide opportunities for social and recreational interaction between residents. In generally the researchers has mentioned about choosing a site of a low-poverty area or getting opportunity of building in a low poverty area can be taken as a means (option) to brought mixed income housing in a neighborhood.

3.4.2 Challenges on Creating Mixed-Income Housing in Low-Poverty Areas

As there were success in creating mixed income housing Blake and Freiberg (2007) also discussed challenges that a developer face while trying to build a mixed income neighborhood in a low poverty area which include:

1. Need for Shared Information within the housing site (where development is about to be implemented)- Housing developers are currently creating mixed-income rental housing in low-poverty areas in relative isolation from each other and from fair housing advocates. Consequently, they do not have the benefit of shared information and knowledge typically available within other models of affordable housing development. In other words while designing

for mixed income housing in low poverty area the developer have no knowledge and experience of the other countries in creating such neighborhood so there will be a problem and the mistake which was done previously might appear again.

2. Resource Scarcity - Affordable housing developers use significant time and effort seeking funding from public and private sources for specific housing projects. Mixed-income housing developers building in low-poverty areas also face these same financial challenges. Additionally, they often compete for these scarce resources at a disadvantage because policy priorities and limitations on funding sources favor the creation of single income level entirely affordable housing in higher poverty areas. Furthermore, some federal, state, and local government policies and program requirements are not favorable to the development of mixed-income housing in low-poverty areas. While many programs provide incentives for developing more affordable units or units affordable to lower income residents, most do not provide incentives to create mixed-income housing that incorporates market-rate units, especially not in low poverty neighborhoods. Generally speaking, if there is limitation and lack of resource or no support from the government or private body it will be difficult for the developer to design for the poor because he might not get profit but designing for the high incomes will be profitable. So it will be difficult for the developer to satisfy the need of the different income groups.

3. Economic Feasibility in Areas with Lower Market Rents - For developers planning to build mixed-income housing in low-poverty areas with lower market rents there is an additional financial challenge to be met in order to create an economically feasible project. Unlike developers in high rent areas where the market-rate rents should generate sufficient revenue to fully support the development and operation of those units, developers in more moderate rent markets are likely to face a financing gap. The specific challenge in these situations is for the developer to raise sufficient financial resources to bridge the gap between the funds raised from tax credits for the affordable units and the revenues to be generated from the market-rate units. In general the project by itself is not economically feasible because for the developer it is difficult to rent or sell the houses in cheap price for the low incomes because they can't afford and it will be difficult to manage the gap of the tax and the project of making mixed income neighborhood.

4. Local Government Policies that Restrict Access to Housing - Some local governments impose or seek to impose requirements on affordable housing developers that restrict access to new housing opportunities. Some requirements are incorporated into local ordinances or zoning codes; others are made as a condition of local support for a particular project. These

requirements impede the ability of developers to create diverse rental housing and to fully comply with fair housing laws. Generally it is not easy for the developer if there is a limit and restriction on access to new housing.

5. Lack of Inclusionary Zoning and Fair Share Housing Programs – inclusionary zoning is a key drive for the development of mixed income housing in low-poverty communities. In order to have a mixed type of housing in a neighborhood the planning by itself has to include spaces for mixed type of houses in the planning.

6. Higher Land Costs - As a general rule, land costs more in low-poverty neighborhoods than in areas of higher poverty where market demand for the land is lower. In fact, building affordable housing in low-poverty areas can be especially challenging due to land costs alone because of the high land value.

3.5 International practices of mixed income neighborhoods

As discussed by Landman (2012) there has been a greater call for mixed income housing developments all over the world since the beginning of the 21st century. Whether it is characteristic of the growing trend of New Urbanism, in support of creating more diverse places, or part of a larger movement towards more sustainable neighborhoods and cities, urban planners and designers have increasingly proclaimed the need for mixed income housing. Therefore in this research, the researcher took the cases of Baltimore, Maryland and Delhi, India that experience mixed income neighborhood.

Box 3.1 Baltimore, Maryland

Newman (2007) has studied mixed-income neighborhoods taking a case study in Baltimore, Maryland USA. In his case study he describes the strategies and achievements made by the civic association of Maryland to maintain the mixed income character of Howard Park.

Howard Park

The mixed-income sites in Howard Park have experienced major demographic shifts since the 1960s, when wealthy residents began moving to Baltimore region. The high income comparison study sites in Homeland began as a planned community for the rich in north Baltimore and have remained that way ever since. The low-income comparison study sites in Bayview are located in southeast Baltimore near the Johns Hopkins Bayview Medical Campus and are stable working-class areas. During this transitional period, developers pressured the city to rezone Howard Park to allow denser housing; the Howard Park Civic Association continually fought these zoning changes and was largely successful at maintaining the suburban-style character of the neighborhood.

During the last four decades, Howard Park experienced a mild shift in socioeconomic status and a more major change in income composition. In the 1960s and 1970s, middle-class began moving into the neighborhood. As a result, the newly redeveloped area of Howard Park has maintained its previous mixed income housing character. The Howard Park Civic Association continually fought these zoning changes and was largely successful at maintaining the mixed-income character of the neighborhood.

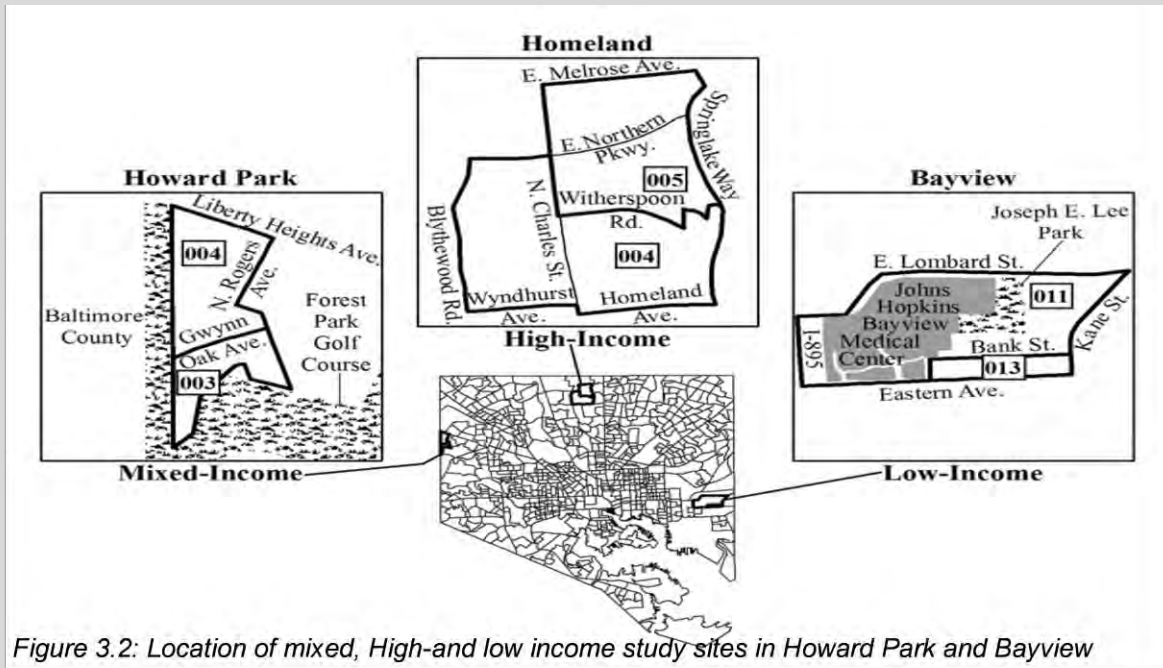
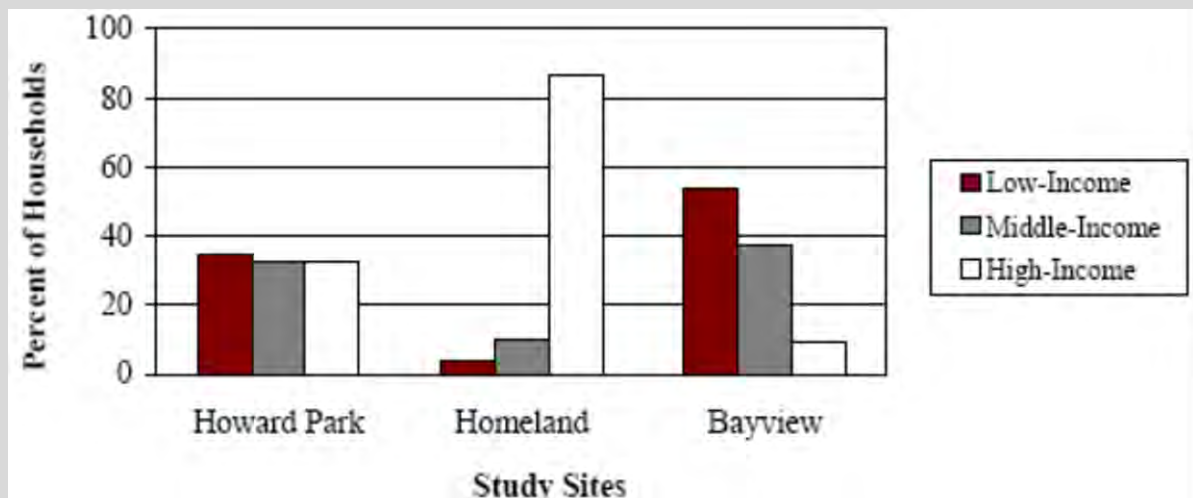


Figure 3.2: Location of mixed, High-and low income study sites in Howard Park and Bayview

Source: Newman (2007) *Mixed income neighborhoods: theory meets reality in Baltimore*



Graph 3.1: Income Mix in Howard Park, Homeland and Bayview Study Sites, 2000

Source: Newman (2007) *Mixed income neighborhoods: theory meets reality in Baltimore*

Therefore from the research it is found out that in order to maintain the mixed neighborhood successfully in Howard park, the physical elements such as: school quality, educational attainment, crime, homeownership and housing stock (which is exhibited the most diverse with different sized houses) were mentioned by the residents as the major characteristics which contributed for the mixity. The existence of nearby services such as school and hospital are other contributing elements in addition to creating employment opportunity. The residents also respond that the socio economic factors which is meaning full interaction between neighbors as other character of the neighborhood. In addition to the above elements, residential stability and social capital--suggest Howard Park as a successful mixed-income neighborhood.

Box 3.2 Delhi, India

In the city of Delhi concentration of low-income families in one location leads to the creation of social ghettos and creates several disadvantages and problems:

- Due to **lack of investment in civic amenities** and basic social infrastructure –these areas often face unemployment, lack of education, crime and very unsanitary living conditions.
- **Mono-cultural concentration** leads to creation of previous rural life styles, delaying the integration of rural immigrants into the urban lifestyle and overall city fabric.
- Isolation leads to **social stigma**, and spatial segregation of economic classes. Lack of shared public spaces with higher income groups creates further social segregation and disregard.

Very often, low income communities are relocated to new locations with the assurance of basic civic and infrastructure amenities, but many of the requirements are not eventually provided by the authorities due a variety of reasons.



Figure 3.3: Neighborhoods in India

Source: Ministry of Housing & Urban Poverty Alleviation, Government of India (2009)

Therefore considering the above issues, the government of India, ministry of Housing & Urban Alleviation (2009) embraced that it is essential that low income groups are located near their sources of employment and within walking distance of informal sources of employment like higher income households and other amenities within the city. Low income groups need to be “mixed” with other income groups in order to reduce social segregation and stigma and build civic pride and provision of good and shared public services and amenities.

Ministry of Housing & Urban Alleviation (2007) aims in providing sustainable affordable housing based on some of the following issues:

1. Provide “Choices” in flexibility of design, use of space, availability of space, tenure, and location of low-income homes.

- Provide choice of dwelling unit size based on location and provision of amenities.
- Provide flexibility for adaptation of low-income community homes to facilitate home or community based economic activity.

2. Involve low-income communities in rehabilitation process, and design and construction of their communities.

3. Address Safety:

- Street design
- Clear hierarchy of streets with well-defined and legible zones for pedestrians, bicycles, buses and cars – would reduce accidents and create safety.
- Mixing of income groups in one location - helps reduce crime.
- Shared public spaces, social amenities and physical infrastructure allow social interaction of different income groups in common public spaces.

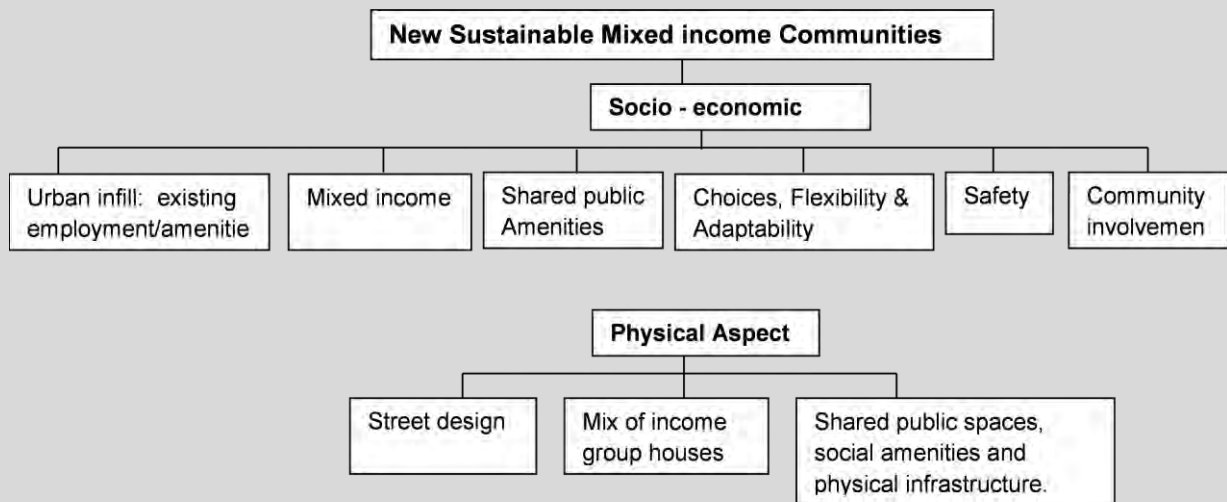


Figure 3.4: Newly developed mixed income community

Source: Ministry of Housing & Urban Poverty Alleviation, Government of India (2009)

After a research has been done by the Ministry of Housing & Urban Alleviation, Government of India and the national resource, a case study area was taken to exercise the new sustainable mixed income neighborhood. In the design proposal, it is considered that high and middle income groups are important sources of informal employment for low income groups in addition many high income families like to have domestic help living close by and are willing to pay for their accommodation.

In this scenario, low-income families may either be located within the same compound as the high income groups; or in adjoining pockets or blocks, sharing common public amenities and infrastructure. This helps support the interdependence between different income groups due to close proximity, and yet helps maintain their individual social and cultural identities, without creating social segregation.



Figure 3.5: The new developed mixed income neighborhood

Source: Ministry of Housing & Urban Poverty Alleviation, Government of India (2009)

CHAPTER FOUR

CASE STUDY

4.1 Background

Housing has been one of the critical problems in Addis Ababa, Ethiopia. A lot of studies have been undertaken and recommendations forwarded to solve this multifaceted problem. In order to solve this problem new housing projects have been studied and are being implemented both by the government and private developers, especially the government interventions, were supposed to be economically sustainable. However, most of them are not being afforded by all income groups especially for the low income earners (Medhanit, 2011). As Addis Ababa has historically pride itself on the healthy mix of income levels in most of its neighborhoods, this thesis will assess their characteristics by taking a case study specifically in the core area of the city. In addition it also investigates the factors and elements that contribute for the mixed income neighborhood.

The chapter has two sections which deal with general background of Addis Ababa housing and the existing mixed income character of Addis Ababa's neighborhoods

4.1.1 General background of Addis Ababa housing

As many other developing countries, housing problems in Ethiopian cities are generally shown in critical shortage of housing, decay of existing housing stock and lack of basic services and infrastructure for housing development (Samuel, 2006). These problems are largely noticed from rural area to urban centers; it has now become a burning issue of city administrations, municipalities and residents. Thus, currently a number of housing development projects are being carried out in Addis Ababa and some other cities in order to reduce the problems and to meet the ever-increasing challenge of urban housing. For the efficient implementation of such interventions a standard neighborhood planning and design manual should have been the major component of housing projects. Different housing development programs are planned by the federal government to be carried out in many other urban centers in the years to come (ibid).

As it is known, Addis Ababa is at present socially mixed and safe city with various urban functions, the city's unique character of "modern urban" and "traditional rural" duality need to be maintained for sustainability (Addis Ababa city government office for revision of Addis Ababa

master plan, 2000). Yet, new developments are rapidly changing the face of the city and destroying its unique features. For this reason, the Local development Plan (LDP) were taken as a new instrument that combine urban planning, urban design and concrete regulations implementation tool for specific areas. It supplements the structural strategic planning approach to proactively facilitate investment and ensure the city's unique identity and urban quality (ibid).

In addition, according to Neighborhood planning and design manual (2006), In order to have a proper neighborhood planning and design manual it seems to take more time that plays significant role in guiding the development of habitable housing that are economical with socially and environmentally friendly neighborhoods and ultimately achieving the goals of the condominium housing development program (ibid). Neighborhood planning and design requires various planning and designing stages, levels and procedures to be followed sequentially and coherently, so that neighborhoods could be developed properly to address the problems and needs of urban housing (ibid).

Therefore, this research's main focus is to study the characteristics of mixed income neighborhoods in Addis Ababa, as the mixity has already existed in the early time the research aims at reviewing the characters and preserving such neighborhoods for the future. It is also included in the office for the revision of Addis Ababa Master Plan (2002) that mixity should incorporate socially mixed population, standards of mixed housing units in percentages and average plot area, and minimum habitable housing standard for high, middle and low income groups were considered as components that should be included in the master plan. A Local Development Plan is already done for Aroge Kera and is taken as one of redeveloping site. Thus, In order to have a further study the researcher took Aroge Kera as a case study area for the research.

4.1.2 The existing character of mixed-income neighborhoods of Addis Ababa

Addis Ababa which is the largest and most populated urban city in the country is the melting pot of all Ethiopians with different background and income levels. The population lives together in diverse neighborhoods striving to better themselves as the world changes around them (Addis Ababa in Action, 2002). Addis Ababa has historically prided itself on the healthy mix of income levels in most of its neighborhoods. This has resulted from the historic settlement patterns in Addis Ababa (ibid). Mixed land use and mixed socio-economic groupings have been common

phenomena in most part of the city and become the rule rather than the exception (Addis Ababa in Action, 2002).

The Addis Ababa City Development Plan explicitly states the intention to “maintain mixed use and social diversity as one characteristic of Addis Ababa” and seeks to “promote a mixed income and activity profile in housing areas. It further states the need to “keep the mix and balance of functions and income groups in residential housing development.” The degree of maintaining social diversity in the central areas of the city is critical to the outcome of this research. In this part of the research the researcher has tried to introduce the study area with the general description of the location, physical and socio economic characteristics of case study area (Aroge Kera) where mixed income neighborhood is existed.

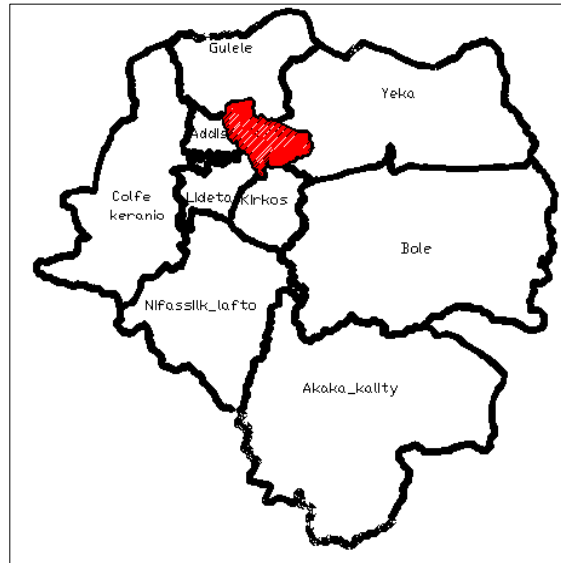
4.2 Location of the study area

The study area is located in Arada sub-city namely *kebele* 01/02 it covers 56 hectares of land. The area is named Aroge Kera because slaughter house service (abattoir) was given in this area before it was relocated to Addisu Kera. Aroge Kera is one of the oldest settlements in Addis Ababa and having different income groups in the neighborhood made the site preferable to be studied as one case area where mixed income neighborhood exists.

Historically, Aroge Kera was established related to the establishment of the palace and no improvement regarding the development activities have been undertaken since then (Aroge Kera LDP report, 2010). But now a day’s development activities are being undertaken in areas surrounding this study area. As a result according to the municipality study the area should be planned for modern development and LDP has been made.



Source: Adapted from encyclopedia Encarta



Source: Adapted from New line map, 2005



Figure 4.1: Location map of Aroge Kera

Source: Google earth, 2010

4.2.1 Physical condition

As mentioned earlier the total coverage area of the site is around 56 hectares. The land use study shows that residential use dominates the site. The ownership status of these houses is mainly *kebele* owned, private, and Rental Housing Agency (RHA). Even though dominated by residence, there are also other land uses such as commerce, administrative and garage (mainly government institutions taking large compounds, such as CSA and Ethiopian Roads Authority garage, respectively); manufacturing, and storage. Generally, mixed settlement pattern show an emphasis on a mix of activities and the different social groups within the urban settlement creates a healthy, safe and sustainable living environment. Private and public schools and health facilities are also available in this site.

There are some dominant buildings in the study area. These include J.F.Kenedy school, Commercial Printing Press, Ethiopian Roads Authority garage, Central Statistics Authority office, Oromia forest products factory, Mega Amphi Theater, and other private mixed use buildings.

4.2.2 Socio economic condition

Population

According to the Aroge kera LDP (2010), the total number of household in the study area is 1850 of which 51 percent are male and 49 percent are female. Unlike the total population of the study area, the sex distribution of household heads indicates that male headed households are higher than female headed households.

	Frequency	%
Male	943	51.0
Female	907	49.0
Total	1850	100.0

Table 4.1: Population by Sex
Source: Aroge Kera LDP report 2010.

Household size

The total number of population on Aroge Kera is 9250 (1850 household). Therefore, the average household size is about 5 people.

Employment Status

From the LDP study of Aroge Kera which is compiled by the Arada sub city Administration, the total employment status of household heads, is indicated below

- 17.7 percent are Government employees;
- 2.1 percent are NGO employee;
- 11.2 percent are employed in the private sector;
- 24.7 percent are unemployed;
- 12.2 percent are self-employed and
- 14.3 percent are pensioned.

	Gov.t	NGO	Private sector	Formal business	Self employed	vendor	student	unemployed	pensioned	other	total
%	17.7	2.1	11.2	5.1	12.1	6.8	0.8	24.7	14.3	5.3	100
Frequency	327	39	207	94	224	125	15	457	264	98	1850

Table 4.3: Employment Status

Source: Aroge Kera LDP report 2010.

Source \ income

Regarding source of income, salary and pension are major sources. The table below shows the percentage of the sources of income.

As indicated in the table, the major source of income in the study area is salary, which accounts for 43.7 percent; pension (15.1 percent); business income (9 percent); remittance (5.6 percent), and rental income (2.5 percent) are important means of income in order of their importance.

Out of the total households about 24 percent of them have some source of additional income in terms of:

- Regular remittance (2,6 percent);
- Occasional remittance (8.5 percent)
- Aid (1.5 percent) , and;

- Other (11.2 percent) means of additional income.

	Salary	Business income	Remittance	Rental income	Pension	Other	Total	Mission	Total
Frequency	809	167	103	47	280	143	1549	301	1850
%	43.7	9.0	5.6	2.5	15.1	7.7	83.7	16.3	100.0

Table 4.4: Source of income Source: Aroge Kera LDP report 2010.

4.3 Discretion of the sample area

In this research Aroge Kera is taken as a case study area in order to study the characteristics of a mixed income neighborhood in Addis Ababa. The researcher has focused on socio-economic and spatial elements that help to study the characteristics of mixed income neighborhood. In order to get the relevant information both qualitative and quantitative data were collected. The countable data such as: number of population, income per month, source of income, job opportunity, and participating in social activities were collected through questionnaire and data from Aroge Kera area LDP report. And uncountable data such as issues of: helping each other in good and bad times, house type, infrastructure, common spaces, green spaces, front yard, compounds and private spaces was collected through in-depth interviews and on site observations.

In addition, it is also important to assess the benefits that the people get from the mixed income neighborhood so that to take a lesson and apply the relevant findings to future neighborhood designs. In order to check the benefit and problem of mixed income neighborhood it is essential to test it by different filters such as: lending and borrowing money, job opportunity, sharing house equipment's, helping each other in good and bad times, participating in social activities (on issues such as *idir*, *iqub*, *mahiber*, funeral and wedding). Other than the socio-economic issues, the spatial elements are other major focus of the research. It is analyzed in terms of house type, infrastructure, common spaces, green spaces, front yard compounds and private spaces.

All the above points of discussion are done by taking case study area as it is on shown the picture below. The spatial and socio-economic aspects in the sample area were taken for the reason that it clearly shows the mixed income neighborhood character. Generally, the points under the two main issues (socio-economic and spatial) are described in depth under each sample life stories.



Figure 4.2: Sample areas discussed in the case study

Source: Addis Ababa Nortech Map and Site survey

4.3.1 Types of income groups in the sample area

In the sample study area there are three types of income groups these are high income, middle income and low income households. As it can be seen clearly on fig 4.3 the compounds of high income residents in the study area are represented by green color, middle income residents are painted blue and low income residents are painted red. The three different income groups were identified by checking in different techniques which is briefly discussed in chapter two selection of the study area. In addition samples of detailed socio economic and spatial characteristics including life stories from each type of income group is discussed below.

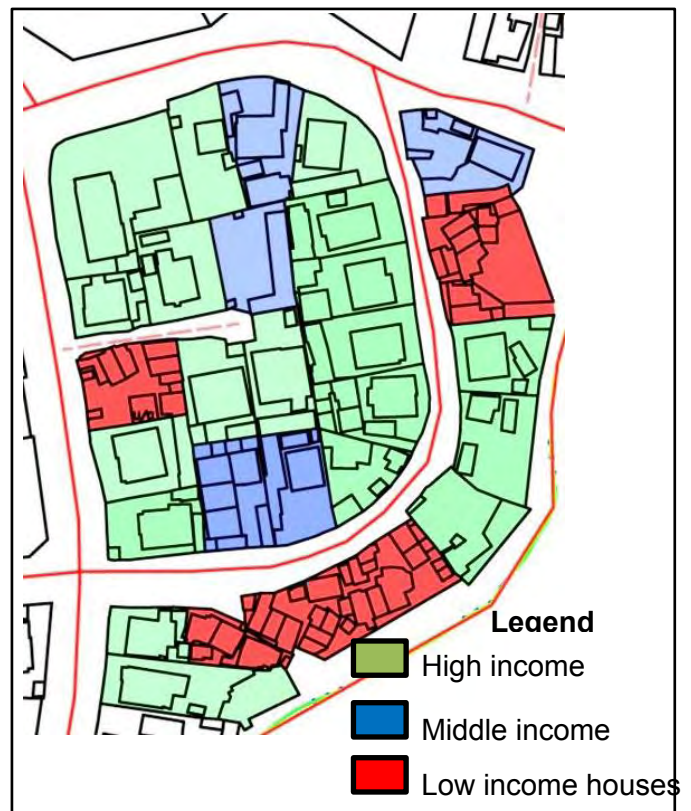


Figure 4.3: Types of houses in the sample area

4.4 Sample life stories

In order to study the character of mixed income neighborhood sample life stories from all income groups (high, middle and low) are taken to reflect both the socio-economic, spatial character and benefit gained from the neighborhood.

life story 1: W/ro Saba Zemen

➤ Socio-economic characteristics

W/ro Saba zemen is 33 year old living in a privately owned house and its now 10 years since she start living in Aroge kera. She moved to Aroge Kera after she got married. In addition to her work, she has a boutique around Haya Hulet. Her husband also works on importing and exporting car. The average **income** they get per month is around 10, 000.



Figure 4.4: Photo of W/ro Saba Zemen

W/ro Saba Zemen has **hired** a guard from the neighborhood, she said it's also possible to find a guard from other places but her reason was to give priority for her neighbor and she had full trust on him. He used to live in the neighborhood so she knows him very much. In addition, she gets **service** from the metal and wood workshop which is found in front of her house. This offer job opportunity for the workers and she get service at the same time.

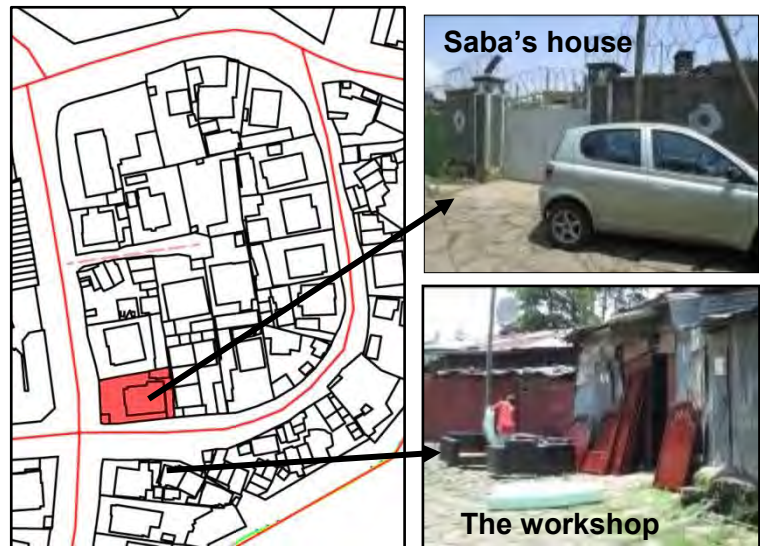


Figure 4.5: Saba's house and the work shop

She said *“my husband and I gave our broken cupboard to be maintained by the wood workers in front of our home and also bought a chair and a table from the workshop because it is near and we don't have transportation cost and also we like the quality. In addition to that as they are our neighbors and we know them very well it's easy for us to complain if something is wrong.*

➤ **Physical characteristics**

House type

W/ro Saba Zemen is a high income resident in Aroge Kera, her main house has an area of 150m² having both living and dining area, three bed rooms, a kitchen and a bath room. Each room has different function and she likes the privacy so she doesn't have a problem of privacy and noise disturbance from the neighbors.



Figure 4.6: house of Saba Zemen's

Back (front) yard

Saba Zemen uses the front with an area of 110 m² for different activity such as: children playing area, car parking, for small program (*mahiber*, birth day) it also serve as a private space for her and her family.



Figure 4.7: Saba Zemen's front yard

Compound

W/ro Saba Zemen lives in a compound with an area of 360 m²; she has three service quarters besides the main house, one guard's room, rental house and extra kitchen and toilet in the compound. She also uses the compound as a private space.



Figure 4.8: Saba Zemen's compound

life story 2: Ato Gezahegn Assefa

➤ Socio-economic characteristics

Ato Gezahegn Assefa is 50 years old. He is married and has three children. He is a private business owner and he gets an average monthly income of 9,000. He has lived for 30 years in his privately owned house in Aroge Kera. In those days he became very close with his neighbors. During different ceremonies in his home depending on the size of the program he **borrow** and as well as **lends** house equipment's when having family and relative meetings he just borrows chairs from the his neighbors, if it's a *mahiber* and wedding or funeral he borrows chair, table and dishes.



Figure 4.9: Photo of Ato Gezahegn

In addition to that during the celebration of epiphany each year, they have a tradition of celebrating at the internal road with his neighbors which serves as a common space (road) for the high, middle and low incomes. They will raise a tent at the middle and big celebration will be held by eating, drinking and singing. So it is a must for everyone to share their house equipment like chair, table, cup, water glass, knife, spoon in order for having this celebration every year.

As Ato Gezahegn described during **good and bad times** they help and share ideas with each other as much as possible (those who have capable will help by money, food or drink those who can't just go and give support by participating on food and drinks preparation).

Ato Gezahegn Assefa said *“I believe all human beings are born equally, it's fate that makes us different. I feel sorry for the high incomes who want to be segregated and want to live with their kind or with people having same level of income with the. Because at the end of the day they are the ones who feel lonely when good and bad times happen, the middle and low incomes are the ones who run to their door willing to help. I have friends who live in Ayat, Bole and CMC (high income neighborhoods in Addis Ababa) living with neighbors having the same income. And they are the ones who are facing the problem of feeling lonely when having good and bad moments because they don't even have contact with their neighbors.”*

In addition, about the **social tie** he mentioned when having problems especially sickness, he said *“when someone was sick i gave 200 birr and took some foods which most of my neighbors. I also help my neighbor's by taking them to hospital in my car when they are sick”*. In addition he mentioned that while having *mahiber*, wedding or funeral he and his wife hire some of the neighbors (low incomes) to work for them on making *tela*, cooking, washing dishes.

➤ **Physical characteristics**

Local road

Ato Gezahegn Asefa as one member of the neighborhood contributed for the construction of the neighborhood local road which has a deep meaning to the neighborhood residents. He cited that the street is constructed by the contribution of the entire neighborhood both financially and labor wise. Those who have money have contributed 850 birr per household those who can't afford has contributed by labor. So it was constructed by the collaboration of the neighborhood residents only House type.

House type

Ato Gezahegn Asefa's main house has an area around 140 m² with living and dining area, three bed rooms, a kitchen and two bath rooms. Each room has different function and he likes the privacy so he doesn't have a problem of privacy and noise disturbance from the neighbors.

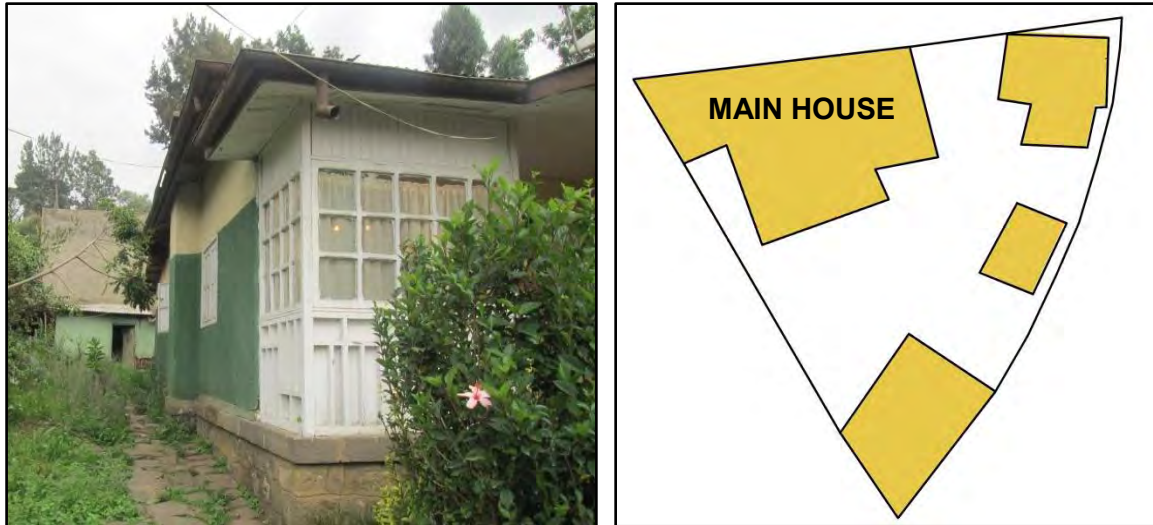


Figure 4.10: Ato Gezahegn Asefa's house

Back (front) yard

Ato Gezahegn Asefa has a front yard with an area of 120 m². he said *"I use the space for different activity such as: children playing area, car parking, car washing, for small program such as wedding, mahiber, birth day, it is also a private space for me and my family."*

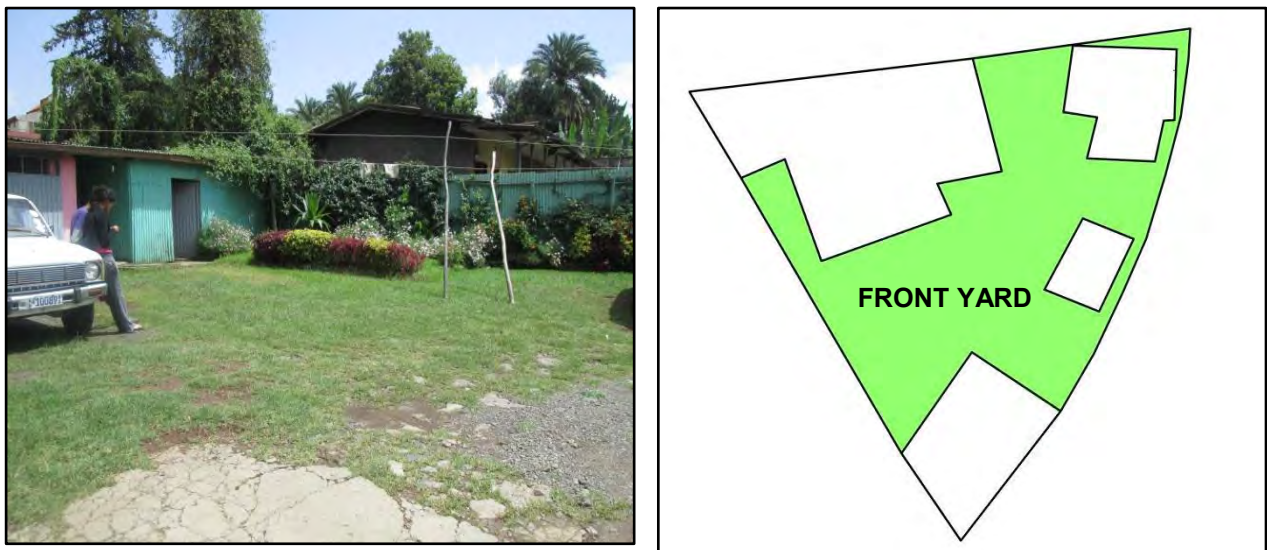


Figure 4.11: Ato Gezahegn Asefa's front yard

Compound

Ato Gezahegn Asefa lives in a compound with an area of 500 m², has three service quarters besides the main house, one maid's room, rental house and extra kitchen and toilet in the compound. he said, *–as long as my privacy is kept at some level in a way I want, I enjoy having a mix of income residents besides me because we help each other very much and i like the social life.”.*

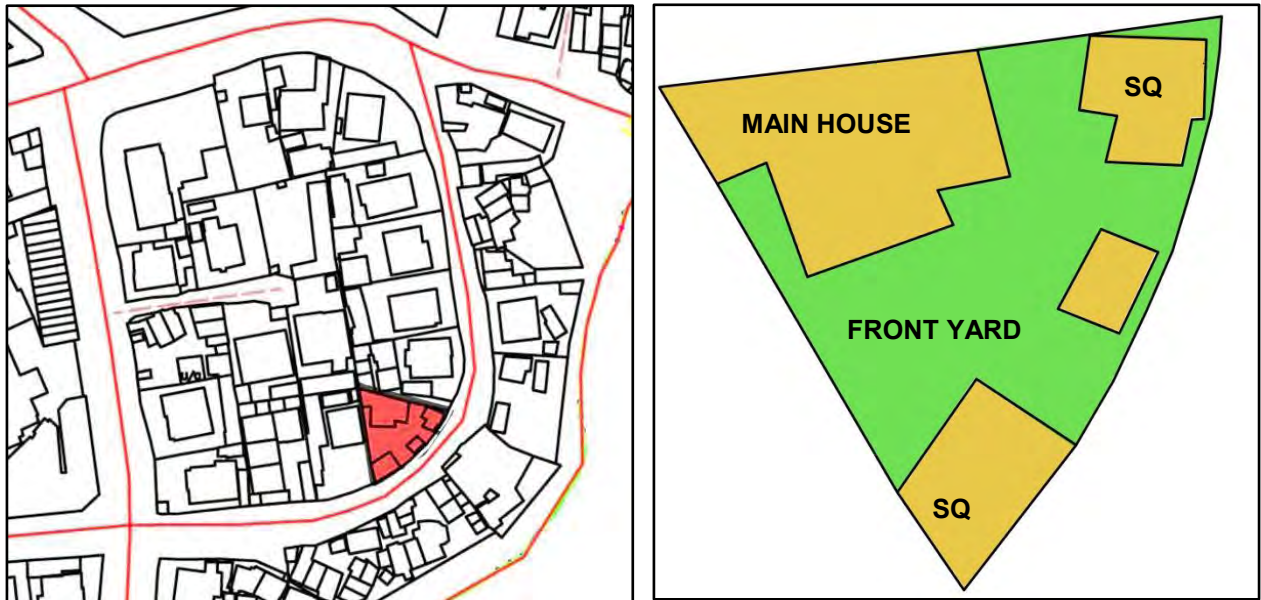


Figure 4.12: Ato Gezahegn Asefa's compound

life story 3: W/ro Shibere Getachew

➤ Socio-economic characteristics

W/ro Shibere Getachew is a 43 years old lady, one of the old settlers in Aroge Kera and been there since birth. She is married, has two children and a house wife, her husband gets a salary of 5000 birr per month she is a middle income resident living in her own house which has been inherited from her parents. About the job opportunity with her neighbors she said *–when the high incomes have*



Figure 4.13: Photo of W/ro Shibere Getachew

big events like wedding or funeral I will go and help them by labor. and sometimes when I have program and need someone to prepare tela or bake injera, for the events it is our neighbor "Worke" who is very low income we give priority because she is our neighbor and very good at working so i want her to use the opportunity to work and get money. I call her when I want her to help me, and also recommend her for my relatives or friends who live in other place when they have events and want some one to work for them".

W/ro Shibere mentioned about **the interaction with her neighbors** she said *"for example when I ever needed someone to help me go to the hospital when I get sick, my neighbors are always there for me. For example last year when I gave birth to my son, Ato Mohammed who lives at the third block from my house took me to the hospital at 10:00 am in the evening and he always help me in such difficult times."*

➤ **Spatial characterstics**

Local road

Regarding the Local road W/ro Shibere Getachew as one of the old settler at the sample area mentioned that the neighbors uses the common spaces for different purposes and that the road itself has created more intimacy between the neighbors. She said *-for example when I meet some people using the local road continuously, I will start greeting them once I know they are from the neighborhood and the next day the greeting will develop and we'll become more intimate. And other than creating intimacy the road is used for holiday ceremony like Demera in which everybody will attends. "*



Figure 4.14: Common Road in sample area

House type

W/ro Shibere's house has an area of 90m² with two bed room, living, dining, kitchen and bathroom. she shares the same corridors with her three neighbors. She has a good privacy in her house but limited privace on the coridor and front yard in the compound.

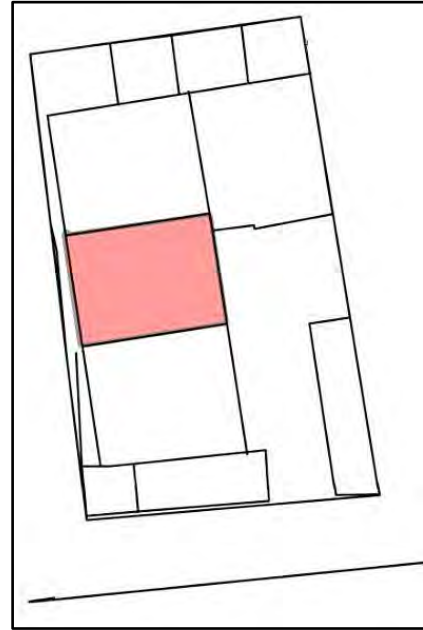


Figure 4.15: W/ro Shibre Getachew's house

Back (front) yard

W/ro Shibere use the front yard with an area of 85 m², she share the front yard with her three neighbours. She mostly use the space for cloth washing, children playing area, crop drying and for events such as wedding, *mahiber* and funerals.

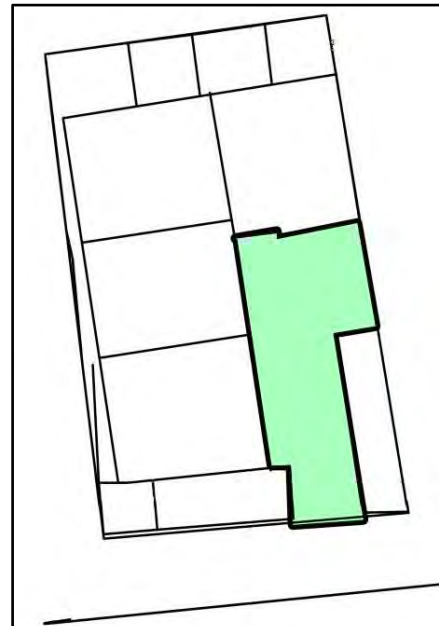


Figure 4.16: W/ro Shibre Getachew's front yard

Compound

W/ro Shibere Getachew lives in a compound with an area of 430 m² with her three neighbors having a common space for different activities. The elements in her compound are: the main houses, service quarter, common front yard, traditional Kitchen and toilet.

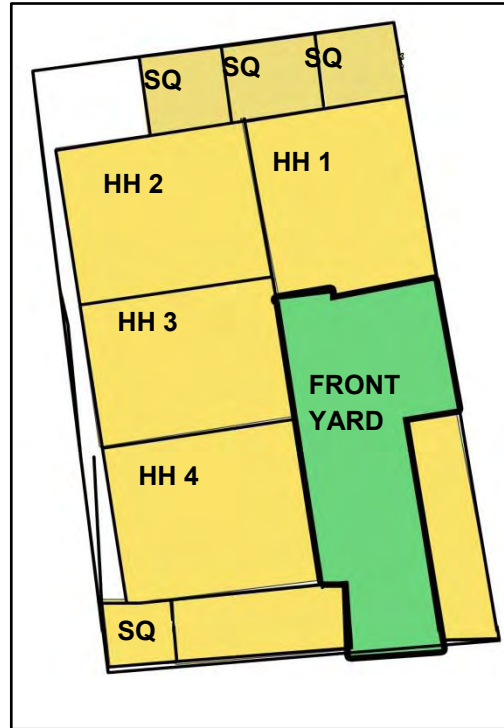


Figure 4.17: W/ro Shibere Getachew's compound

Life story 4: W/ro Enani Bulto

➤ Socio-economic characteristics

W/ro Enani Bulto has been living in a *kebele* owned house in Aroge Kera for 25 years. She is a house wife having 4 children. One of her daughter is in Nazret with relatives and the other in Gonder. Her third son is in Jail; her last daughter is a grade 7 student living with her. Her source of income is washing clothes, preparing pepper and *tela* in the neighborhood and other places. Another source of income is from her daughter (i.e her last daughter) sells candy and *kolo*, totally her **income** is 400 birr per month.



Figure 4.18: Photo of W/ro Enani Bulto

About the **job opportunity**, the daughter of W/ro Enani Bulto sells candy, peanut, *ko/o* and other smaller items after she is back from school. She sells around the asphalt road near her home (at the collector street for the neighborhood) by carrying it with small basket. She doesn't have a specific place to seat and sell, she just go here and there asking if people want the items. Her neighbors notice her struggle and they thought of preparing a very mini shop around her home so she won't face difficulties or get tired. The existence of the mixed income neighborhood was really helpful for W/ro Enani; they encouraged and made her to improve herself. W/ro Enani has a health problem but as she has a very good **social interaction** with the neighbors, she gets financial and moral supported from her neighbors they also reported to the *kebele* and now she get a permanent fund from the *kebele*. She said *-after I am being supported by the kebele I start participating in some activities representing my neighborhood, I even complained for the officials that there is a problem of enough supply of water pipe in some part of the neighborhood and that the residents are facing water problem. Then the kebele provide five water pipes for five compounds for who are very poor. "*

➤ **Spatial characterstics**

Services

W/ro Enani Bulto sends her daughter and son to public school because she can't afford the private school. she said *"as long as I can't afford to teach my children's in private school I send them to public school but I don't feel bad about that because I live by my standard, it's good that there is both kinds of services for high and low incomes because if the services are only for high incomes and if there was no public school around here it would be difficult for me due to transportation cost and safety for my children's"*

House type

W/ro Enani Bulto's main house has an area of 20 m² without partition (she cooks, eats, sleeps and dresses in one room).She doesn't have kitchen in her house but she shares kitchen and toilet with her neighbors.



Figure 4.19: Map and photo of W/ro Enani Bulto house

Back (front) yard

W/ro Enani Bulto's compound has a front yard with an area of 180m² she said *–use the front yard with my eleven neighbors next and in front of me. We use the space for cloth washing and drying area, cooking, playing area for children's, crop drying, special occasions like wedding, mahiber, and funeral.*"

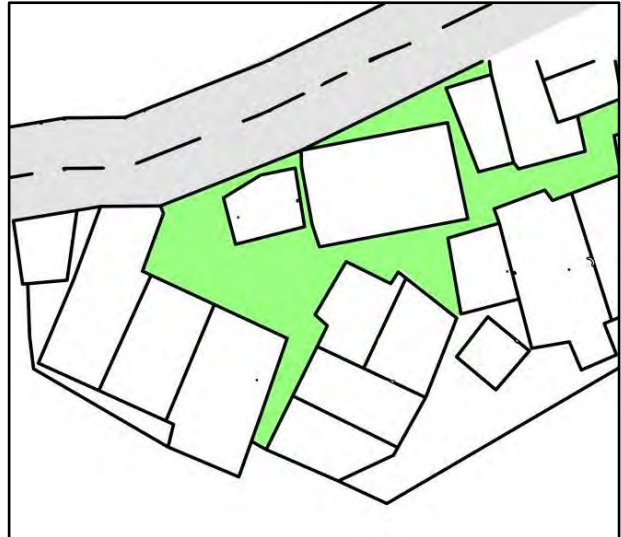


Figure 4.20: W/ro Enani Bulto's front yard

Compound

W/ro Enani Bulto lives in a compound with an area of 680 m² she said *–there are 12 households in the compound sharing a common space; we shared both kitchen and toilet. It is very useful that am living with neighbors of my kind because we share house equipment's and food items easily, other than this the existence of our outside neighbors who have different income status*

are helpful because we help each other in good and bad times, create job opportunity and have good social interaction.”

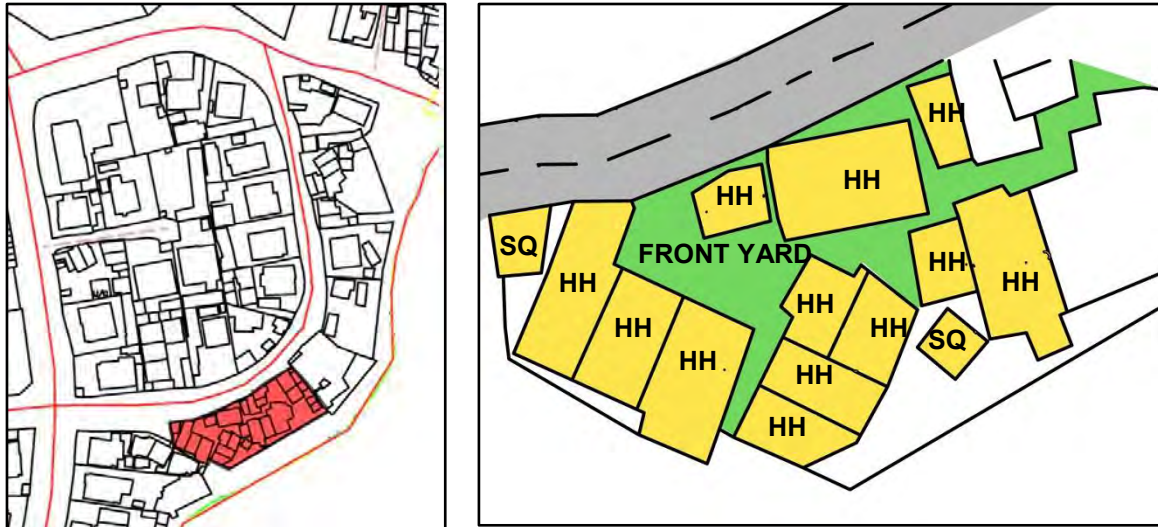


Figure 4.21: W/ro Enani Bulto's compound

life story 5: Ato Taye Hailu

➤ Socio-economic characteristics

Ato Taye Hailu is 26 years old young man living in a *kebele* owned house. He is a taxi driver, in addition to his work he participates in bicycle tournaments. The bicycle federation gave him a chance to go abroad for tournaments on the condition that he has collateral for making sure that he won't disappear abroad after a computation. One of his high income neighbors (Lidet Tadesse and her husband) has **lent** him 300,000 birr for the collateral. He then went abroad and returned the money to his neighbor afterwards. . He says he was very grateful for being trusted by his neighbor and glad that someone did such a big favor for him.



Figure 4.22: Photo of Ato Taye Hailu

He has a strong **social interaction** with his neighbors of the same compound and outside, also for holidays they have a culture of having breakfast in one of his neighbor's house, lunch in the others house then dinner at someone else's house.



As AtoTaye Hailu lives in front of his high income neighbors, they easily call him to take them in his taxi whenever they want to go somewhere. For example the existence of private

clinic and school was helpful to AtoTaye Hailu, it has created **job opportunity** and helped him to develop new customers. Those who use the private clinic (Hemen) for children or pregnant women and they prefer having a *contrat taxi* so they have his telephone number and call him any time they want even in the evening. Others send their children to private school hire him to pick and drop their children because as they know him from the neighborhood they have trust in him to bring their children from school. So the provision of private services in the neighborhood was really helpful for him.

One of his neighbor who is a high income resident W/ro Lidet Taddesse said *“when I needed a taxi on my way out from work late at night or if I am in a hurry to go to work, Taye (the neighbor who is in front of my home) is the only person I will call to pick me because we already developed trust and intimacy trust since our childhood. The longer we live in the neighborhood the more we know each other and become intimate.”*

In addition the neighborhood has helped Ato Taye create job opportunities for others too; he helps a 15 years old boy living nearby his house by making him wash his car because he is a good boy. Besides this, based on the trust they developed with the boy, Taye lend the boy some money and opened a movie rental shop, to create a better income for the boy.

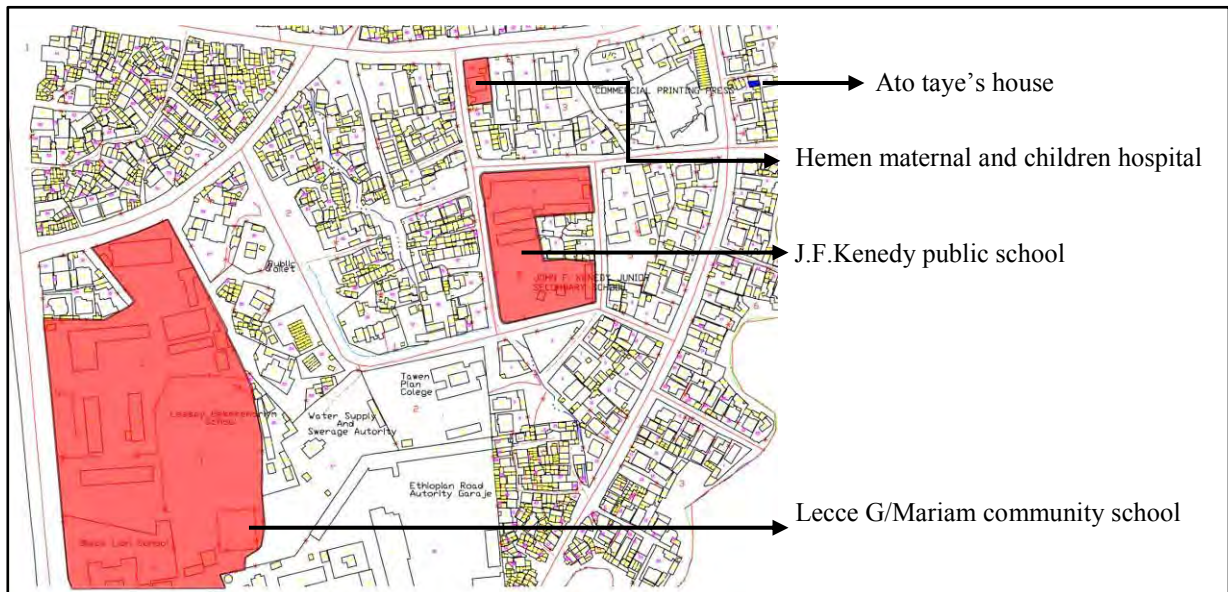


Figure 4.25: AtoTaye's house and the services in the neighborhood

➤ **Spatial characteristics**

House type

Ato Teye Hailu lives with his 5 family members in a house with an area of 30 m² with two rooms. The house has one living room and one bed room. They cook and eat in the living room and sleep and dress in the next room. They have a common kitchen and toilet with their neighbors.



Figure 4.26: Ato Teye's house

Back (front) yard

Ato Teye Hailu use the front yard with an area of 175 m² with his eight neighbors. They use the front yard for cloth washing and drying area, cooking, playing area for children's, crop drying, and for small occasions like wedding, *mahiber*, funeral. He parks his taxi out of the compound because the front yard is very narrow and irregular shape for car parking.



Figure 4.27: Ato Teye's front yard

Compound

In Ato Teye's compound has an area of 511 m², there are nine households, one kitchen and one toilet which is shared by commonly by the neighbor. He said *"it is helpful to live with neighbors of my kind, because we can easily share house equipment's and food items. In addition also living around neighbors of different income residents is good because we help each other in good and bad times, create job opportunity and have good social interaction."*

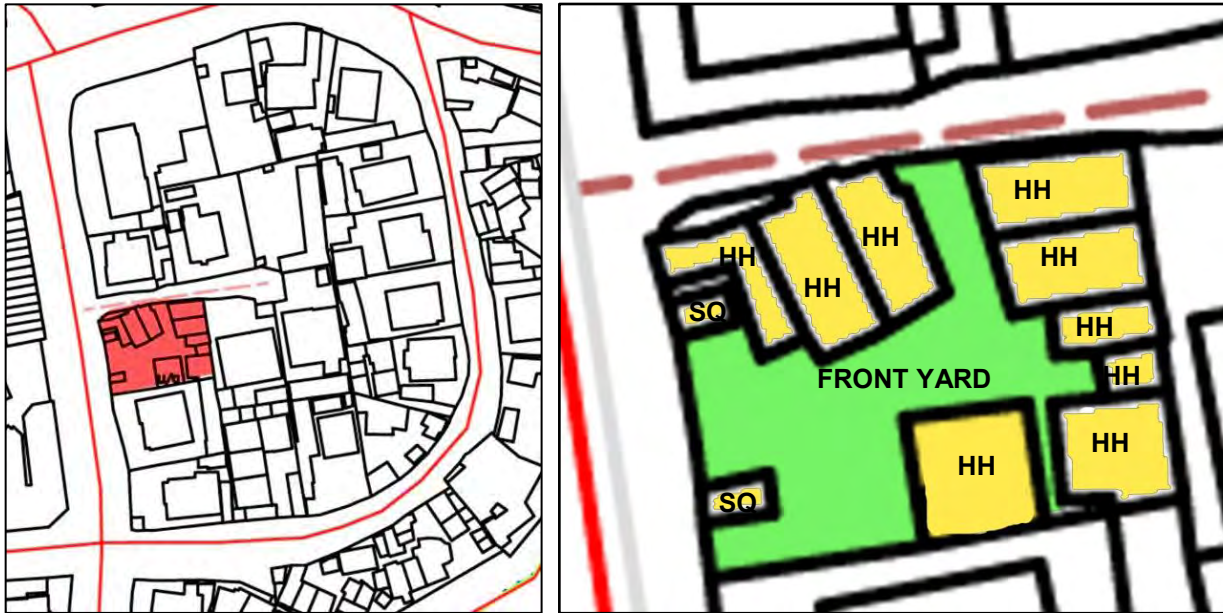


Figure 4.28: Ato Teye's compound

CHAPTER FIVE

ANALYSIS AND FINDING

5.1 Analysis

In this part of the research the data discussed in the previous chapter is analyzed in detail. In this research 35 sample interviews and life stories has been addressed to study the characteristics of mixed income neighborhood in the study area. The data gathered through interviews, questioners, detailed discussions, in-depth life stores and maps are analyzed by using both qualitative and quantitative methods. This is done by using different analyzing points (filters) from the case study in such a way that represent the character of mixed income neighborhood in the specific study area. **Quantitative** analyzing method is used to analyze the quantifiable data of socio-economic and spatial elements. The quantitative analysis is done by relating and comparing the data of the three different income groups which are discussed in the previous chapter. And it is presented by tables, graphs and descriptions. The **qualitative** analyzing method is used to show Comparison and relationships of spatial characteristics like: house types, compound, front yard service and infrastructure of the different income groups in the study area. And it is presented by illustrative maps and pictures supported by descriptions.

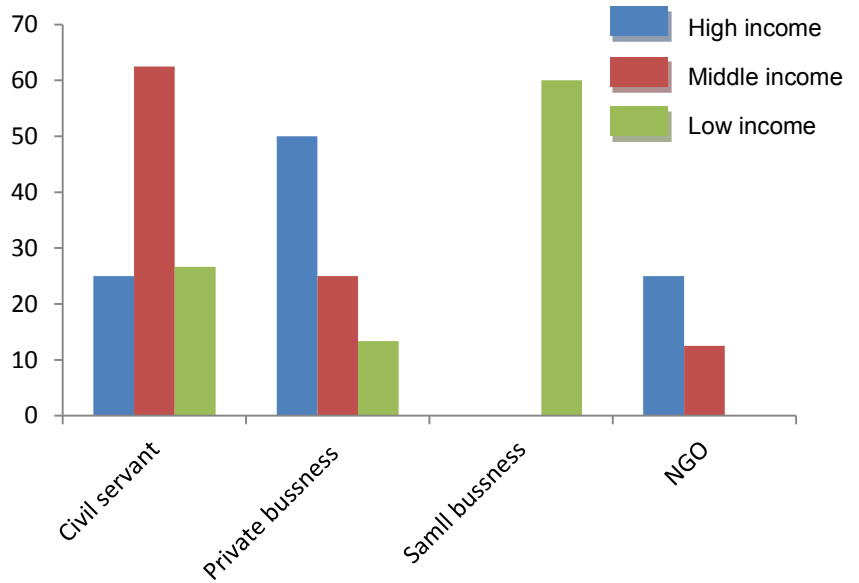
A. Analysis on the socio-economic aspect

Employment status

In the mixed income neighborhood of Aroge Kera there are different people with different employment status. Such as the high and middle income people work on private businesses, NGO's, civil servants and use house renting as an additional source of income.

The low incomes work as civil servants while some others have pension and get support from their children or relatives. They also work on small businesses like washing clothes, baking bread, *injera*, *tela* and preparing spices to the neighbor or at other place. They are also engaged in business such as taxi driving, artist and poet.

Out of the 35 sample interviews from high income 25%, middle income 62% and low income 27% are civil servants. 50% of the high income, 25% of the middle income and 13% of the low income have their own private business. 55% from high income and 25% from middle income works in NGO; the other 60% are low incomes who get their source of income from small businesses.

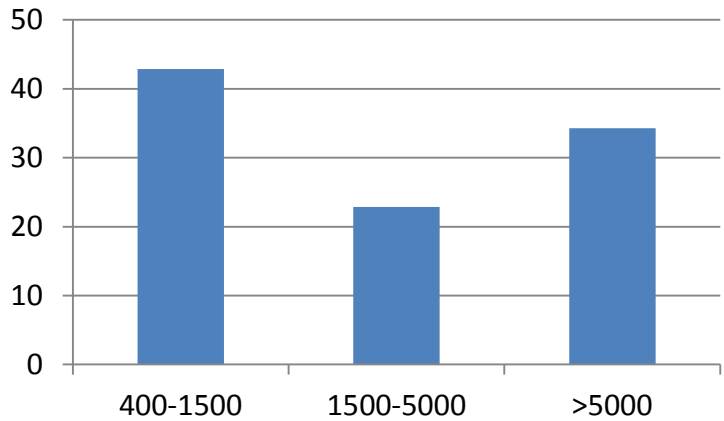


Graph 5.1: Employment status

Income per month

As the employment statuses of the sample interviews are different their income per month is also different. It ranges from 400 birr to 10,000 birr.

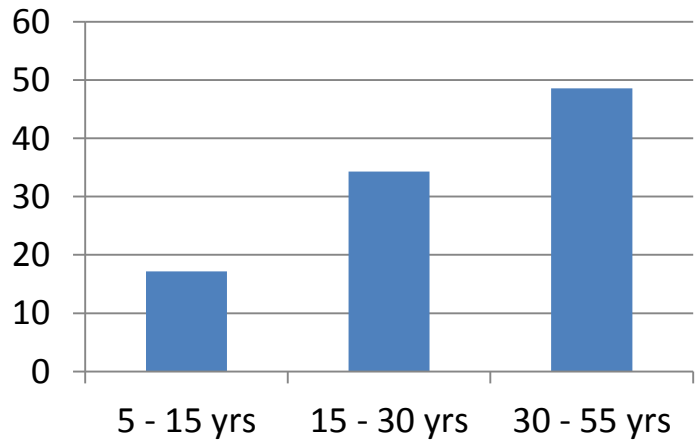
Out of the 35 sample interviews 43% of them get 400-1500 birr per month, 23% get 1500-5000 birr per month and 34% of the interviewed persons get more than 5000 birr per month.



Graph 5.2: Income per month

Length of stay

In the case study area of Aroge Kera the neighborhood residents have lived for a very long period of time and this length of stay created strong and visible social interaction and participation in social activities. From the sample interviews 5 years is the minimum length of stay and 55 is the maximum.

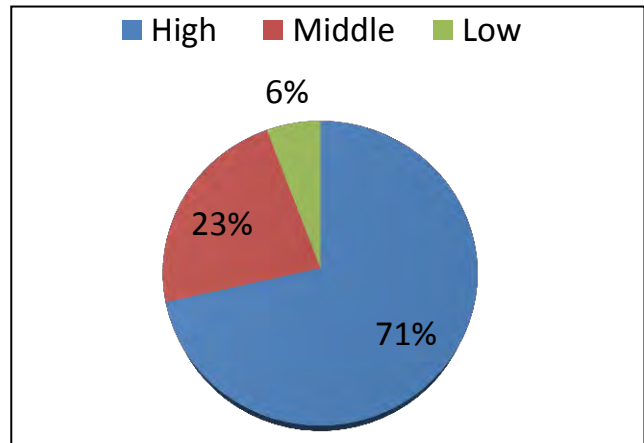


Graph 5.3: Length of stay

Out of the 35 sample interviews people who live in Aroge Kera from 5-15 years are 17%, people who lived 15-30 years are 34% and the rest are 49% who lived in the study area for 30-55 years.

Opinion of the people on the level of mixity

Residents of Aroge Kera define the level of the mixity high, low and medium based on the different tenure type and distribution of income groups in the neighborhood. According to the data collected from sample interviews the level of the mix is very high and they have also mentioned that they are very surprised and happy about the visible income mix in the neighborhood compared to the other neighborhoods they know.



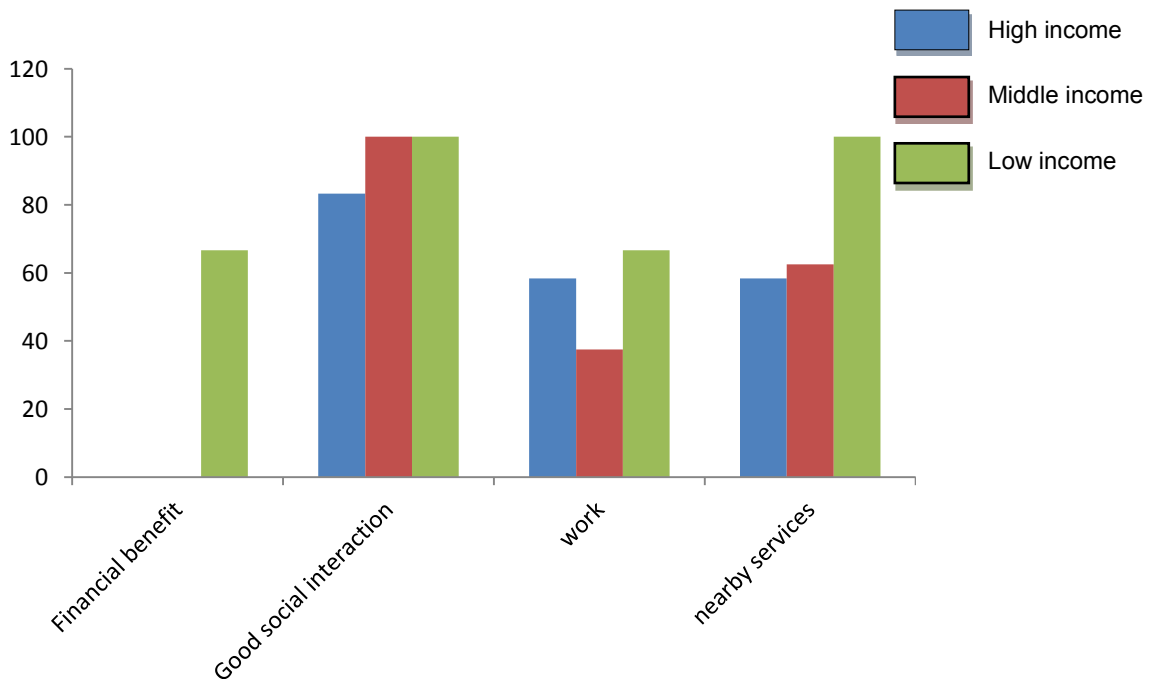
Graph 5.4: Opinion of the people on the level of mixity

Out of the 35 sample interviews 71% responds that there is high level of mixity in the neighborhood, 23% middle and 6% respond low.

Benefit from the mixed income neighborhood

There are different benefits that the mixed income neighborhood brought for the people living in Aroge Kera. Such as financial benefit or borrowing and lending of money and house equipment's, good social interaction, helping in good and bad times, work (which represent as a job opportunity for the low income and cheap labor cost for the high and middle incomes, availability of nearby services (clinic, school, market), sharing service and infrastructure (electricity at evening times, water, road)

Out of the 35 sample interviews 67% of the low incomes get **financial benefit** when they face problem or lend money when they need. 83% of the high incomes, 100% of low incomes and 100% of the middle incomes have **good social interaction** with the neighbors. 67% of the low incomes get **job opportunity** from the high and middle incomes, 58% of high incomes and 38% of the middle incomes get **cheap labor** from the low incomes. From the service provided 58% of high income, 63% middle income and 100% of the low income get benefit or **access the services**. 73% of the low incomes served from the outdoor lights & constructing internal roads by the high and middle income, 83% of the high incomes and 75% of the low incomes use the **infrastructure** in the neighborhood.



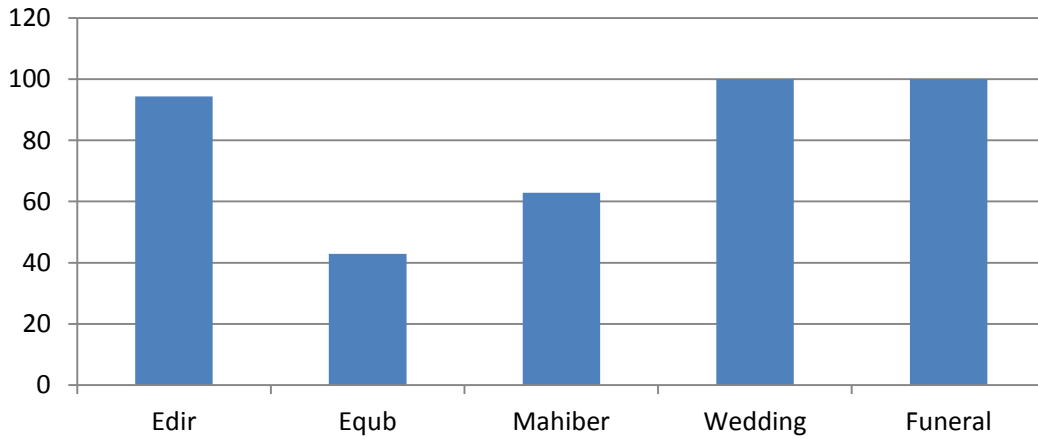
Graph 5. 5: Benefit from the mixed income neighborhood

Participation in social activity

The interviewed residents mentioned about participating in social activities like *iqub* (mostly the high incomes have *iqub*), *idir*, *mahiber*, funeral and wedding helps them to meet and become very intimate.

Out of the 35 sample interviews 94% have *idir*, 42% *iqub*, 63% *mahiber* 100% participate in funeral and wedding.

In the social activities of *Idir*, *Mahiber*, wedding, and funeral almost all the females from the different income groups have same *idir* in the neighborhood. But from the interview those who have *iqub* are the ones with more money (high incomes) because the low incomes cannot afford to have *iqub*.



Graph 5.6: Participation in social activity

Borrowing and lending money

The mixed income neighborhood has benefited the residents through their day to day activity which is caused by the social interaction and participation in social activities that the mixed income neighborhood created. The intimacy and social interaction between them led to borrowing and lending money in good and bad times. The respondents have mentioned that it doesn't mean there is always borrowing and lending money, even if they want to borrow from their neighbor they are ashamed to ask and prefer not to ask. But still there is a tradition of borrowing and lending money when having some problems like accidents and funerals or when someone is sick they will help each other by money, taking food or drinks.

Job Opportunity

The existence of mixed income neighborhood has helped the different income groups by creating job opportunity and cheap labor. It brought job opportunity for the low incomes in the form of being hired as a house guard, made, washing clothes and preparing homemade items, car washing, taxi driving and the high incomes get service from the nearby wood and metal workshop and get maintenance of house furniture's, and also will benefit from cheap labor.

Sharing House Equipment

For different celebration and events there is a sharing of house equipment's in the sample study area. The materials are usually water glass, cups, dishes, tables, chairs and kitchen equipment. But the sharing system might be depending on the size of the program, the larger the ceremony the more equipment they borrow from the neighbor.

Helping each other in good and bad times

During good and bad times the neighboring residents help and share ideas with each other on the level they can, like: those who can will help by giving money, food or drink but those who can't just go and give support by working on food and drink preparation.

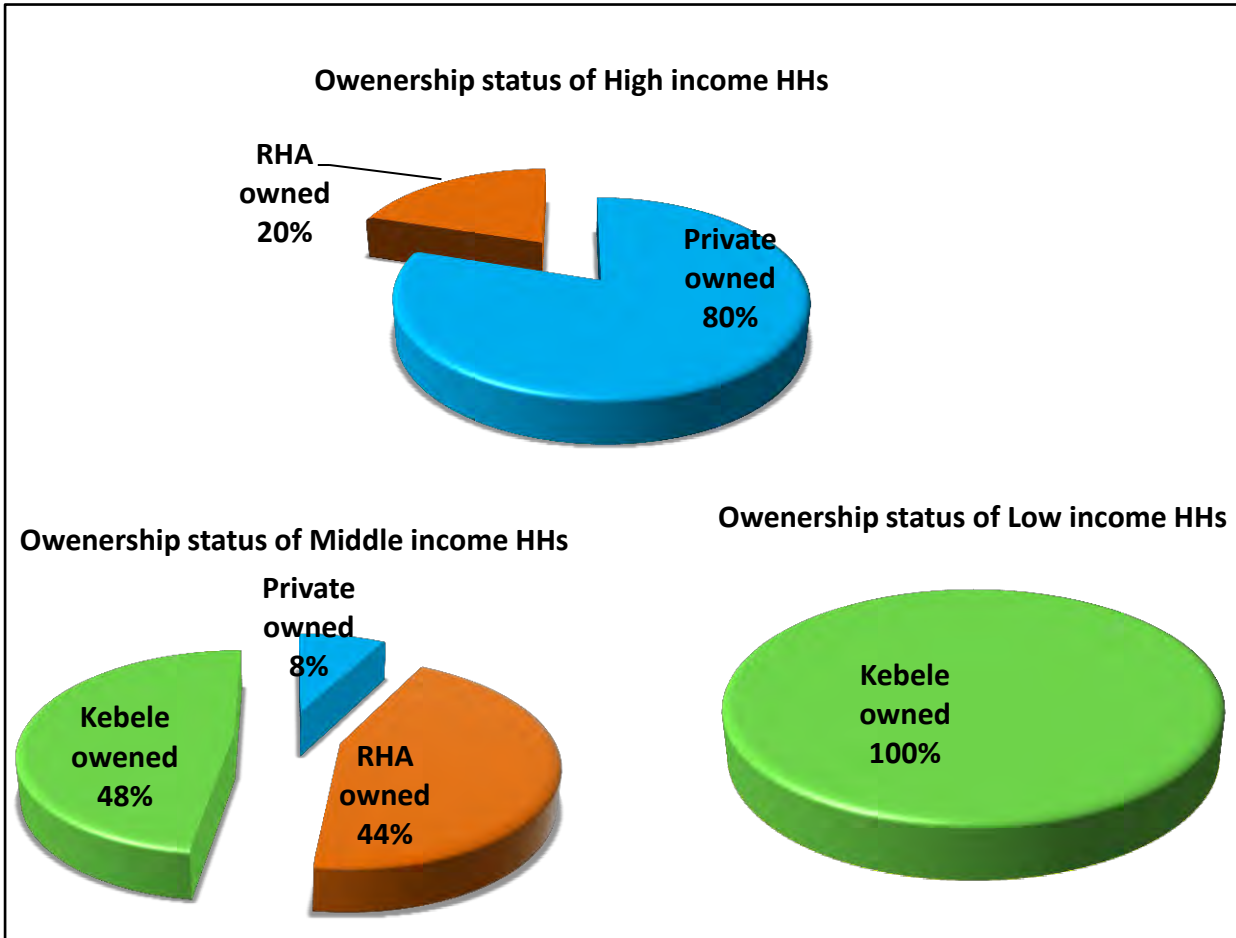
Problems faced in the mixed income neighborhood

As there are benefits from the mixed income neighborhood there are also challenges that the residents face. One is the issue of security, as the respondents mentioned all the income groups are facing some level of security problem especially at night time but these days they are trying to improve it by having outdoor lights from some of the households. And also according to the community complain the government has hired a guard at night time. The other problem is that some high income household parents do not allow their children's to go outside their compound to play with the neighbors, as it is mentioned by the high income households they are afraid that their children's might become undisciplined.

Out of the 35 samples interviews 42% high income, 38% middle income and 27% low income face **security problems** 63% of middle income and 100% of the low incomes face **lack of common space** in the compound. 58% of high incomes and 50% of middle incomes **feel insecure** about their children's playing with neighbors. 100% of low incomes, 63% of

middle income and 58% of the high incomes respond that there is **lack of children play ground**.

Ownership status



Graph 5.7: Ownership status

B. Spatial implications of mixed income neighborhood

Local road (public space)

The local road serves as a common space for the different income groups, as it is located at the center, it can easily be accessed. It is constructed by organizing and contributing money and labor from the neighborhood residents. The sample local road has an average width of 12 m and a total of 224 m long with a stone pavement and green space at the right and left side. The people living around this local road use it for performing different activities such as: raising tent when having funeral, wedding, religious ceremony (epiphany), crop drying area, car passing, parking and washing area. They have also mentioned that the local road is wide so that the low incomes can use it as crop drying area on one side of the road while the cars of high incomes can pass on the other side.

The character of the local road makes the neighborhood not to be disturbed by other people who come from other neighborhoods because both sides of the road is connected to a collector asphalt road, on one side it is very sloppy and can't easily be accessed to the neighborhood.



Figure 5.1: Sample area local road

The local road found at the middle of the mixed income neighborhood serve as a day to day passage way and creates intimacy. The road also used as a space where different activities take place.

Services and Infrastructures

In the neighborhood of Aroge Kera there are both private and public clinic and school. Even if the low income households sometimes go to both the private and public clinic because it is affordable. All income groups can access the Arada public health center which is found nearby the neighborhood. As a market place all the income groups buy items from the neighborhood small markets for small quantity. For higher quantity the residents buy items, vegetables and fruits from *atilkilt tera*.

There also exist both public and private schools; they use the services according to their level and income status. Mostly the low income households send their children to the public school and the high income households to private school. The low income households pin pointed is that, since public school existed in the neighborhood their children are not forced to go far to get their education.

In the sample area of the study the sharing of infrastructure is much more visible. There are local roads in every neighborhood; some constructed by the low incomes labor and the high incomes a financial support. Sharing of outdoor lights for security purpose has played a great role for security in the study area. In the earlier time they were facing security problem because of the absence of outdoor light. But now the outdoor light is being provided by the government as well as the high incomes. In addition guards are hired for some of the neighborhoods.



Kibre higher clinic.



John F.Kenedyelementary public school.



Hemen maternal & children hospital.

Figure 5.2: services in Aroge Kera

They have never faced water problem till now because the water line is the same line which goes to the palace. The sample interviewed people mentioned that in earlier times they used to share electricity from neighbors for their houses, but nowadays there is no such sharing electricity because all households in the neighborhood have their own electric lines. From all the respondents of the sample area there is a good drainage system which is paved and managed at the side of the local road.



Figure 5.3: Physical elements found in the mixed income neighborhood of Aroge Kera

Problems faced on the spatial characteristics of the study area

The major problem noticed in the sample neighborhood of Aroge Kera is a lack of green or open space. Although there are some green spaces they are not maintained and managed well. They are not also proposed using the standard for a neighborhood. The other problem is lack of common space in the compound of the low incomes for children's playing and recreational space. The elders use the local road for gathering space and when they need additional space for tent while having special occasions.

House types

In Aroge Kera there are different house types for the different income groups (high, middle and low). The size, character and arrangement of the houses are also different from one another. The three income groups have different house area with different cluster arrangement and function.

High income households live in private owned houses and some are owned by rental housing agency. The houses have an average area from 120-180 m² having 3-4 bedrooms. With both living and dining area, a kitchen and a bath room. Each room has different function and there is high level of privacy. There is no problem of privacy and noise disturbance from the neighbors because there is one main house in one compound.

Middle income household's houses are row houses owned by rental housing agency, *kebele* houses and some have private houses. These houses have an average area of 60-100m² having 1-2 bedrooms, living and dining room, kitchen and bath room privately in their own houses. There are 3 – 6 main houses located in a row sharing one corridor in one Middle income's compound.



Figure 5.4: The different income houses in the study area

The low income households live in *kebele* owned row houses, which are owned by the government with a very cheap rental price (50 cent – 50 birr). These houses have an average area from 15 - 35m² mostly without partition in the house or sometimes with a simple partition which can be curtain to define the space between the living and sleeping area. Low income Households cooks, eats, sleeps and dresses in one room. There is no separate kitchen and there is shared toilet with the other neighbors in one compound.

Income group	Area of the house	No of rooms in the house	Functions in the house
High income	120 – 180 m ²	Seven or eight	Bedrooms, living and dining area, a kitchen and bath room.
Middle income	60 – 100 m ²	Four or five	Bedrooms, living and dining area, a kitchen and bath room.
Low income	15 – 35 m ²	One or two	No partition. space for sleeping, eating and cooking area

Table 5.1: Comparison of households house types



Figure 5.5: High income house



Figure 5.6: Middle income house



Figure 5.7: Low income house



Figure 5.8: High income house



Figure 5.9: Middle income house



Figure 5.10: Low income house

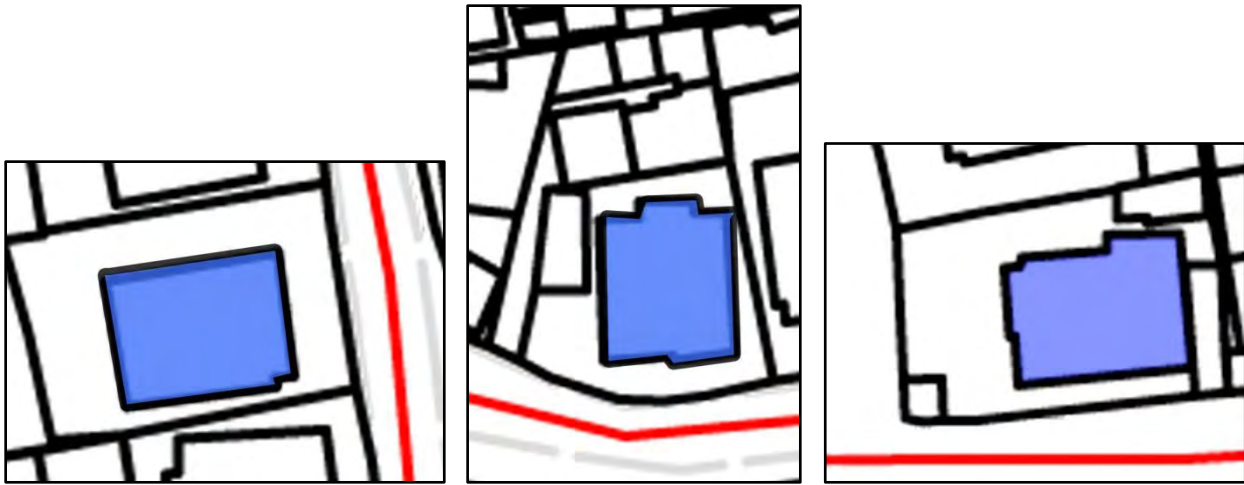


Figure 5.11: Map of high income houses



Figure 5.12: Map of Middle income houses

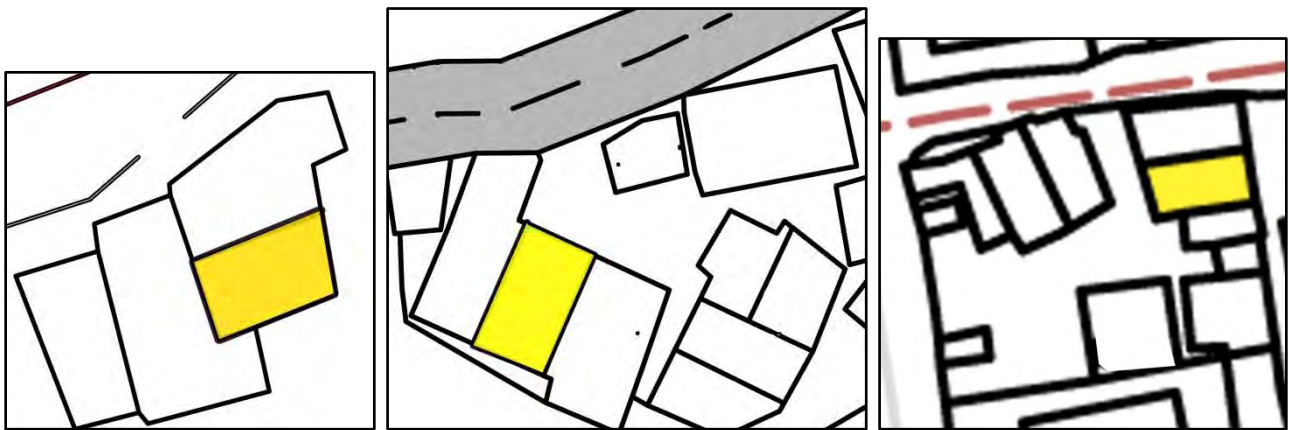


Figure 5.13: Map of low income houses

Front yard (Private space)

There are also different types front yard spaces in Aroge Kera for the different income groups (high, middle and low). The size, shape and level of privacy of the front yard are different for the three income groups.

The high incomes front yard has an average size of 70-120m². From the interviewed samples in this research one high income household described the front yard as *“I use the space for different activity such as: children playing area, car parking, for small program (mahiber, birth day ...), it is also a private space for me and my family.”*

The middle incomes front yard has an average size of 80-120m². It is shared by 3-5 households and serves as a common space for the cluster of the houses. For the middle income households the front yard is mostly used for cloth washing area, car parking, children playing area, crop drying. The level of privacy compared to the high income is less. But it is more private than the low incomes front yard because it is bigger and shared by a lesser number of households. Front yard of the low incomes has an average area of 100-200m², serve as a common space for the entire 9-13 households in the compound. From the interviewed samples in this research one low income household described the front yard as *“I use the space just in front of my house as a front yard for cooking food, and washing kitchen items. But I share front yard of the compound with my nine neighbors. We use the space for cloth washing and drying area, playing area for children’s, crop drying, special occasions like weeding, mahiber, funeral.”*

Income group	Area of the Front yard	No of Households sharing the front yard	Activities on the front yard
High income	70 – 120 m ²	1HH	children playing area, car parking, private space
Middle income	80 – 120 m ²	3 – 6 HHs	cloth washing, car parking, children playing area, crop drying
Low income	100 – 200 m ²	9 – 13 HHs	cloth washing, children playing, crop drying, special occasions

Table 5.2: Comparison of household’s front yard

For the high income the private space can be the compound as well as the main house. For the middle and low income the private space is their house and the space just in front of their doors; that is 1 or 2 m which is not defined by any element and used for cooking and private outdoor space.



Figure 5.14: Private spaces of middle income households



Figure 5.15: Private spaces of low income households

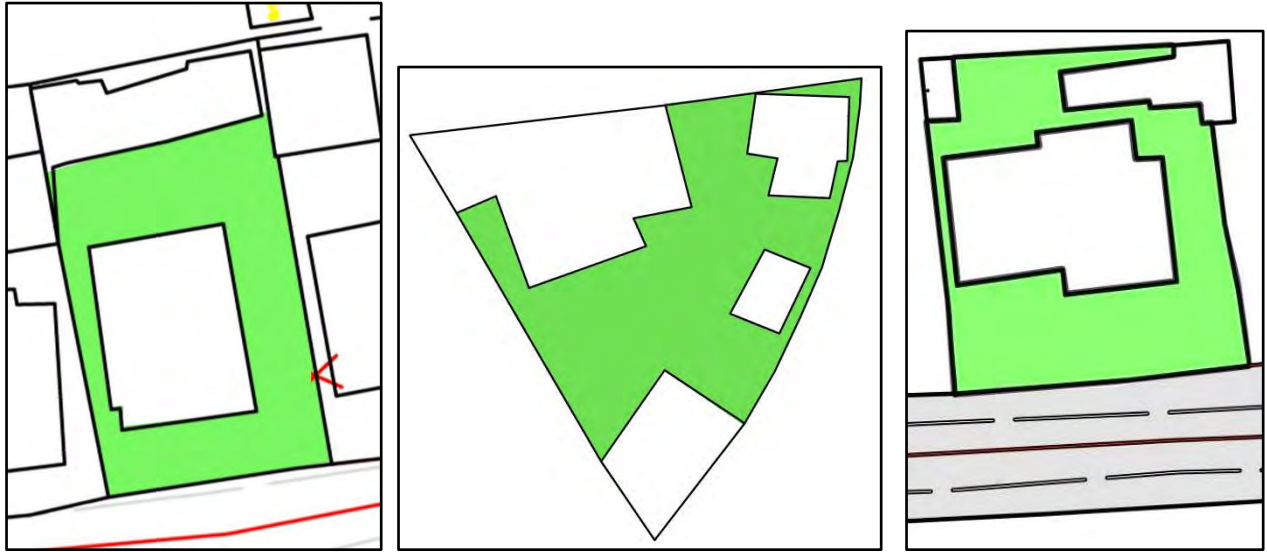


Figure 5.16: Map of high income front yards

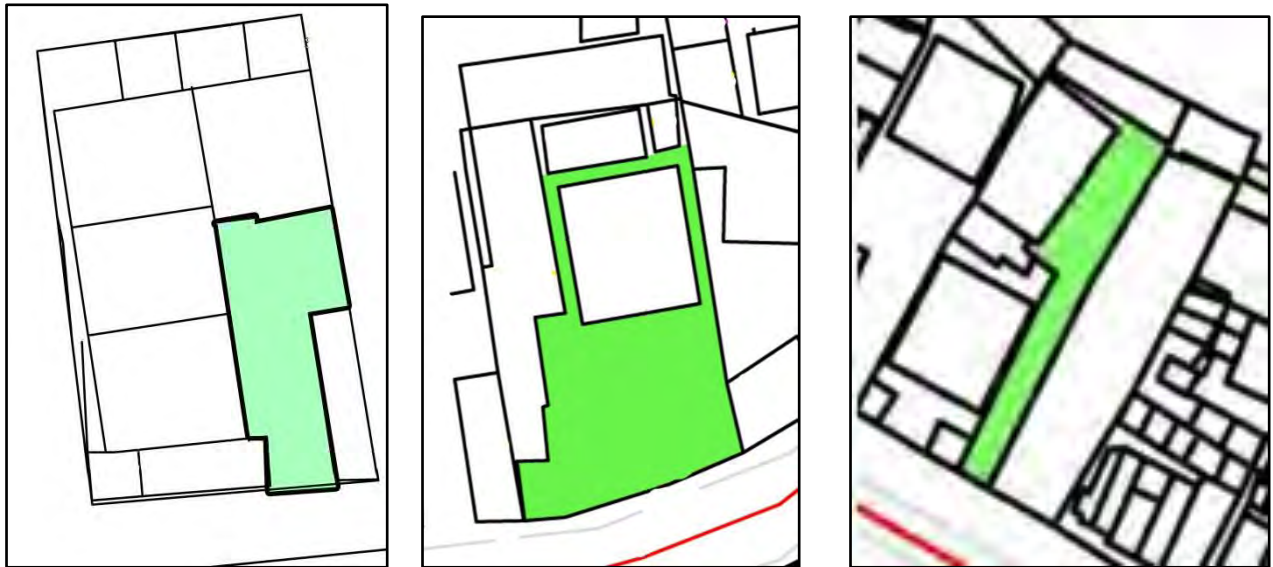


Figure 5.17: Map of middle income front yards



Figure 5.18: Map of low income front yards

Compound

There are different types of compound spaces for the different income groups found in the study area. The size, shape, character and functions in the compound are different from one another.

The **high income’s** compound is a private compound with an average area of 300 – 500m². The compound usually has service quarters besides the main house, maid’s room, rental house, extra kitchen and toilet in the compound. As most High income households describe *–as long as my privacy is kept, I enjoy having a mix of income residents besides me because we help each other very much and I enjoy the social life.*”

The **middle income’s** compound has an average area of 400-600m², shared by 3-6 households. They use the common space in the compound for different activities. There are separate service quarters for each household. Some of the households rent out the service quarter to get additional income.

The **low income’s** compound has an average area of 500-700m² composed of 9-13 households. As some respondents said *–we are sharing a common space, kitchen and toilet. It is very useful living with neighbors of similar status because we share house equipment and food items easily, other than this the existence different income groups in the neighborhood is helpful because we help each other in good and bad times, create job opportunity and have good social interaction.*”

Income group	Area of the Compound	No of Households in one compound	Elements in the compound
High income	300 – 500 m ²	1 HH	service quarter, maid’s room, main house, extra kitchen, toilet
Middle income	400 – 600 m ²	3 – 6 HHs	Separate service quarter, common space
Low income	500 – 700 m ²	9 -13 HHs	Common toilet, common service quarter

Table 5.3: Comparison of household’s compound



Figure 5.19: Map of high income compounds

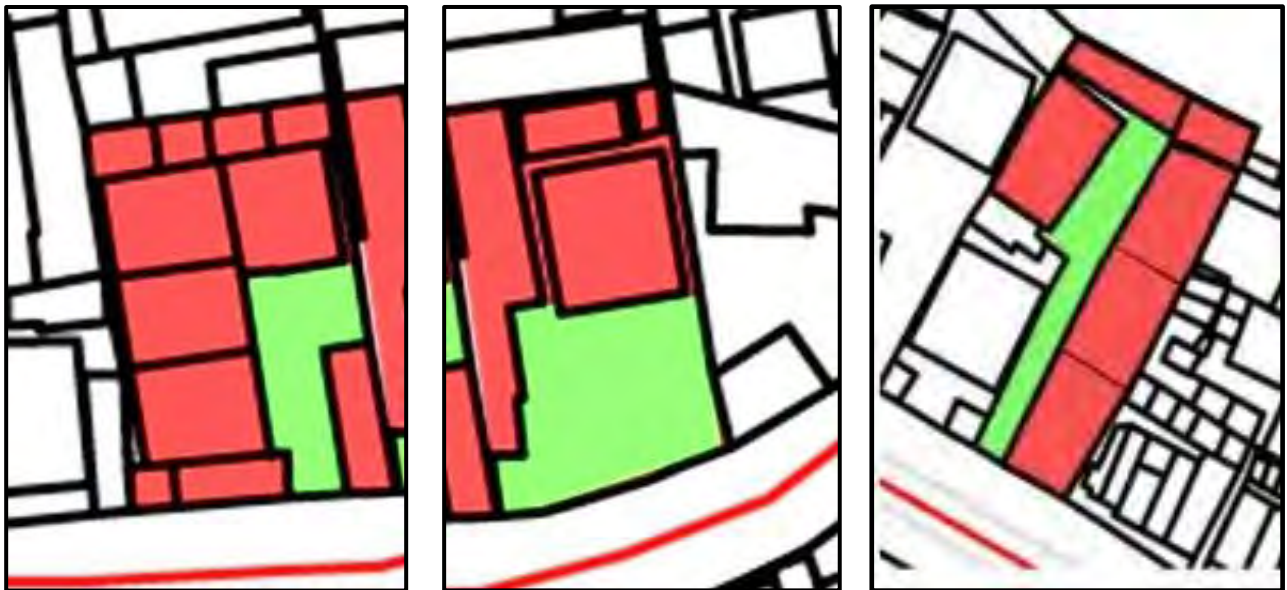


Figure 5.20: Map of middle income compounds



Figure 5.21: Map of low income compounds

5.2 Findings

At the early age of Addis Ababa, the existence of regional rulers in the midst of their people and scattering of the armies around the palace has made the rich and poor live in close proximity. Ambassadors used to live next to their guards and maids. This has played a great role for the achievement of mixity. Even if it becomes very rare to see such neighborhoods nowadays, it still exists at some part of the city.

Aroge Kera is taken as a sample area to investigate the characteristics of mixed income neighborhoods. In this part the major findings of the research is described in accordance with the main objectives of the research. The main objectives of the research are: to analyze the factors and elements that brings mixed income neighborhood in Aroge Kera, to identify and analyze the characteristics of mixed income neighborhood, to investigate the problems and benefits of mixed income neighborhood, to identify the socio-economic and spatial implications and to design a mixed income neighborhood for the future. Thus the major findings of the research are discussed as follows.

- Factors and elements that brings mixed income neighborhood in the inner city neighborhoods.
 - ✓ The length of stay from the different income neighborhood is different from one to another. From the sample of respondents those who lived in Aroge Kera for longer time in from 30-55. The length of stay has contributed to make the neighbors to be very close to each other.
 - ✓ Job opportunity, participation in social activity, sharing house equipment, helping each other in good and bad times, Availability of different house types, full access of service found in the nearby, level of privacy of spaces of the house, front yard and compound.
- Socio- economic characteristics of mixed income neighborhood.
 - ✓ The social interaction is visible between neighbors of the different income groups. But the level of intimacy between neighbors of the same compound is more strong and visible. I.e. low income residents who live in one compound are more intimate than their neighbors of the middle or high income residents. Therefore the level of intimacy and social interaction is stronger with their own kind who lives immediately next to them or in same compound.

- Spatial characteristics of mixed income neighborhood.
 - ✓ All the three income residents get full access of service found in the nearby neighborhoods like school, clinic, and shopping center.
 - ✓ The internal road or common space of the samples taken for the research is wide so that the different income groups can exercise their own activity in the common space. Activities like vehicular access, washing or parking, crop drying, cloth washing.
 - ✓ As there are different types of houses in Aroge Kera, the size and arrangement are also different. The house area for high income is 120-180m², middle income 60-100m² and low income 15-35m² which gives a mixed type of houses for the neighborhood.
 - ✓ The front or back yard of the houses have different characters for the different income groups but still some common character exist in the middle income and low income front yard spaces. The front yard for high income is 70-120m², 80-120m² for middle income and 100-2000m² for low income. This has a great impact for the mixity because of its size, shape and level of privacy.
 - ✓ Arrangements of the compound are different for the mixed income neighborhood of Aroge Kera. The high incomes have mainly one main house, service quarters and guard or made house in one compound owned by one household, which has an average area of 300-500 m². But in the case of middle and low income compound different households live in one compound in a cluster of 3-6 households for middle income with an area of 400-600m² and 9-13 households for low incomes with an area of 500-700m².
- Benefits and problems of mixed income neighborhood.
 - ✓ The low incomes benefited in getting financial support from the middle and high income people when facing problem and when they are sick. The high and middle incomes get cheap labor cost from the low incomes in constructing internal road, helping for different events like by baking *injera*, *wot*, *tela*. And the low and some of the middle income people get job opportunities in reverse.
 - ✓ The residents of Aroge Kera have faced some challenges from the mixed income neighborhood. There is a shortage of children's playground, face a problem of security (theft), feeling of un secure about their children's while playing with neighbors is mainly noticed by high incomes, and the low incomes are more affected by lack of common space in the compound.

PART II
IMPLICATIONS, RECOMMENDATION
And DESIGN PROPOSAL

CHAPTER SIX

IMPLICATIONS, RECOMMENDATION & DESIGN PROPOSAL

6.1 Implications of a mixed income neighborhood character

Core spatial elements which imply the character of mixed income neighborhood were identified from the research case study area, Aroge Kera. These elements has contributed for the existence of the mixed income neighborhood and made the site to sustain its existing character. Therefore, the research recommends for the future neighborhoods mixed income neighborhood should incorporate:

Common spaces: besides being a breathing space for the site it creates a strong social interaction through sharing spaces such as open spaces, children play ground, and gathering and event taking place areas.

Well-designed local roads: serve as a car parking, car passing and car washing for the different income residents and at the same time it is used for crop drying at the side of the road and tent raising purpose. More often it creates intimacy between neighbors while passing through it.

Housing type: constructing houses based on the size, shape and quality by considering the level and status of the residents.

Compound: the proportion of the compound should be thoughtfully designed for the different income residents separately. As the meaning of a compound and level of privacy for the different income households differ the number of clusters in a compound should also be calculated.

Size and shape of the front yard: Determining the size and shape of the front yard creates intimacy between neighbors and shared common space in the same income status households in the compound. Depending on the income status of the households the size and shape of a front yard should be calculated based on the number of households live in a cluster.

Services: provision of social services will made the site to be more mixed and attract all income groups in need of getting service from near distance and easy access of job.

Level of privacy: as the level of privacy depending on the income status of households differ; it can be achieved through the size and shape of common spaces and front yard shared, and number of households in a compound.

6.2 Sample design proposal

6.2.1 Concept development

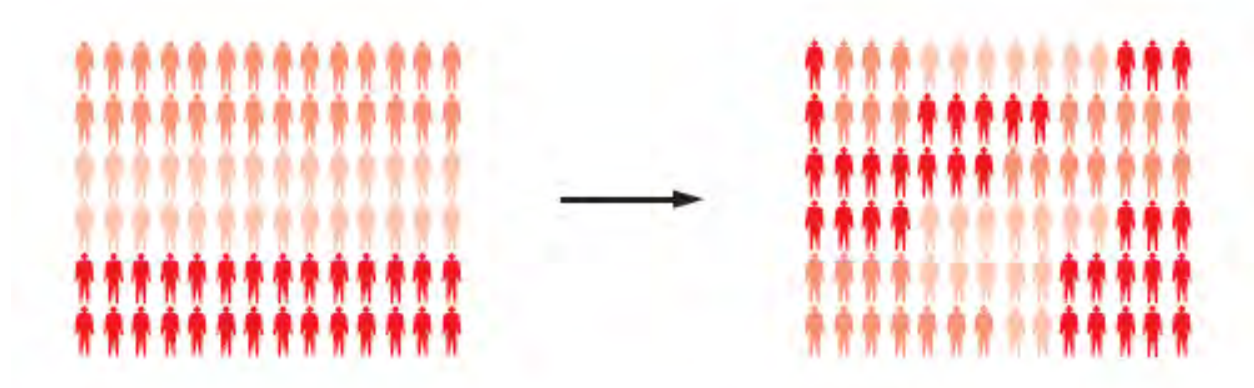
Different researches have studied the concept of mixed income neighborhood. It was believed that mixing different income level of households is preferred means of developing social interaction, more diverse typology of houses and affordable housing, for this reason some countries including England and towns such as Colombia, Maryland, Virginia and Reston were planned for mix of incomes.

The concept of mixed income neighborhood has been defined by different researchers. From this research, some researchers such as Chapple, Galster, Popkin, Duke and Kleit supported the idea based on the benefit related to gained access to more improved services, good quality housing, neighborhood facility and safer environment. The existence of social services and amenities (parks, schools etc.) in a mixed income neighborhood helps to have more social interaction among the peoples. Mixing residents of varying incomes has a benefit of access to education and employment opportunity. It also has a benefit of improving the lives of middle class residents, role model for low income residents by demonstrating standard of behavior, housekeeping manners, parenting skills and other social norms. Other researchers such as Joseph, Diane and Zach have opposed the concept of mixed income neighborhood. Even if they agreed on the benefit of increased job opportunity, access to quality goods and services, there was a concept that they will not be benefited of increasing social interaction and no guarantee that low income families will be able to access the job or that the job will offer higher earning, and better benefit.

From the research site Aroge Kera, the existence of mixed income neighborhood is much more visible and the level of mixity has made the neighborhood to be successfully mixed. The characteristics of mixed income neighborhood are studied based on the socio-economic and spatial elements that contributed for the mixity. In this research the socio-economic character of the mixed income neighborhood is defined by good social interaction, helping each other in good and bad times, sharing household equipment, job opportunity, cheap labor, financial support, participating in social activities (*idir, iqub, mahiber*,, wedding, funeral, etc). Preserving

the good potentials of such neighborhood and improving the existing problems are essential for developing successful mixed income neighborhood.

MIX PEOPLE



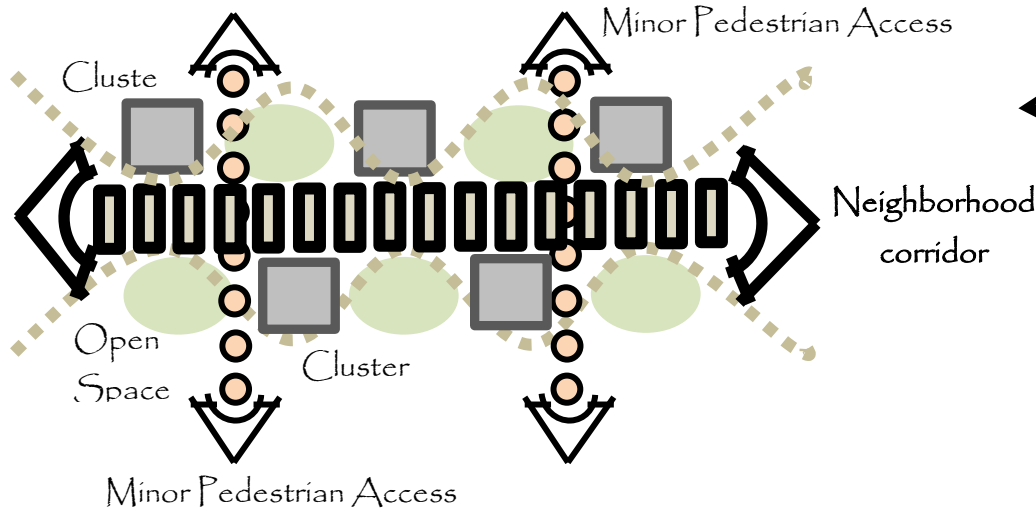
Cities with ghettos are dead – and dangerous.

Therefore, live together.

The proximity of different social and economic groups in one neighborhood is the basis for local network of services, employment, security, cross financing, informal welfare, low crime rate, and solidarity. This leads to social cohesion.

(Kneble, 2006)

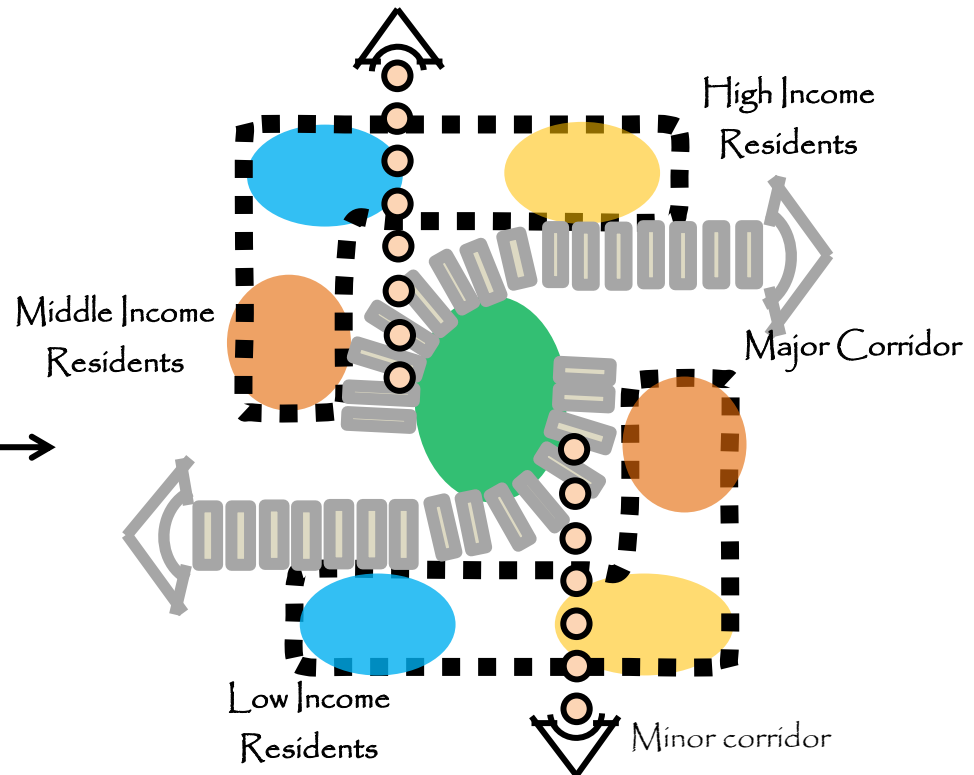
Implication of mixity on local roads



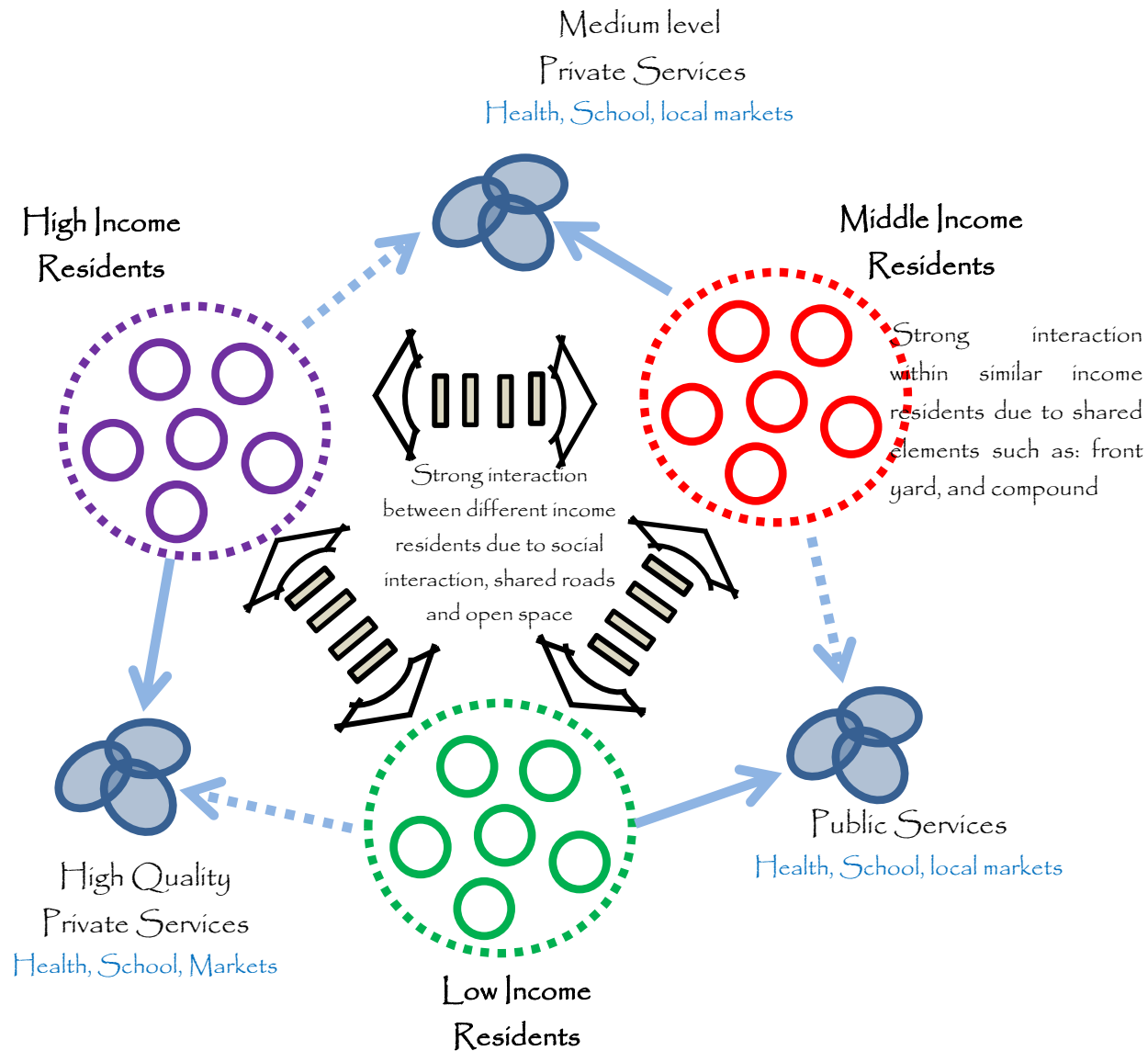
As the findings of the research shows the implication of mixed income neighborhood character can clearly be seen on the neighborhood local roads. As it can be seen from the graphic description, the main neighborhood corridor has a great impact on creating mixity by organizing clusters and Neighborhood open spaces and also by being the main element which all income status households uses for day to day activity.

Mixity at a cluster level

Based on the findings of the research the implication of mixed income neighborhood at a cluster can be described by the existence of the different income residents in close proximity sharing open spaces and local roads as well as pedestrian access. As it can be seen from the diagram different income status can be arranged together by having their own different level of private and public spaces. All income status households can have equal access for the common central open space and it can be used for different events. Major and minor corridors should be interlocked with the central open space and by passing



Character of mixity at neighborhood level



Strong interaction within similar income residents due to shared elements such as: toilet, front yard, and compound

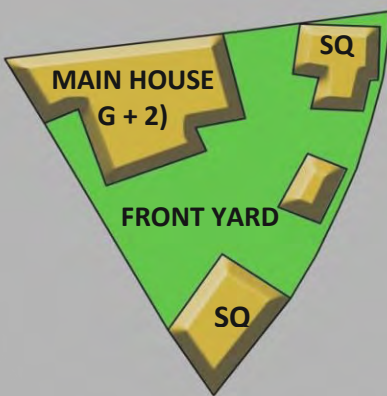
The finding of this research shows the implications of mixity at neighborhood level which can be characterized by: residents have strong interactions are similar income residents due to the elements they share like: toilet, front yard and compound. The different income level residents also have strong relationship due to their social interaction and shared elements like: roads and open spaces.

In addition provision of different level of services (like: school, health centers and markets in one neighborhood have a great impact for the existence of mixity. This is because all types of income residents can easily access these services based on their income level.

6.2.2 Overall Proposed Physical Character of Mixed Income Neighborhood

Existing

- Area of the house - 120- 180m²
- Interior - 3 -4 Bed rooms
- Form – G+0 Detached houses
- Separate service quarter
- Built with good quality material (stone and cement)



High income HH's house

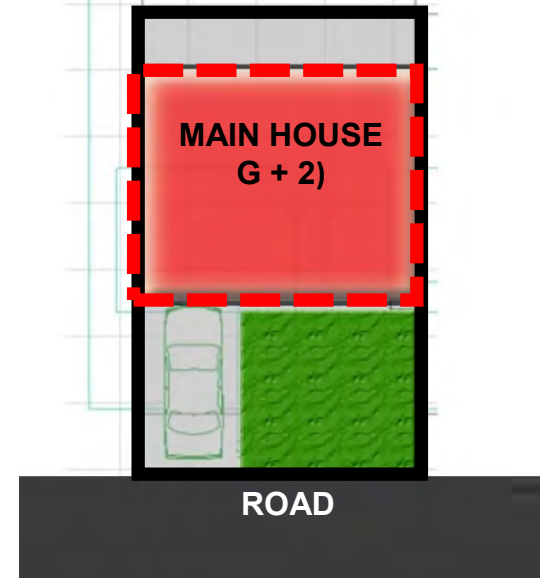
Proposed



- Area of the house - 75 m²
- Interior – 4 -5 Bed rooms
- Form – G+2 Row houses
- Service quarter on the back yard.

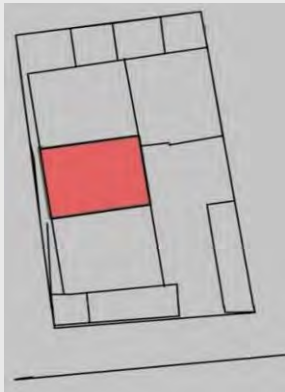
Design Considerations

- High level of Privacy
- High Level of security
- Standard of the house
- Quality house functions
- One Compound for one HH



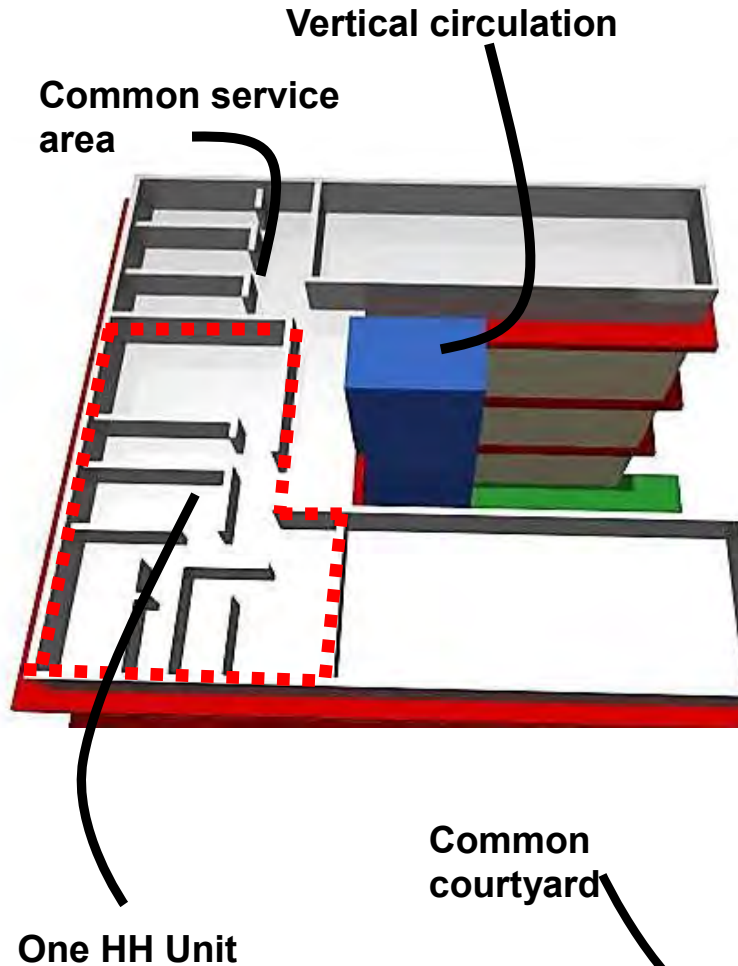
Existing

- Area of the house -60 - 100m²
- Interior - 1 -3 Bed rooms
- Form – G+0 Row houses
- Separate service quarter
- Built with cement plastered Mud wall



Middle income HH's house

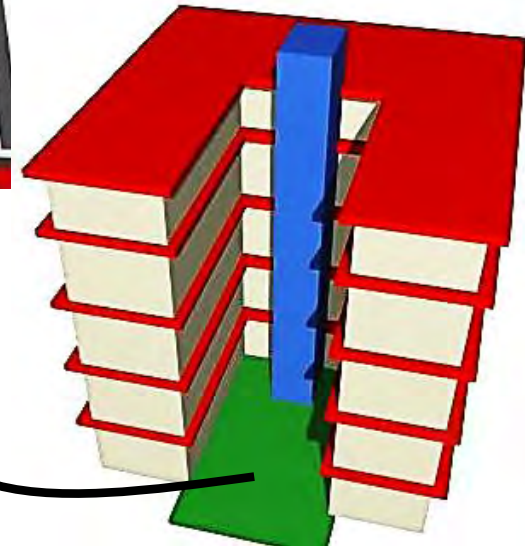
Proposed



- Area of the house – 90 - 110 m²
- Interior - 1 - 3 Bed rooms
- Form – G+4 Apartment
- Service quarter on every floor

Design Considerations

- Medium level of Privacy
- Good Standard of the house
- Quality house functions
- Level of security
- Three HHs sharing Service area
- 15 HHs sharing common courtyard



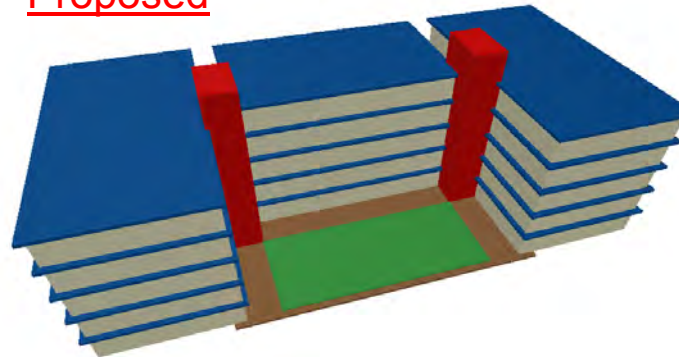
Existing

- Area of the house – 15 – 35 m²
- Interior - No internal partition
- Form – G+0 Row houses
- Has no service quarter
- Poor quality Built with walls and floor



Low income HH's house

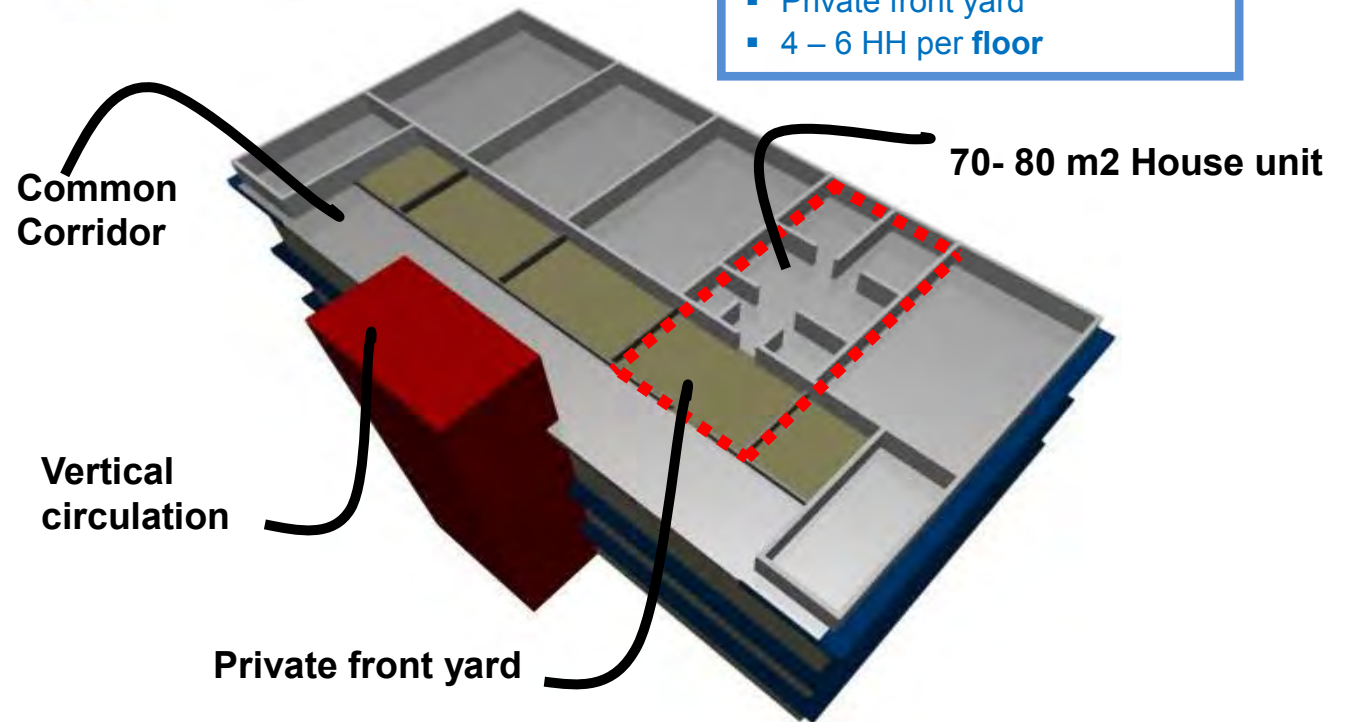
Proposed



- Area of the house - 70 -80 m²
- Interior - studio – 3 Bed rooms
- Form – G+4 condominium
- Private front yard

Design Considerations

- Fair Standard of the house
- Fair Quality of house functions
- Good Level of security
- Private front yard
- 4 – 6 HH per floor



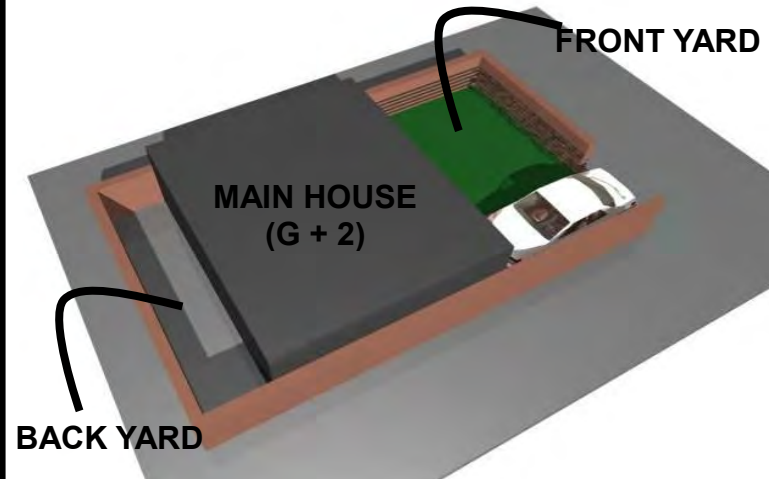
Existing

- **Area of the compound** – 400 – 500 m²
- **Functions:** Main House, SQ, Guard house, car parking, open space, external toilet and kitchen, cloth washing and children playing area.



High income HH's Compound

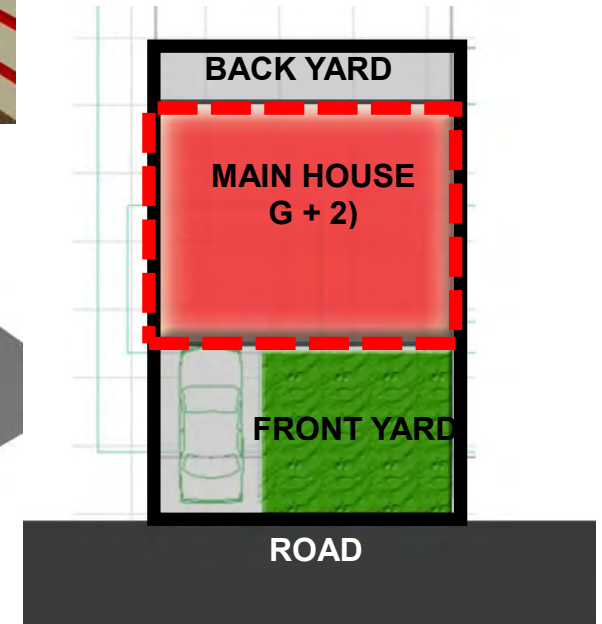
Proposed



- **Area of the Compound** - 120 m²
- **Functions:** Main house, open space, Car parking, SQ

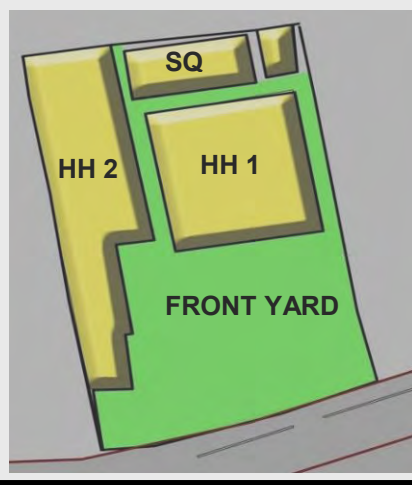
Design Considerations

- Private elements in the compound
- Private open space
- Good Level of security
- One house in one compound



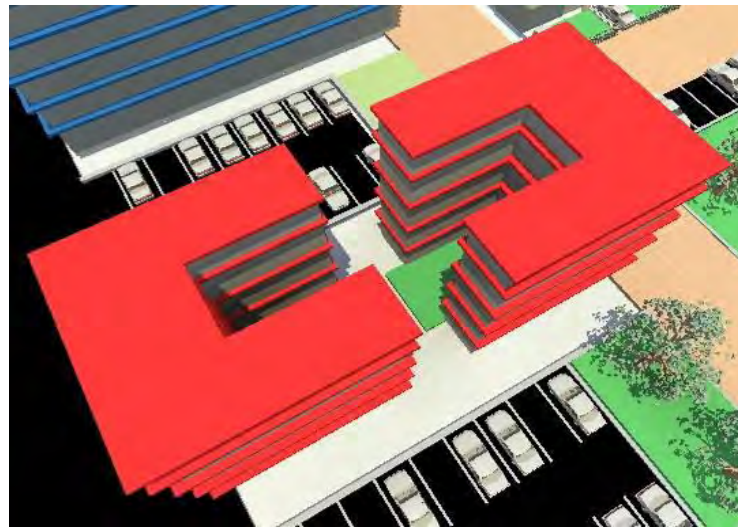
Existing

- Area of the compound – 400 – 600 m²
- 3 – 5 HH per compound
- **Functions** : Main Houses, SQ for each, common open space



Middle income HH's Compound

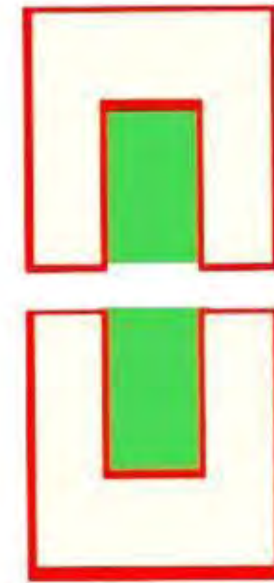
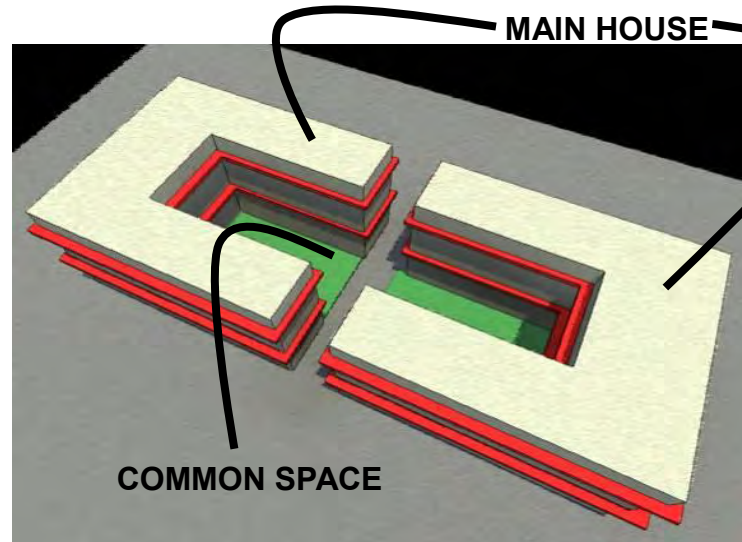
Proposed



- Area of the Compound – 1000 – 1500 m²
- **Functions**: Main house, common open space, SQ
- 3 HH per floor , 15 HH per Block

Design Considerations

- Shared elements in the compound
- Common open space
- Good space definition
- Multiple HH in one compound



Existing

- **Area of the house** –400 - 600 m²
- 9- 15 HH per compound
- **Functions:** Mainhouses, common toilet, common open space, no car parking



Low income HH's compound

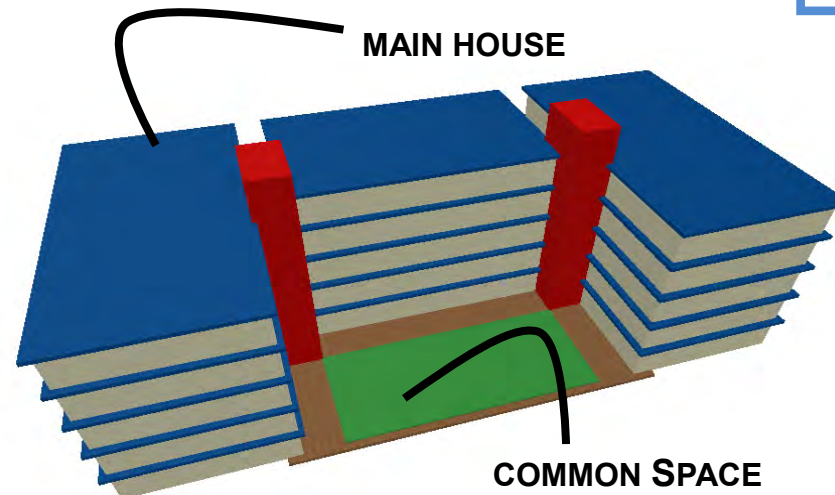
Proposed



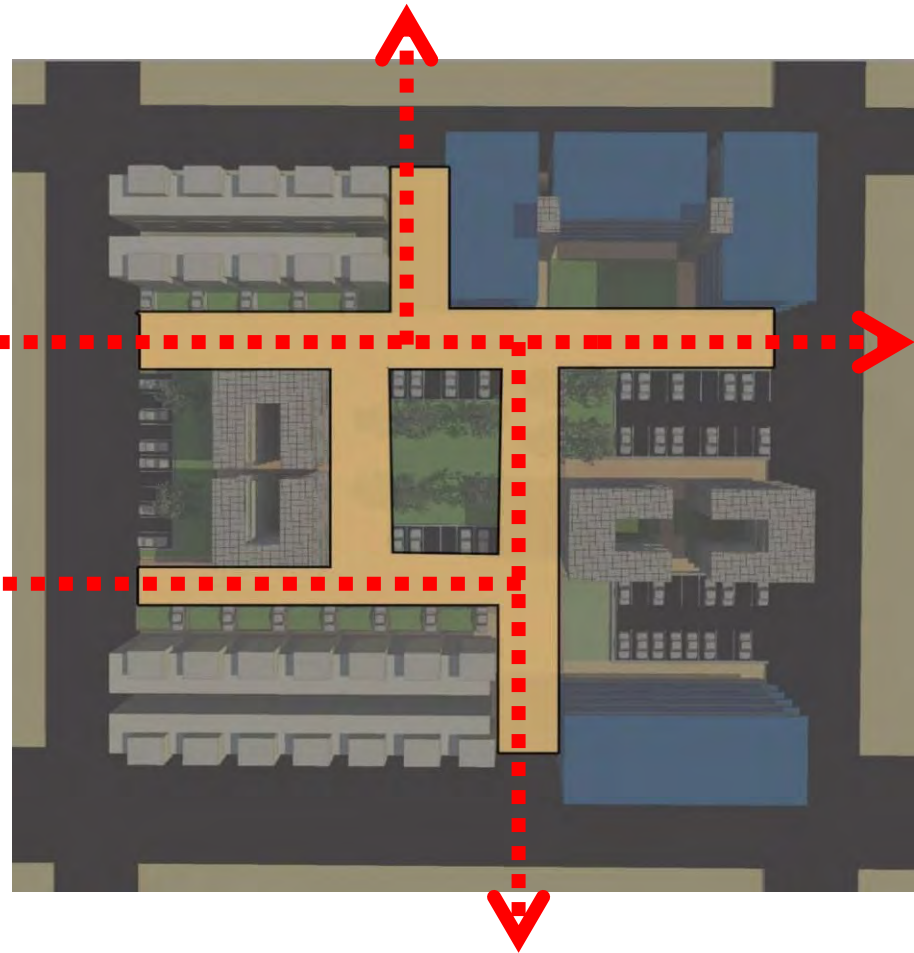
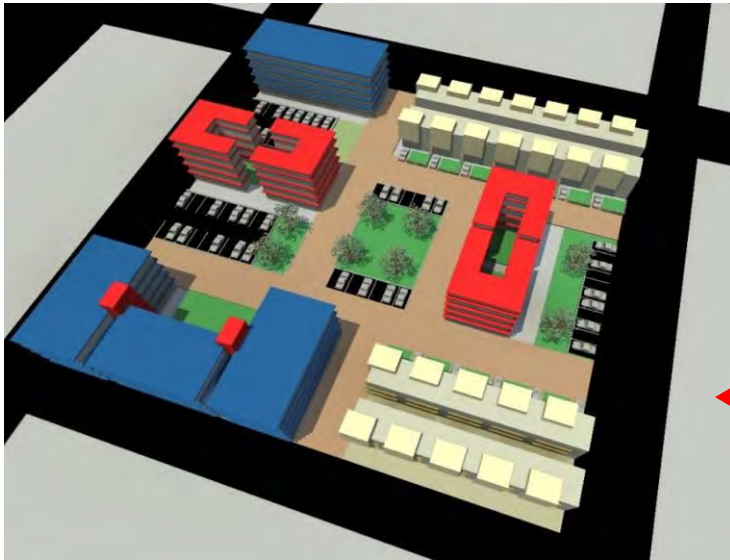
- **Area of the Compound** – 1000 – 2000 m²
- **Functions:** Main house, common open space, SQ
- 4 -6 HH per floor , 20 – 30 HH per Block

Design Considerations

- Shared elements in the compound
- Common open space
- Good space definition
- Multiple HH in one compound
- Common vertical circulation



Local road



- **Accessibility** - Can easily be accessed from five directions.
- **Function** - Serve all the three income groups as a passage way for pedestrians and vehicles.
- Connects the different income groups as well as the neighborhood open spaces.

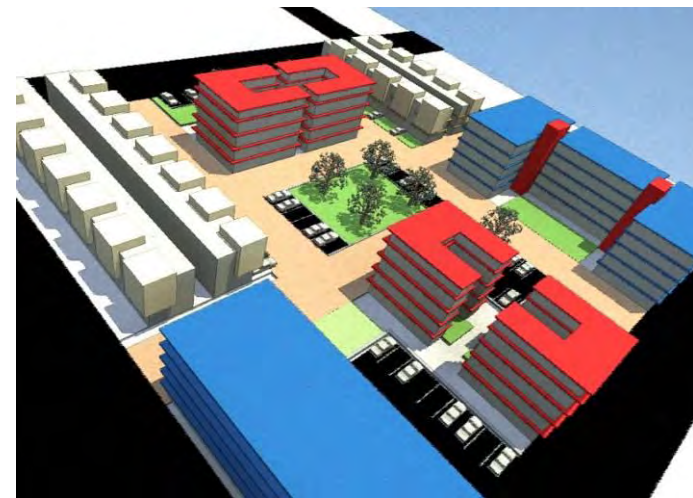
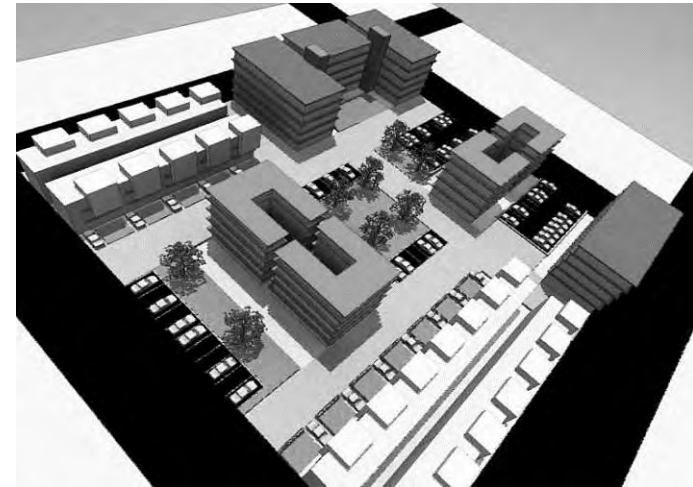
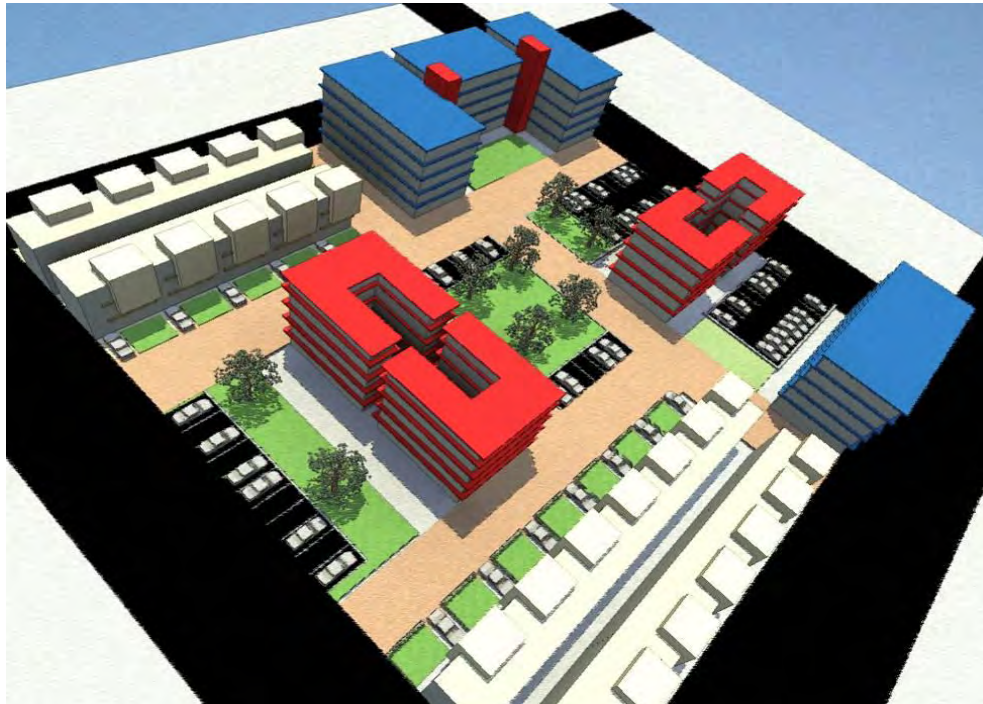
Common Space



- **Function** - Shared common space for crop drying, car parking, raising tent, gathering space for "edir", mahiber, religious ceremonies like demera....
- **Level of privacy** - Hierarchically arranged open spaces for each income families (for car parking, children playing area).



Cluster composition



- Sample cluster composed of all income groups.
- Different housing types for each income groups.
- Different types of compound characteristics designed for each income groups.
- Different level of open space composition for different income groups and one central shared open space.
- Internal road designed to integrate the different income groups.

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APPENDICES

Appendix-A: Source and type of information collected

Source	Type of information collected
Municipality	In Selecting Arada sub city as a case study area.
Sub city	<ul style="list-style-type: none"> - Recommending the sample site where mixed income neighborhood exists. - Character of the neighborhood - Maps, Aroge kera LDP study - General back ground about the social, spatial and environmental issue of the site.
<i>Kebele</i> 01/02	<ul style="list-style-type: none"> - Boundary of the specific study area. - Recommend sample respondents from the sample study area.
Statistics agency	Specific number of population in <i>Kebele</i> 01/02.

Appendix-B: List of interviewees

In order to study the existence, advantage and factors for the existence of mixed income neighborhood in-depth interview or life stories of households were used in the research. The respondents are selected from the case study area and they are selected according to their willingness and the detailed information they give. The households interviewed are:

- W/ro Enani Bulto
- W/ro Saba zemen
- W/ro Lidet Taddesse
- W/ro Shibere getachew
- Ato Gezahegn Asefa
- Ato Wondwosen G/Yohanis
- Ato Taye Hailu
- W/ro Abebech Deguma
- Ato Ayalneh Fikru
- W/rt Etagegn Bekele
- Ato Teshager Alehegn
- W/ro Sinkines Teware

Appendix-C: Questionnaire

1. Name: Age Sex.
2. House No..... Family size.....
3. What do you work?
4. Income per month.....
5. What other source of income do you have?

6. How long have you been living here?

7. Have you ever think of moving to other place?
 - A. Yes
 - B. NoIf yes Why?
8. Do you prefer staying here other than other place?
 - A. Yes
 - B. NoWhy?
 - A. The social interaction is good
 - B. I have no other choice
 - C. I lived for long time and I like it here
 - D. Other
9. Do you notice mix of different income living together in the neighborhood?
 - A. Yes
 - B. NoIf yes how?
 - A. Different tenure type existed
 - B. There is visible distribution of income in the neighborhood
 - C. different types of income groups live around me
 - D. Other

10. How do you thing the mixed income neighborhood (mixity) existed

11. How do you range the level of mixity in the neighborhood?
- A. Very high
 - B. High
 - C. Medium
 - D. Low
 - E. Very low
12. What kind of benefit do you get from the mixed income neighborhood?
- A. Financial support (borrowing and lending money)
 - B. Good social interaction
 - C. Helping each other in good and bad times
 - D. Job opportunity
 - E. Sharing house equipment
 - F. Serving from the uses (services) found around the neighborhood so no need for going far (shops, school, clinic, wood and metal work....)
 - G. Sharing Service and infrastructure
 - H. Other
13. Do you lend or borrow money from your neighbor?
- A. Yes
 - B. No
14. Do you lend or borrow house equipment from your neighbor?
- A. Yes
 - B. No
15. Do you participate in any social activity? Such as:
- A. *Edir*
 - B. *Equb*
 - C. *Mahiber*
 - D. Wedding
 - E. Funeral
 - F. other
16. In what way do you participate in any kind of social activity in the neighborhood like By donating money or working together (labor)
- A. *Edir*.....
 - B. *Mahiber*
 - C. Wedding.....
 - D. Funeral.....
 - E. other.....
17. Do you share electricity from your neighbor?
- A. Yes
 - B. No

18. From where do you access light at night time for the purpose of security?
- A. Neighbor
 - B. self
 - C. Government light (road light)
 - D. Other
19. From where do you get water when there is shortage?
- A. Bono
 - B. Neighbor
 - C. Other place
20. Do the neighbors co-operate in constructing internal roads that can be accessed by all?
- A. Yes
 - B. No
21. From where do you access additional space when facing shortage of space for different activities and while having events like wedding, funeral, *mahiber*.....?
- A. Relatives
 - B. Neighbors
 - C. Friends
 - D. Common space outside the compound
 - E. Private Space inside the compound
 - F. Other
22. Who access the school found in the neighborhood?
- A. High incomes
 - B. Low incomes
 - C. Middle incomes
 - D. A & B
 - E. B & C
 - F. A & C
 - G. All
23. Which school do you send your children's?
- A. Private school in the Neighborhood
 - B. Private school outside the Neighborhood
 - C. Public school in the Neighborhood
 - D. Public school outside the Neighborhood
 - E. Other
- Why.....
- A. Private school is affordable
 - B. Private school is not affordable
 - C. Public school is affordable
 - D. Public school is not affordable
 - E. Far from the neighborhood
 - F. Near to the neighborhood

24. Do all the services (school, clinics.....) in the neighborhood accessed by all income groups?

- A. Yes
- B. No

25. Which clinic do you go when you have health problem?

- A. Private clinic in the Neighborhood
- B. Private clinic outside the Neighborhood
- C. Public clinic in the Neighborhood
- D. Public clinic outside the Neighborhood
- E. Other

Why.....

- A. Private clinic affordable
- B. Private clinic is not affordable
- C. Public clinic is affordable
- D. Public clinic is not affordable
- E. Far from the neighborhood
- F. Near to the neighborhood

26. Do you think the shops and mini markets are accessed by all income groups?

- A. Yes
- B. No

27. From where do you shop most of the time?

- A. Neighborhood market
- B. Around the neighborhood
- C. Other place

28. Do you think the mixity brings job opportunity for the dwellers?

- A. Yes
- B. No

How.....

- A. I hire made from the neighborhood
 - B. I hire house guard from the neighborhood
 - C. I buy wood or metal products from the neighborhood
 - D. my neighbor provide me money when to start job
 - E. my neighbor let me work for him
 - F. others
29. What common space do you have in the neighborhood that makes the different income groups to be mixed?
- A. Internal roads
 - B. Open spaces
 - C. Front yards
 - D. Others
30. What elements do you think brought the mixity in your surrounding? How?
- A. The road
 - B. Open space
 - C. Compound
 - D. Front yard
 - E. Others
31. What problems have you face from the mixed income neighborhood?
- A. security (theft)
 - B. Segregation by income group
 - C. Lack of common spaces in the neighborhood
 - D. Others
32. What does the common space contribute to the mixity?
- A. creates intimacy between the neighbors
 - B. serve for different activity (wedding, funeral, *mahiber*, ...)
 - C. Serve as working place (car washing, metal and wood working.....)
 - D. Others

33. For what purpose do you use the common space?
- A. For gathering space of different activity (wedding, funeral, *mahiber*, ...)
 - B. Just to pass on it
 - C. working place (car washing, metal and wood working.....)
 - D. Others
34. Who use the common space?
- A. All income groups around the neighbor
 - B. Specific groups
 - C. all peoples even outside the neighborhood
 - D. Other

