ADDIS ABABA UNIVERSITY

GRADUATE SCHOOL OF SOCIAL WORK

COMMUNITY SITUATIONAL ASSESSMENT FOR ECO-CITY DEVELOPMENT INTERVENTION: THE CASE OF GULLELE SUB-CITY, ADDIS ABABA

BY

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ADDIS ABABA

October, 2007

Running Head: COMMUNITY SITUATIONAL ASSESSMENT

Community Situational Assessment in Relation to the Concept of Eco-City Perspectives: the Case of Gullele Sub-City, Addis Ababa

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A Thesis Submitted to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirements for the Degree of Master of Social Work (MSW)

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Addis Ababa

October 2007

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Acknowledgments

First of all, I would like to express my heart- felt and warm gratitude to Professor Sandhya Joshi, my advisor, for her firm support and constructive comment, which shaped my research to a great extent.

I am very much grateful to Ato Gosaye sheferaw, Manager of kebele 07, Gullele Sub-City, for his unreserved support in availing the list of residents, which helped me to identify the study respondents, as well as for his assistance for facilitating guides with in the community.

My special thanks go to my dear friend Getachew Negash for his unreserved moral support, which contributed a lot in helping me to finish the study effortlessly. In addition, I would like to forward my heart felt thanks to those study participantsand organization heads who willingly participated in the interviews.

Finally, I humbly thank all my colleagues who assisted me by sharing ideas and materials that are relevant for the study.

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Abstract

The whole idea of the eco-city concept revolves around three essential interdependent elements, which are sound environment, economic viability and provision of social services. The goal of eco-city intervention is to create better socio-economic and physical environment that have long sustainability effect to the beneficiaries. This study focuses on community situational assessment in relation to the concept of eco-city perspectives by taking the case of Ketchene area in Gullele sub-city. The objective of the study was to assess the economic, social and environmental aspects of the study area using eco-city concept as an assessment tool. The study is descriptive in nature and used both quantitative and qualitative methods of data collection. The study revealed that the respondents of the study area are living in extreme poverty and poor environmental conditions confronting with physical problems such as lack of access for social services, poor sanitation and waste disposal, unavailability of greenery and open spaces. The survey also found out that most of the sample respondents' houses are characterized by small size and poor quality design, which is incompatible with the modern city plan. Besides, the majority of the respondents are engaged in the informal small scale economic activities and almost all of them are living in extreme poverty. As reported by the respondents, the main reasons for their abject poverty are unemployment, shortage of raw materials, production/ working place problem, lack of modern machinery, shortage of capital, absence of credit facility and problems related to market. The study further attempted to pinpoint implications for social work intervention to improve the poor living condition of the respondents of the study area.

CHAPTER ONE

Introduction

The City of Addis Ababa emerged as a military camp in 1887. Thereafter it continued to grow haphazardly without any urban planning. Its population has grown to four million inhabitants with very slow economic growth, producing a high density. The alarming growth of the population in turn has caused over crowding, environmental degradation, high traffic congestion, slums and squatters, high unemployment rate, wide spread poverty and shortage of public utilities. Contrary to this growth, the city's service giving capacity has been deteriorating from time to time (Tesfaye Shewaye, 2001). The city of Addis Ababa has served as the center for political, economic and administrative institutions of Ethiopia for more than a century. It is also today's political capital of Africa, home of the organization of African Union (AU), the seat of the United Nations of Economic Commission for Africa (UNECA), many embassies and other regional and international organizations. However, the city of Addis Ababa is not up to the mark in terms of environmental sanitation as the center of the African Union, and does not satisfy varied needs of its citizens. The city suffers from a chronic shortage of essential social services, an awfully inadequate physical infrastructure and an unhealthy environmental condition. To combat the unhealthy situations, the city council has launched broad based development strategies in addition to proposing good governance (Addis Ababa City Administration, 2003). Eco-city intervention program is one of the development strategies that has been designed to improve the situation. The focus of this research

is, therefore, to assess the economic, social, and environmental aspects of the study area which is useful as baseline information to implement eco-city projects.

Statement of the Problem

The city of Addis Ababa is an industrial, commercial, diplomatic and service center of Ethiopia, which is growing haphazardly without any planned interventions. As a result the original pattern of settlement still dominates in the current structure of the city, while the population has grown to 4 million inhabitants with very slow economic growth (Addis Ababa City Administration, 2003). In some parts of the city the gross density of the population is as high as 2500 inhabitants/hectare (City Government of Addis Ababa, 2002).

On the other hand, the city is not capable of accommodating the increasing population. As a recent study conducted by the city Administration of Addis Ababa (Addis Ababa City Administration, 2002) indicates that:

- 80% of built up area of the city is 'slum area' and is further deteriorating day by day
- 79% existing housing stock badly needs maintenance
- 95% of neighborhoods have no sewer and drainage lines
- 40% of neighborhoods do not have emergency access roads
- 72% of the streets are below standard width and quality
- 40% of the solid waste are left uncontrolled
- 47% of the households live in rented housing units
- 60% of the households have no direct access to potable water
- 75% of the households are low income earners

- 60% of the households have no direct access to toilet facilitates
- There are only 7 parks for the four million inhabitants.

The city of Addis Ababa has one of the highest population growth rates in the world with annual growth rate of 3.85%. Today it has about four million inhabitants. In the period of the next 20 years, the number will be doubled. The unemployment rate of the city is about 35-45%. Fifty percent of the inhabitants are living below the poverty line and one third of the city's inhabitants are living in extreme poverty (Addis Ababa City Administration, 2005).

According to the reports of the Central Statistics Authority (CSA), the high, middle and low income groups in the city accounts for 4, 16, and 80 percent of the city's population respectively. Moreover, the monthly income for the three categories is more than 2000 Birr, 670-2000 and less than 670 Birr respectively. The third category (low-income group) represents those households living below subsistence level (CSA, 2004, Addis Ababa City Administration, 2002).

Following the introduction of eco-city planning concept in "Agenda 21" in Rio de Janeiro in 1992, many cities in the world are integrating eco-city projects in their urban development program (United Nations [UN], 1992). Similarly, in December 2003, the City Administration of Addis Ababa launched an eco-city project program as an alternative planning instrument to upgrade in some selected slum and shanty areas. The eco-city projects aimed at improving the socio-economic and physical environment of the city.

The major tasks of eco-city projects among others include:

- Improvement of sanitation, public toilet, dry and liquid waste disposal systems.
- Develop/improve access roads and other service facilities.
- Develop education and health center facilities.
- Upgrade residential and recreational centers.
- Upgrade slum centers through redevelopment of houses.
- Establish production and marketing facilities and income generating schemes.
- Protect the natural environment by making the city green and clean.
- Develop public and private parks and prepare land for lease purposes.

Although these pilot projects have tried to include some of the slum *Kebele*s in the city, the current study area, which is *Kebele* 07 of Gullele Sub City, was not covered by the initiative so far. This study, therefore, attempts to assess the socio-economic, cultural and environmental situations of the study area with the objective of gathering some baseline information which can be helpful to devise and implement eco-city development program for the benefit of the residents.

Background of the Study Area

Gulelle Sub-city is one of the ten sub-cities found in the northern part of Addis Addis Ababa. According to the new structure, the sub-city is divided in to ten *Kebele*s including *Kebele* 07. *Kebele* 07 is located in the northern part of Addis Ababa to the North of Ketchene Medhanealem Church. It has more than 18,000 population and is surrounded by *Kebele*s 17 & 18, *Kebele* 06, *Kebele* 04 and *Kebele* 08 in the north,

south, east and west, respectively. The area is commonly called Ketchene, which is nearer to 'Entoto', which was Emperor Menlik's former initial seat as a military garrison. Historically, 'Entoto' later became the capital city with gradual expansion towards the south where Ketchane served as the stepping-stone and the first settlement area for the present Addis Ababa. This indicates that the *Kebele* as a settlement is as old as that era of the late 19th century.

According to reviewed documents from the city council, the area is characterized by a lack of access to basic services, poor housing conditions, a high density of people with low income, poor environmental sanitation, and an unplanned urban settlement. The *Kebele* is devided into different sub-localities (sefers) namely Mariam Wonz, Baha Sefer, Addis Amba Sefer, Kossober Sefer, Margeja Sefer, Shinkaurt Sefer etc. As far as the land use of the *Kebele* is concerned, almost all areas are residential except for a few establishments along the main asphalt road. These establishments are used for mixed income generating activities for many residents who engage in retailing shops, metal workshops, garages, bakeries, etc.

Objectives of the Study

General Objective: The General objective of the study is to assess the economic, social, and environmental aspects of the study area -(*Kebele* 07 of Gullele Sub-city) using eco-city concept as an assessment tool.

Specific Objectives

1. To assess the demographic characteristics of the study area sample respondents' in terms of population size, age, sex, ethnic and religious composition.

2. To assess the social conditions such as educational, cultural and recreational facilities.
3. To assess the housing situation, kitchen, toilet facilities and utilities (access to clean water, electricity, telephone).
4. To assess sanitation and environmental conditions (i.e. sewerage disposal, and solid waste management, open and green spaces, degradation, settlement pattern, vehicular access) of the study area.
5. To examine economic conditions such as poverty, income, employment situations & type of business activities of the study participants.

Significance of the Study

The study helped to assess and understand the general situation of the study participants in terms of social, economic, environmental conditions from the dimensions of eco-city imperatives. Thus, the study is believed to have significance for development actors who are already involved or have intention of working with slum area upgrading development endeavors such as a local NGO named Integrated Holistic Approach Urban Development Project, which is involved in slum upgrading activities. Furthermore, the results of the study might serve as a source for those who are intending to do further research on eco-city related areas.

Limitations of the Study

Since the eco-city is a newly introduced concept of a city planning tool for all countries in the world including Ethiopia, there was a scarcity of relevant and well-organized sources that could meaningfully enrich the subject matter under the study. Furthermore, the limited period of research time and inadequacy of resources

hampered the researcher to adequately address the complex and dynamic socio-economic and environmental problems of the study respondents.

Conceptual Definitions

Eco-city refers to economically viable, environmentally sound and socially acceptable neighborhood development plan i.e. creating a habitable environment including provision of physical infrastructure, social services, and unpolluted environment.

economically viable study of goods and services: the study of the production, distribution, and consumption of goods and services (Microsoft® Encarta® 2006.)

environmentally sound surrounding areas: the land or area surrounding a place Microsoft® Encarta® 2006.

socially acceptable investing in companies that help society: investment in companies not considered to do things that harm society as a whole, e.g. polluting or making products that endanger people's health (Microsoft® Encarta® 2006.)

Kebele is the smallest unit of administration, and in this study it refers to Kebel 07, which is under Gullele Sub City of Addis Ababa City Administration

CHAPTER TWO

LITERATURE REVIEW

Eco-City: Concept and Definition

Cities are one of the most complex things that human beings have ever created. They are the wellsprings of culture, technology, wealth and power. According to the definition of Pennink, Dauskardt and Davidson (2001), urban areas are places of intense activities and densely grouped facilities. Activities of urban areas are characterized by the employment of people in occupations such as trade, manufacturing and services. The physical environments and infrastructures that house and support urban areas are characterized by highly dense and complex structures: ranging from vast industrial installations to modest dwellings; from transport routes to interchanges to public parks and cultural facilities; and from sophisticated business districts to sprawling residential areas. Pennink and et al. (2001) further stated the difficulty of demarcating the end and the beginning points of countrysides, towns and cities. According to these authors, however, it is technically possible to define country sides, towns and cities using the size of the population, administrative or political boundaries, functional characteristics of the settlement, and sometimes through common sense.

Based on their locations, resource endowment, political and strategic importance, cities and towns offer unique characteristics and challenges for national, regional and local development (UNCHS, 2001). With regard to opportunities, the development of cities and their management have been the focus of attention

because cities, 1) accommodate more than half of the world's population, 2) are engines of national development, 3) are centers for social progress and cultural development, 4) can impact upon more people faster, and 5) facilitate and accelerate rural development (United Nations Center for Human Settlement [UNCHS], 2001). As further stated by UNCHS (2001), cities also face challenges from different angles. The most common ones include the high and increasing issues of urban poverty, along with the sharp decrease and further degradation of urban environments. There is a high level of resource consumption and waste disposal centers. The demand for urban infrastructures and services outweigh the environment and city's ability to provide supplies, leading to a weak municipal finance base and institutions that manage and run cities as compared to requirements.

The concept of eco-city was first introduced in Rio de Janeiro in 1992 at the "Earth Summit", Conference on Environment and Development where 178 countries participated in formulating instruments towards Sustainable Development (UN, 1992). "Agenda 21" , which was one of the instruments devised by the 'Earth Summit', calls for action at local levels by involving the various groups such as municipalities, the community and the private citizens to ensure sustainable urban development.

According to the 'earth Summit' participants, sustainable development involves protecting the global environment, while ensuring that social and economic development make life better. It is here where the eco-city concept was born, a brave effort to put sustainable development intervention into action. Action oriented

activities include poverty reduction, access to water and energy, food security, waste management, the prevention of land degradation and environmental health.

Eco-city is an ecologically healthy city. It is a green city where emphasis is placed on pollution prevention, recycling, and efficient use of energy by taking advantage of available sources. The eco-villages in various countries have shown cases of environmentally sound water management schemes and better ways of planning and building communities (Faran khan, 2002).

The participants of the Fifth International eco-city Conference conducted at Shenzhen,China,urged that integrated, holistic ecological perspectives and principles be applied to city planning and management. During this confrence a declaration was devised, that states that people oriented, eco-city development requires a comprehensive understanding of complex interactions between environmental, economic, political and socio-cultural factors based on ecological principles. It further says that cities, towns and villages should be ecologically designed to enhance the health and quality of life of their inhabitants and maintain the ecosystems on which they depend. This requires careful ecological planning, management and participation of citizen and stakeholder groups. According to the declaration, eco-city development is a holistic approach integrating administration, ecologically efficient industry, people's needs and aspirations, harmonious culture and landscapes where nature, agriculture and the built environment are functionally integrated (Fifth International Eco-City Conference, 2002).

The declaration defined the requirements of eco-city development as follows:

- Ecological security–clean air, safe and reliable water supplies, balanced diet, healthy housing and workplaces, municipal services and protection against disasters for all people.
- Ecological sanitation–efficient, cost-effective eco-engineering for treating and recycling human excreta , gray water, and all wastes .
- Ecological industrial metabolism–resource conservation and environmental protection through industrial transition, emphasizing materials re-use, life-cycle production, renewable energy, efficient transportation, and meeting human needs.
- Ecoscape (ecological-landscape) integrity–arrange built structures, open spaces such as parks and plazas, connectors such as streets and bridges, and natural features such as waterways and ridgelines, to maximize accessibility of the city for all citizens while conserving energy and resources and alleviating such problems as automobile accidents, air pollution, hydrological deterioration, heat island effects and global warming.
- Ecological awareness–help people understand their place in nature, cultural identity, responsibility for the environment, and help them change their consumption behavior and enhance their ability to contribute to maintaining high quality urban ecosystems.

According to the declaration key actions needed by eco-city are to:

1. Provide safe shelter, water, sanitation, security of tenure and food security for all citizens and with priority to the urban poor in an ecologically sound

manner to improve the quality of lives and human health.

2. Build cities for people, not for cars. Roll back sprawl development. Minimize the loss of rural land by all effective measures, including regional urban and peri-urban ecological planning.

3. Identify ecologically sensitive areas, define the carrying capacity of regional life-support systems, and identify areas where nature, agriculture and the built environment should be restored.

4. Design cities for energy conservation, renewable energy uses, and the reduction of re-using and recycling materials.

5. Build cities for safe pedestrian and non-motorized transport use with efficient, convenient and low-cost public transportation. End automobile subsidies, increase taxation on vehicle fuels and cars and spend the revenue on eco-city projects and public transportation.

6. Provide strong economic incentives to businesses for eco-city building and rebuilding.Tax activities that work against ecologically healthy development, including those that produce greenhouse gases and other emissions. Develop and enhance government policies that encourage investment in eco-city building.

7. Provide adequate, accessible education and training programs, capacity building and local skills development to increase community participation,. and support community initiatives in ecocity building.

8. Create a government agency at city, regional and nationa leveles to

devsign and execute policy to build the eco-city. The agency will coordinate and monitor functions such as transportation, energy, water and land use in holistic planning and management, as well as facilitate projects and plans.

9. Encourage and initiate international, inter-city and community-to-community cooperation to share experiences, lessons and resources in eco-city development and promote eco-city practice in developing and developed countries (The Fifth International Eco-City Conference, 2002).

Cities all over the world are starting to take up the concept of eco-city by adapting it to their local needs and existing realities. Eco-city development in different countries concentrates on different issues. For instance, the USA eco-city development program has a focus on neighborhood units aimed at "beautified neighborhood centers". The South African eco-city development program concentrates on the city targeting poverty reduction and crime prevention (The Government of National Unity, 1997)

The Addis Ababa eco-city development concept is a combination of these two concepts, and works towards sustainable beautification of neighborhoods in selected eco-city development project areas with an emphasis on social, economic and spatial issues while developing their unique character and identity of the intervention areas (Addis Ababa City Administration, 2003).The unique character of Addis Ababa is that the majority of housing stock are government owned without any intervention and maintenance for decades. Rich and poor people live side by side in mixed modern complexes and shanty houses.

Urban Planning: An Overview of the Different Urban Policies and Strategies

To tackle the challenges that cities present, numerous developed countries have devised specific policies and strategic interventions. Such initiatives have to take into account the specific conditions in urban areas, specially the close spatial and functional relationships between different sectors of the city or town-housing, employment, infrastructure, transport, etc(World Bank, 2001).The initiatives should also consider issues like, poverty, environmental quality, social equity, and cultural diversity and security. As the following selected examples indicate, the conceptual understanding of eco-city, emphasis and approaches vary from country to country and from organization to organization.

The World Bank (WB) approach in regard to eco-city development is to strategize holistically and intervene selectively. The World Bank has developed an urban policy around the understanding that, urban transformation offers significant opportunities for countries to improve the quality of life of their citizens, and to bring impacts on their economies (World Bank, 2001). In this process, emphasis is given to decentralized local government and participatory local democracy. In its comprehensive development framework, the WB recognizes cities as integral units in specific spatial, social, political, environmental, financial and economic context-much like that of countries'. These multi-dimensional areas of intervention activities require a deeper and more integrated approach. According to the WB, the strategy will have a greater impact in raising the living standards of the poor and promoting equity with major roles being played by local government, the private sector and civil

society. The strategy emphasizes on the wider elements of sustainable development with the view that cities must be livable, competitive, well organized and managed, and financially sustainable.

The United Nations Center for Human Settlements (UNCHS-Habitat) in its second conference held in Istanbul in 1996, confirmed the need for important changes regarding human settlements and urbanization issues. Like the WB, Habitat recognizes the positive role cities play in achieving social and economic development through more holistic, inclusive and participatory policies that are required to make cities safer, healthier and more equitable. The Habitat agenda addresses two themes: 'Adequate Shelter for all' proposed to be tackled through security in tenure, property rights, access to credit, technologies, standards and rights to housing. The second theme is entitled, 'Sustainable Human Settlements in the Urbanizing World' to be tackled through proper planning and management of land resources, access to basic services, environmental protection, transportation, energy and better opportunities for social and economic development. Strategies to meet this agenda includes partnership formations, adoption of enabling approaches, activation of enabling mechanisms, building capacity among partner groups and monitoring and assessment of progresses (UNCHS, 2001).

In 1997, South Africa introduced an Urban Development Framework as part of the national reconstruction and redevelopment program (following changes in the apartheid administration) aimed at producing a consistent urban policy approach that guides the development of strategies and helps define the role of various sectors in urban development (The Government of National Unity, 1997). The urban

issues which received high attention of the Urban Development Framework include the:

- Dysfunctional nature of the urban areas.
- Growing urban population, persistent poverty, and lack of housing and basic facilities.
- Social problems, growing illiteracy and health problems.
- Economic inefficiency, lack of competitiveness, drop in investment and growing unemployment.

Urban Planning from Historical Perspectives

As Boddy (2002), stated that, urban planning before the 20th century was centered on beautification of physical aspects of cities. Later as the century progressed, planning began to embrace the whole range of human geography – physical, social, economic, political and environmental. In the 1930s, American planning studies incorporated social and economic elements along with a physical design for the first time. One of the most innovative planning concepts of the 20th century was the "garden city," first described in Sir Ebenezer Howard's famous 1898 book, "Garden Cities of Tomorrow."(Boddy, 2002). Letchworth, the first garden city, was established in Britain in 1903, followed by Welwyn in 1919. New towns throughout the world were modeled after Howard's garden cities, including Radburn, New Jersey in 1929. In Europe after World War II, entire towns and cities which were destroyed by the war, were rebuilt following the British new town planning principles.

CHAPTER THREE

RESEARCH DESIGN AND METHODS

Research Site Selection

According to the 1986 initial master plan of Addis Ababa,, which was revised in 2003, the Kechene Church and its surroundings were identified among the many areas that need intervention. Therefore, producing initial data about the area which help governmental and nongovernmental organizations to devise workable eco-city development programmes was the reason to conduct this study.

Research Design

Since the objective of the study is to assess the living situation of the study participants in *Kebele* 07 of Gullelee Sub City from eco-city perspectives, it is more of descriptive. It is descriptive because it assess the study subjects in terms of demographic characteristics (gender, age group, income, education, family size, religion, ethnic group), housing situation including kitchen and toilet facilities, availability futilities(potable water, electricity, telephone, .etc), sanitation conditions (swage disposal and solid waste management), environmental conditions(open and green space, degradation level, settlement pattern), and economic situation(poverty and income status, employment structure, type of business activities)

The study employed both quantitative and qualitative methods to collect the necessary information from the study participants. Accordingly, the following methods of data collection were used:

- Structured questionnaire (survey method) for the sample household heads in the study *Kebele*,

- Guiding interview questions for key informants such as *Kebele* officials, representatives of sector department heads (education department head, environmental development unit head and two schools' directors), and
- Observation

Before embarking up on the actual data collection process, the researcher made a pre-assessment (reconnaissance) visit in the study area to have some preliminary understanding regarding the *Kebele* understudy. This visit helped to get acquainted with *Kebele* authorities who facilitated the research activity by providing lists of numbered houses of the *Kebele*, used as a sampling frame upon which sample households were selected. This further helped to determine the sample size and sampling procedure.

Sample selection technique

According to the information obtained from the *Kebele*, there were 3000 households that were residing in the area during the time of the survey. Since the study area is characterized by slum settlement, the people who live in such environment are considered to be homogenous and in similar socio-economic status. Thus, random sampling technique was used as an appropriate technique to select the study sample.

In the sample design an attempt was made to make sure that all households were adequately represented and that random sampling was employed. In general, the following steps and principles were followed in the sample design and selection of the households:

a) First of all, considering the financial and time limitation, the researcher decided to include only 100 household heads.

b) The List of houses obtained from the *Kebele* Administration was arranged in ascending order. To identify the first house number a lottery was drawn and then every 30th house was taken as the study participant.

c) Those households without a house number were given an arbitrary number considering the house as next to its neighbors for the purpose of this study. Because the sample size was not calculated on the base of statistical formula the result of the study can not be generalized the households of 3000 of the study area.

Data Collection Instruments

As indicated earlier the methods used to collect the data include structured and semi structured questionnaire, and key informant interviews. Considering the study participants' low level of literacy and understanding of the issue, the interview was made by the researcher.

Semi - Structured and Structured Questionnaire

This instrument was designed and administered to obtain a rich and considerable amount of quantitative and qualitative data from the study household heads.The questionnaire has four main parts, which include demographic characteristics, economic conditions, housing and related facilities, and infrastructure and utilities.

Guiding Questions for Key Informants

A guiding question was prepared and utilized to gather information from the *Kebele* officials, sector department heads, and school directors, representatives from

the *Kebele* Neighborhood Development, and Micro and Small Enterprise Development Offices. Accordingly 2 *Kebele* officials, 1 sector department head, 2 school directors, 1 Neighborhood Development head, 1 Micro and Small Enterprise head were interviewed on the general background and history of the study area, the living situation of the *Kebele* community, and available infrastructures and services.

Direct Observation

The researcher made observation in most of the households during the survey as well as during the time of data collection from the sampled households. Direct observation was made on the informants' housing condition like number of rooms, materials used to construct houses, their access to different facilities such as water and toilet, and so on. Furthermore, the settlement pattern, environmental degradation, sanitations, working condition, availability of open and green space, and recreational facilities were observed.

Secondary data sources

Both published and unpublished literature related to the concept of eco-city was searched and reviewed with the aim of gaining knowledge helpful to understand the situation of the study population.

Data Analysis

The primary step in analyzing the quantitative data was checking the questionnaire for consistency and error. Accordingly, those items that contain unrealistic or incomplete data were excluded. The answers for open ended questions were counted and responses were grouped into few discrete categories and tallied

accordingly. The collected data were analyzed using descriptive statistics (frequencies and percentages).

Ethical Considerations

As the study requires the full consent and cooperation of the host household heads, due attention was given to the research ethics of informed consent. Once the sample households were identified, before conducting the interview, discussion was carried out with the subjects of the study about the purpose of the research in order to enhance their full participation and transparency. Moreover, the study participants were asked to give their consent and willingness followed by their signature in the prepared format (Appendix 1). The study participants were also told that information obtained from them remains confidential.

CHAPTER FOUR

MAJOR FINDINGS AND ANALYSIS

This chapter is divided in to three sections. The first section presents the social situation of the sample respondents in terms of demographic characteristics, educational status, cultural and recreational facilities. The second section deals with issues regarding housing, housing facilities, sanitation, environmental and infrastructural conditions. The last section discusses about the economic conditions and activities of the study respondents.

Social Conditions

Demographic Features of the Respondents

As discussed in the methods section, a total of 100 household heads participated in the study. The demographic profile of the participants is presented in the following tables

Table 1: Distribution of Sample Household Heads by Age and Sex

Age	Sex				Total	%
	Male	%	Female	%		
21-30	6	11	3	6.7	9	9
31-40	11	20	7	15.6	18	18
41-50	13	23.6	8	17.8	21	21
51-60	12	21.8	18	40	30	30
61-70	10	18.2	5	11.1	15	15
70+	3	5.4	4	8.9	7	7
Total	55	100	45	100	100	100

As shown in the table above, the majority (30%) of the respondents are in the age category of 51-60, followed by those in the age category of 41-50(21%), and 31-40(18%). The least proportion of respondents are those in the age category of 70 and above, and 21-30. As to their gender distribution 55 of them are male and 45 of them are female.

Table 2: Distribution of Respondents' Marital Status by sex

Marital status						
	Male	%	Female	%	Frequency	%
Married	42	78.2	12	26.7	54	54
Single	3	5.5	1	2.2	4	4
Divorced	3	5.5	5	11.1	8	8
Widowed	7	12.8	24	53.3	31	31
Separated	-	-	3	6.7	3	3
Total	55	100	45	100	100	100

As indicated in the above table 55% of the respondents are male while 45% are female. Among the male respondents 78.2% are married while it is only 26.7% of the females are married. On the other hand, 53.3% of the female respondents are widowed while only 12.8% of the male respondents are widowers. The table demonstrates that among the female respondents 73.3% of the households are female headed. In line with this, organizations who have an interest to carry out community development programs in the study area should give special emphasis to them.

Table 3: Family Size of the Respondents

Family size	Frequency	Percent
0-5	49	49
6-10	44	44
11-15	7	7
Total	100	100

As it can be seen from the table, the majority (49%) of the respondents reported to have up to 5 family members, followed by 44% of the respondents who have 6-10 family members. 7% of the respondents reported to have 11-15 family members. The reason for large family size might be the prevailing high fertility rate and the maintenance of extended family system in the area. Since the livelihood of many of the respondents is based on traditional weaving which needs intensive labour, they bring new family members (usually children) from rural areas to work and live with them.

Table 4: Ethnic Background and Religious Composition

		Frequency	Percent
Ethnic	Amhara	95	95
	Gurage	3	3
	Oromo	2	2
	Total	100	100
Religion	Orthodox Christian	99	99
	Muslim	1	1
	Total	100	100

Almost all the respondents (95%) are from Amhara ethnic groups who came and settled in the area from northern Shoa. The religious composition of the

respondents shows that 99% are followers of orthodox Christians while Muslims account only for 1 %. In general, the respondents are more homogeneous in regard to ethnicity and religious denomination.

The survey further tried to assess the age and sex structures of the respondents' family members, which is presented in table 5 below:

Table 5: Respondents' Family member by Age and Sex

Age	Sex				Total	%
	Male	%	Female	%		
0-10	25	9	26	8.	51	8.5
11-20	40	14.5	53	16.4	93	15.5
21-30	82	29.6	89	27.5	171	28.4
31-40	93	33.5	105	32.5	200	33.3
41-50	15	5.6	18	5.6	33	5.5
51-60	10	3.7	22	6.8	32	5.3
61-70	6	2.3	7	2.2	13	2.2
70+	5	1.8	3	1	8	1.3
Total	278	100	323	100	601	100

As indicated in the table above, most of the household members are found in the age group of 31 - 40, which accounts for 33.3% of the total followed by those in the age group 21 - 30 (28.4%). The least percentage of the household members is those in the age group of 61 and above which comprises only 3.5% of the total respondents. This indicates the presence of early death or the shortness of the life expectancy in the community. This might be caused by so many factors among which

lack of basic health services, proper nutrition, as well as congested nature of settlement patterns and poor environmental sanitation.

A little more than half of the household members (52.4 %) are found in the age group of less than 30 years, indicating the presence of large number of young population which would an opportunity and useful potential for economic development in the study area.

Table 6: Educational Situation of the Respondents

Educational status	Frequency	Percent
Illiterate	26	26
Read and write	16	16
Elementary (1-6)	20	20
J. high school (7-8)	6	6
Secondary high school (9-12)	23	23
Certificate	1	1
Diploma	7	7
Degree and above	1	1
Total	100	100

According to the results of the survey, the majorities of the sample respondents (74%) are literate/at least can read and write. Among these, 49% are within the category of primary and secondary school. The proportion of the respondents holding Certificate, diploma and above are 9%, while 26% respondents are illiterate.

The respondents were further asked to identify the skill(s) they possess in terms of vocational and traditional skill, which is presented in table 7 bellow.

Table 7: Vocational and Traditional Skill of the Respondents

Types of Skill	Frequency	Percent
Wood work	2	5.41
General mechanic	3	8.11
Masonry	2	5.41
Secretarial science	2	5.41
Handicraft		
▪ Weaving	14	37.84
▪ Carpentry	5	13.51
▪ Pottery	4	10.81
Services		
▪ Singer	1	2.70
▪ Food processing	2	5.41
▪ Beauty	2	5.41
Total	37	100

Among the respondents, 37 of them reported to have some kind of vocational and traditional skills. Accordingly of the 37 respondents, 62.2% have possessed traditional skills which include weaving (37.8 %), carpentry (13.5%), and pottery (10.81%). On the other hand, 37.8% of the respondents have possessed vocational skills which they acquired most probably through formal training.

Educational Facilities

The study has attempted to assess the educational facilities existing in the study area. The result of the assessment is presented in table 8 below.

Table 8: Existing Educational Institutions in the Study Area

School Name	Level	Ownership	# of enrolled students	# of teachers	# of class rooms	Teacher to student ratio	Class room to student ratio
Betemariam youth academy	KG	Private	-	-	-	-	-
Kechene Deberselam	Primary	government	2628	73	41	1:36	1:64.09
Addis Brihan	Primary	Government	2435	67	21		
	Grade1-4					1:78	1:78
	Grade 5-8					1:80	1:79

Source- *Kebele* Education sector.

As seen from the above table, there are two governmental primary schools, namely Addis Birhan and Ketchne Debre Selam. The total numbers of students enrolled in those schools are 5063(51% male and 49% female). The total number of teachers is limited to 140. The teachers' student ratio in Kechene Debreselam School is much better than that of Addis Birhan School. Further investigation for the disparity was found to be the building of additional new classrooms for Kechene Debreselam School, which is a ground+4 building. As to the Addis Birhan School, although similar construction is underway, it is not yet completed. In both schools shift system is employed for Grade 1-6 students where as students in grades 7& 8 are attending school for full day.

As to the classroom student ratio, the Kecene Debreselam School exhibits 1:64 wheras in Addis Birhan School, the ratio stands, at average, 1:79. Except one privately owned Kindergarten (Betemariam youth academy) there is no public or government owned kindergarten in the study area where children of the low-income groups can attend. Furthermore, there is no high school and preparatory levels (9-12)

in the study area; children are compelled to go to the neighboring *Kebele*s to attend these levels.

From the available information, it can be concluded that the presence of shift system, the high number of students per class room (78-80), the shortage and absence of the necessary educational facilities, such as library, laboratory, audiovisual and pedagogical centers etc. have played detrimental effect on the teaching learning process, and quality of education in the study area. In this regard, one of the key informants from the Education Office said the following:

> *As a result of the high number of students in a single class, the assigned teacher would not be in a position to follow up either the class works or the home works given to the students. As a result, it would not be possible to evaluate the students' strength and weakness and provide them support accordingly, which at the end of the day unable the schools to produce trained citizens up to the standard.*

Furthermore, it was observed that the schools are situated at the center of living area surrounded by commercial houses such as taverns, '*Chat*' shops, music shops and tearooms, which have a negative impact on the quality of education in the study area.

Recreational and Human Service Facilities

According to the information gathered from sample respondents and the *Kebele* officials, there is no place for either out-door or in-door games, which the community specially the youth can use for entertainment purposes and help to build physical and mental fitness of the community.

Contrary to the existing large number of population (especially youth population in the area) the *kebele* is lacking entertainment facilities and sport centers. Therefore, dwellers in general and youths in particular are reported to pass their time

in unwanted and unprofitable places like bars, taverns – where locally brewed alcohols(Tella, Katikala and Teje) are being served, as well as in gambling houses, chat and "shisha" houses etc.. The final effect of all these social problems, as indicated by both individual respondents and key informants, will eventually lead to the breeding of irresponsible generation.

The respondents were asked to identify existing NGOs and *Idirs* in the study area. Reportedly, local or international NGOs were nonexistent in the study area except the Free Methodist Mission, which provides food, educational materials and medical treatments for HIV orphan children and also taking care for the HIV/AIDS victims. As to *Idirs,* it was reported the presence of 20 *Idirs i*n the study area but they have no substantial role or any sort of participation in the overall development programs except giving burial and condolence services. However, the very existence of these institutions would be a potential source for proper implementation of eco-city development endeavors if they are properly mobilized.

Housing Condition, Housing Facilities, Environmental Sanitation, and Infrastructure

Housing Condition

Housing is one of the basic necessities for human life. Housing is defined as a residential unit, which has at least,

- One main multipurpose room
- Private or shared toilet and bathing facility
- Private or shared kitchen

- Private or shared electric light
- Private or shared tap water
- Access road of minimum width 4, 6 and 10m in core intermediate and expansion areas respectively (City Government of Addis Ababa,2002)

The study respondents' housing situation was assessed based on the above definition. Accordingly, attempt was made to describe ownership of the houses, types of materials the houses constructed with, the purposes of the houses, number of rooms, years of constructions of the houses, etc.

Table 9: Type of Ownership of the Houses

Type of ownership	Frequency	Percent
Kebele's houses	59	59
Rented from private owners	6	6
Privately owned houses	35	35
Total	**100**	**100**

Out of the total sample respondents 59% are living in *Kebele* owned houses. Only 35 % are living in privately owned houses and 6 % do not have their own houses and compelled to live in rented houses from individuals. The existing housing units do not match with the number of household heads in the study area. This implies that some of the household heads lack even a single roomed living quarter and might be considered as homeless.

Table 10: Types of Materials the Houses Constructed

	Frequency	Percent
Bricks /hollow block	2	2
Mud, Wood and Bamboo	98	98
Total	**100**	**100**

As it can be seen from the above table, 98% of the houses are made of simple materials like mud and straw, bamboo and wood, whereas only 2% are made of Bricks/hollow block.

Table 11: Number of Rooms of the Houses

	Frequency	Percent
Single roomed	15	15
Two rooms	38	38
Three rooms	26	26
Four rooms	8	8
Above four rooms	13	13
Total	**100**	**100**

As we can see from the table above about 53% of the house unites are with 1 0r 2 rooms. This indicates how much the existing rooms are small in number to accommodate the large size households of the the respondents in the category. Houses with three rooms are reported to be 26% followed by 21% houses consisting four and above rooms.

The respondents were asked to rate the condition of their houses, which their responses summarized in table 12 below.

Table 12: Conditions of the Houses

	Frequency	Percent
Good	26	26
Needs minor maintenance	64	64
Highly damaged, which need reconstruction	10	10
Total	**100**	**100**

As we can understand from the above table, only 26 % house units of the sample respondents are found in good condition. Whereas 74 percent houses are found in bad and highly damaged condition, which requires immediate maintenance or complete reconstruction.

According to the observation of the researcher, most of the houses of the sample respondents are found in a poor condition, which do not undergo any maintenance since their original construction mainly due to the low income level of the community as well as the existing tiresome and time consuming process they face in the *Kebele* administration to get construction permit.

Table 13: Functional Purpose of the Houses

Purpose	Frequency	Percent
For living	56	56
For living, cooking and working	44	44
Total	**100**	**100**

About 56% houses of the respondents used for living purpose only whereas 44% of the houses are used for multipurpose activities such as living, working, cooking, and commercial activities.

Table 14: Construction Year of the Houses of the Respondents

Construction year	Frequency	Percent
With in 10 years	3	3
Before 10 years	3	3
Before 20 years	5	5
Before 30 years	27	27
Before 40 years and above	62	62
Total	**100**	**100**

As shown in the above table, the majority of houses (62%) in the study area are constructed 40 years before. While 32% of the houses aged 20-30 years. The remaining 6% of the houses are constructed within and before 10 years.

As the researcher has observed, the houses of the respondents are highly congested. Furthermore, as mentioned earlier, they were constructed from mud, straw, wood, and without plan. It is believed that some of them aged back probably to Emperor Minilik II and Emperor Haileselasie when Entoto was expanding towards the south as the first urban center, and still stands with little rehabilitation.

What we understand from the survey result is that, most of the sample respondents' houses are characterized by small size and poor quality design, which is incompatible with the modern city plan. The houses, in addition to being inconvenient and wretchedly constructed, they are fewer in numbers when compared to the ever-increasing population of the dwellers. The overall housing assessment evidently

indicates that unless some sort of remedial measure is taken to improve the housing condition, it will be worsen from time to time up to a stage where it would be totally impossible to solve the problem.

Housing Facilities

The availability of sanitary and kitchen facilities is considered to be the most important indicators of quality of housing units. Thus, the respondents were asked to explain about their access to toilets and kitchen facilities.

Table 15: Access to Toilet Facility

Type of ownership	Frequency	Percent
Private	35	35
Communal	55	55
No toilet	10	10
Total	**100**	**100**

According to the sample survey result, 90% of households have access to toilet facility, of which 35% are privately and 55% are communally owned. 10 % of the respondents, however, do not have access to toilet facilities.-

Even if there are around 44 public toilets in the study area, built by the government in cooperation with the community, they are not enough as compared to the number of dwellers with no access to toilet facilities. The toilet problems in the study area explained by the *Kebele* Manager as follows:

> *Although there are a number of publicly and privately owned toilets, they are made of wooden materials rather than concrete one and they are easily sunk or demolish by themselves, which causes the occurrence of deaths. What is more, since there is no road access for suction truck,*

some of the toilets are overflowing and contaminating the neighborhoods, which creates health hazards to the residents. Because most of the toilets are not functioning properly, the resident are compelled to use plastic bags and other containers to remove their excretion.

In general, it was reported that a considerable number respondents forced to use every open space in the area and the river side to answer the call of nature which is contributing a lot in polluting and contaminating the surrounding environment. As reported by the *Kebele* manager, there are several factors as to why enough toilets were not constructed. The first reason is the low income and wretchedness of the community as they are poverty stricken and the second reason is the topology of the area, which hinders constriction of new toilets as well as the inconvenience of the area for suction trucks. Some of the dwellers, therefore, have no other means than disposing liquid and solid waste everywhere including in front of their doors as well as nearby ditches.

Table 16: Kitchen Ownership of Respondents

	Frequency	Percent
Private	75	75
Communal	17	17
No kitchen	8	8
Total	**100**	**100**

The majority (75%) of the sample respondents have privately owned kitchen and 17% of the respondents are using communal kitchen. The remaining 8% of the respondents have no access for kitchen services. It is common to see dilapidated kitchens attached with the main living rooms. As explained earlier, about 53% of the house units are having 1 or 2 rooms & used for multipurpose activities. The smoke

that comes out from the kitchens pollutes the area because many households used the main room for cooking. This kind of living arrangement has, undoubtedly, a negative impact on health.

Environmental Sanitation

Assessment was also made to understand the environmental sanitation condition of the study area in terms of liquid and solid waste management system.

Table 17: Liquid Waste Management Systems

Sewage disposal system	Frequency	Percent
Private sewage system	8	8
Common drainage canal (open ditches)	22	22
No sewage system at all	70	70
Total	**100**	**100**

The majority of the sample respondents (70%) have no swage system at all. 22% of the respondents use common drainage canal (open ditches)and 8% do have private sewage system by making internal connection with underground buried tube to the passing river and open ditches.

According to the key informants from the *Kebele* administration, there are about 4 k. meters of drainage channels with an average width of 0.50 metres, which was constructed by the contribution of the community members facilitated by the *Kebele* development committee. In general, lack of proper drainage and sewerage system is among the main problems of infrastructure of the study area. The *Kebele* Manager further said the following:

There are several factors for the prevailing environmental pollution and unhygienic situation of the study area. Some of the factors include the unavailability of sufficient and properly constructed toilet facilities, absence of adequate solid waste containers and inability of the municipality to provide timely service for removing them, lack of drainage facilities and poor utilization of the existing ones, and low level of awareness among the community members regarding the relationship between unhygienic environment and health condition.

Table 18: Sample Respondents' Solid Waste Management System

Solid waste disposal system	Frequency	Percent
Collecting and burning	24	24
Government garbage bin	71	71
Dumping in rivers	3	3
Dumping solid waste at any open space around	2	2
Total	**100**	**100**

As indicated in table 18 above, 71% respondents reported that they use government garbage bin (metal made container) to dispose generated wastes from their houses. On the other hand, 24% of the respondents reported collecting and burning solid waste as a sole mechanism to dispose their dry wastes, and the rest 5% dump their solid waste at any open space including road sides and open ditches, as well as the river bank in the area.

Lack of enough containers for disposal of solid waste is among the main problems in the study area. Although there are only three metal made containers for the whole community in the area, they are not sufficient to collect the wastes generated from the large size households and also are not managed on time by the responsible body which the City's municipality. As a result, they [the containers] became a source of health hazard by contaminating and polluting the area.

However, there is a good start by the jobless youth who organized themselves in the form of cooperative to dispose solid wastes through door-to-door collection. This alone may not be a fundamental solution to make the area clean since the sanitation problem is enormous and, it is beyond the capacity and effort of the organized youth.

Utilities

The study respondents were asked to explain their access to different utilities such as potable water, electricity, and telephone line, which their responses are presented in the tables below

Table 19: Access to Potable Water

Potable Water source	**Frequency**	**Percent**
Private	64	64
Communal	19	19
Other	17	17
Total	**100**	**100**

The data collected on water supply indicated on table19 shows that 64% of the respondents have private water tap, 19% use communal water points and the rest 17% do not have access to clean water at and use spring and river water or buy from private water vendors, with higher price, that greatly lessens their water consumption amount. This again attributes to poor personal and environmental hygiene, which in turn leads to poor health condition of the respondents. The communal water points in the area are inadequate and some of them are out of use. In connection with this, the

following explanation given by the Neighborhood Development Office representative shows how grave the problem is:

> *Although many of the residents have access to water line, they are receiving water provisions one or two days per week only. Thus, for the remaining days, the residents are forced to fetch water from springs and the river in the surroundings for drinking, washing and other purposes. And it can be said that those who have water lines are not different or in a better position to that of without waterlines.*

Table 20: Respondents' Access to Electric Power

Electric line	Frequency	Percent
Yes	83	83
NO	17	17

The majority (83%) of the respondents have their own private electric meter where as 17% do not have their own. Further inquiry what alternative power source that they are using reviled that they use candle, lamp, and some of them buy electric light by paying a certain amount of money per ampoule per month from their neighbors. However, due to the wretchedness of the respondents in poverty, most of them cannot afford to buy electric ovens for baking bread or *injera.* So the only alternative they have is to use wood as source of energy, which has a negative impact on the nearby Entoto forest. Using wood as source energy, beyond causing deforestation; it might create a fire, which is a threat to the lives of many residents. In addition, the smoke that comes out from such fires usually affects the environment through polluting air.

As far as the street light is concerned one can see that it is available only around the main asphalt road in the area. All other corners and inner roads do not

have such facilities, which make the area totally dark in the night time. Lack of streetlight in the area might expose the residents to different criminal acts such as robbery, burglary, and rape as briefed by the key informant from the *Kebele* administration. Subsequently, this made the residents to feel insecure.

Table 21: Access to Telephone Line

Telephone line	Frequency	Percent
Yes	67	67
NO	33	33

Around two third of the respondents (67%) reported that they have access to fixed telephone line, while the rest 33% do not have the service. Since most of the respondents are in a low economic status, and leading a hand to mouth life, they consider having telephone lines as some thing that belongs only to the affluent individuals in the community. In addition to absence of private phone lines, there is no any public phone in the whole study area, which can serve them at an affordable cost.

Environmental and Infrastructure Conditions

Environmental Degradation

As mentioned in the background, *Kebele* 07 is located in Gullelle Sub-City in the northern part of Addis Ababa. The asphalt road that leads to kechene divides the study area in to two parts. As the area is located at the foot of Entoto hill, it is exposed to flood and erosion. Due to the absence or lack of proper drainage channel, the land in this area, especially the former *Kebele* 16, is exposed to flood and erosion as stated by informants from *Kebele* administration officials. The northern part of the

study area is characterized by gorges and valleys. There is a river named 'Mariam wonz', which starts from the highlands of Entoto bordering the study area causing soil erosion and land sliding from time to time. It is especially affecting areas such as 'Chereka ber' and 'Mariam wonze sefer'. Unless some sort of restraining wall is constructed along the bank of the river, there is a great danger of the area to be exposed for unwanted hazard. Moreover, the topography of the area is invariably slippery due to over flooding during the rainy season.

Settlement pattern

Two categories are observed in terms of settlement of the study area. The first category refers to the area located in the eastern part of the asphalt road, (former *kebele* 18) which is surrounded with haphazardly built houses and in access to any vehicle services. These unplanned and inaccessible settlements have contributed to the existence of dense and congested settlements which resulted in physical and psychological discomfort to the residents and its accompanying problems such as poor access in emergency situations.

The second category (former *Kebele* 16) is the area that is relatively planned and located west of the asphalt road with lined and grid system of roads constructed with paved stones and relatively has good houses and modern buildings. In general, it might be said that the sloppy, gorge and valley nature of the area contributed to the unplanned settlement pattern. With regard to service facilities and utilities, there is no planned road, open and communal green spaces.

Road access

According to the information obtained from the *kebele* administration officials, the roads in the *Kebele* can be categorized in to three :- asphalt roads, roads that serve as access in the area, and those narrow pedestrian roads.

Table 22: Accessibility of the Houses to Vehicles

Accessible	Frequency	Frequency
Yes	56	56
NO	44	44

As it was mentioned above most of the houses of the respondents are congested with out having access roads (44%), which deter them from accessing services such as ambulances, fire brigade, liquid waste suction truck etc. Explaining the situation, the Neighborhood Development representative said the following:

> Since the houses are highly congested and with narrow internal alleys, the area is totally inaccessible to any kind of vehicles. Therefore, those residents who need particular attention like pregnant women and patients are not getting ambulance service on time. Furthermore, the residents are always worried for fear of firebreak which might claim the lives of many and the devastation of their houses and property.

The only existing main road that starts from the ketchene Medihanialem Church upward (leading to ketchene) divides the study area into two parts. As observed by the researcher, this road has three shortcomings: - First it is narrow, second it has no space for pedestrian and third it is not structured in a way to include sewerage and drainage system.

Economic Condition

Assessing the economic conditions of a given area is one the essential elements of the eco- city concept. Therefore, attempt was made to understand the poverty situation, types of economic activities and related problems, and income status of the study respondents.

Table 23: Income Category of the Respondents

Income level	Frequency	Percent
No income	3	3
Less than birr 167	43	43
Birr 168-340	27	27
Birr 341-670	17	17
Birr 671-1050	4	4
Birr 1051-1500	3	3
Birr 1501-2000	2	2
Birr 2001 and above	1	1
Total	**100**	**100**

As the sample study indicates about 90% of the households get less than birr 671 per households. According to the socio-economic study of the Addis Ababa City Administration (City Administration, 2002, 2005), respondents are categorized within low-income bracket group. Only 10% of the total households get greater than 671 birr per month per family. Furthermore, 3 % of the respondents have reported not to have any income.

Taking an average family size of 6 persons per household, the minimum income birr 167 is less than birr 28 per person per month (0.92 Birr per day). This is

very far below the poverty line set by the World Bank, which is 1 USD/day (African Development Bank, 2006) and shows how the respondents are living in extreme poverty situation. As reported by the respondents, the major reasons for low-income status is unemployment, shortage of working capital, lack of credit facility, and problem related to market, raw material, working places and poor housing conditions.

The respondents were also asked to explain their occupation and source of income, which is summarized in the following table

Table 24: Employment Status of the Household Heads

Occupation (means of livelihood)	Frequency	Percent
Government employee	9	9
NGO employee	1	1
Formal small scale trade (Restaurant, grocery, Fruit and Vegetable, butchery , bakery, pastry, garage, transport, tailor,)	18	18
Informal small scale trade (weaving, pottery, carpet making, local beverage drinks selling, food processing, back street vending, leaf and firewood collecting for sale.)	47	47
Pension	19	19
Jobless	6	6
Total	**100**	**100**

As it can be seen from the above table, the livelihood of the respondents depends on formal and informal small scale trading, government employment, and pension. Accordingly, 47% of the informants make their living by involving in informal type of economic activities. Those engaged in government employment are

accounted for 9%. Only 18% of the respondents engaged in formal small-scale trading. There are 6% of the respondents in the jobless category.

The data collected from the sample respondents and the personal observation of the researcher regarding their life style reveals that 47% are involved in informal economic sectors to earn their livelihood. On the other hand, the remaining 53% of the respondents are either government employees or are engaged in the formal small-scale trading. The respondents were also asked to compare the current life situation with that of 10 years ago.

Table 25: Comparison of Current Life Status to that of10 years ago

Life status indicator	Frequency	Percent
It does not show improvement	29	29
It is highly improved	15	15
It has gone down	39	39
It is below standard (poverty line) & is not able to fulfill basic needs	17	17
Total	**100**	**100**

As indicated in the above table, 56% of the respondents reported that their economic status has gone down from bad to worse year after year which unable them to fulfill their daily basic needs. Only 15% of the respondents confirmed that their life has shown some improvements whereas 29% of the respondents reported that the living conditions have not shown improvement. The reaction given by one of the respondents illustrates the current escalating living standard.

> Yow know? It is not long time ago when we were affording to buy *'tef'*, edible oil, *sugar, vegetables, cereals and other food staffs with reasonable prices. But now things have changed drastically and prices*

are soaring up which is beyond our buying capacity. You can imagine what will happen for those of us with larger family members and with meager income. I don't know what say except leaving the matter to the almighty God.

Respondents Involvement in Informal Economic Sectors

The study further tries to assess the life style of those respondents engaged in the informal economic sectors, especially in traditional handicrafts and small scale trading.

Traditional Handicrafts

Crafters in the study area have very long traditions of handcrafting as part of daily life probably dated back to Emperor Menelik era. The majority of craft producers in the study area are immigrant of Amhara Ethnic groups from Northern Shoa part of the country,

There are a number of crafting activities in which some of the respondents are traditionally engaged. These include weaving, pottery, metal and woodwork (Table 26). Of the traditional crafting, weaving (traditional cloth making) takes the largest share, more than 69%, followed by pottery (traditional clay making) accounted for 16.7%. The share of carpet, metal and woodwork is 11.1% percent, 2.8% respectively as shown in the table below.

Table 26: Respondents Engaged in Handicrafts Occupation

Type of handicraft	Frequency	Frequency
Weaving	25	69.4
Carpet	4	11.1
Pottery	6	16.7
Metal & wood work	1	2.8
Total	**36**	**100**

Weaving

Employment Structure

As it can be seen from the above table 26, the majority (69.4%) in the hand crafts sector are weavers. According to the key informant (Micro and Small Enterprise head) of the study area, three types of employment structures are widely practiced in weaving. The first type of structure is family heads that own production instruments and do the business by themselves involving family labor. This comprises the dominant share of employment structure. The second type is, hired weavers for fixed payment on piece rate system, locally known as '*qotari*'. The third type of employment structure refers to the comers from rural areas whose food and other accommodations are covered by their relatives and are working for them at lower wage rate.

Production Techniques, types of products, working place and conditions

Almost all weavers are using the same type of traditional, hand and foot driven, woven cloth making instruments. Though they have awareness about the use of modern weaving instruments, none of them have one due to the higher investment and more spaces it requires.

Except very few, almost all of them are engaged in producing similar products. The commonly produced item is '*netela*' decorated with embroidery. Few have tried to innovate and diversify their product but discouraged by the fact that others easily and immediately copy their innovation from the market.

According to the information obtained from key informants and personal observations, the working conditions of weavers are so miserable. For instance, they are forced to work up to 12-14 hours per day. Homes are used as working and living places; which contributes towards congested and crowded types of living arrangements. Thus, there is no healthy working atmosphere for them and at the same time the quality of their product will be also easily affected. Furthermore, it is common to see more than 15 weavers in a house made of mud and wood with the size of not more than 20 sq. m.

The respondents engaged in weaving activities were asked to explain the challenges they face to run and expand their business and single out, among others, the following major problems:

- Shortage of raw materials
- Production/ working place problem
- Lack of modern machinery

- Shortage of capital
- Absence of credit facility
- Market problem
- Lack of basic skill

The respondents engaged in weaving activities have also market problems not only in the case of buying raw materials but also selling finished products. The raw materials for making clothes are supplied both by wholesalers and retailers at low and relatively higher prices, respectively. As binding agreements, wholesalers reduce cost per unit sale of raw materials if the weavers demand substantial quantity of raw materials. However, the weavers further lack sufficient amount of working capital to purchase large quantity from the wholesalers at a time. Thus, they are obliged to purchase low quantity of raw materials, mostly used for only one week, at relatively higher prices from retailers. The weavers underline the possibility of getting significant profits if raw materials are directly obtained either from wholesalers or government suppliers.

The weavers have also problems of market outlet for selling finished goods. None of them, either privately or communally, have selling shop in a market place like '*Merkato*', '*Addisu-Gebeya*' and '*Shiromeda*' where accessibility to direct consumers are viable and products are sold at negotiable prices. Thus, almost all of them have adopted delivering of finished products to retailers who have their own private shop at known market places. These retailers, because they own the shop and they are few in number, they are the one who set market prices of finished goods. The weavers, therefore, have no options but to negotiate with retailers rather than selling at the

prices set by themselves. The prices set by retailers are usually low as compared to price consumers pay to retailers. This indicates that producers of the products are not getting real market prices of their products.

Although the rate of participation in weaving is high, the average income derived from is very low. As information obtained from the respondents it ranges about 80 to 100 Birr per week based on their speed of production and quality of products. There is slight variation of income between owners of production materials working with family labor and hired workers. The former earn relatively better income than the latter. Incomes can also be varied occasionally and seasonally. Although it is obvious that relatively better price with higher demand is obtained during festivals, like '*Enkutatash*' (Ethiopian New year's day), '*Maskal*' (the festival of the finding of the true cross), '*Gena*' (Ethiopian Charismas), '*Timeket*' (Ethiopian Epiphany), they are not producing large quantity and supply to the market due to problems mentioned above.

Given the time taken for production, usually 12 to 14 hours per day, and the market outlet problems, the sector is viewed as unprofitable by the respondents. However, the respondents are stating that they are engaging themselves in the sector simply to meet their daily minimum basic needs. The respondents of the study also underscored that if problems related to market and working capitals are solved, the sector would be not only profitable but also be able to play significant role in reducing poverty and unemployment.

Pottery (clay product making)

As we can see from table 26, pottery is one of the means of livelihoods for some of the respondents in the study area. This job is traditionally given to women and in the study area, in most cases; the wives of the weavers are those who engaged in such type of activities.

The activity is carried out by the labor of family members or their relatives living together for the work is done manually without any modern tools. Based on the required sizes of the product, the workers roll the piece of moist clay between their hands until the desired thickness and shape is achieved. Once rolling is finished, they allow the clay to dry until it is hard. During rainy seasons, this will take longer time and make the activity too difficult.

Due to shortage of labor and absence of their own shop at marketplaces they are forced to sell products to retailers at lower prices. According to the information of respondents, their average weekly income ranges only from Birr 30 to 40. The respondents indicated that there is a minimum of one birr difference if the products are directly supplied to consumers rather than retailers. Given the production time required, usually 6 to 8 hours per day, such micro economic activity is not at all profitable. Besides lacking enough profits, firing places for finished products and lack of accessibility to raw materials are mentioned as main problems of the producers. Although raw material, clay soil, for production is found within the study area bounds, it is not easily accessible to them.

Small scale trading

This sector is a means of livelihood for a considerable number of respondents in the study area. The types of activities for those involved in the sector include sale of locally brewed alcohols, dry wood and leaf, house made food items as well as engagement in back street vending, and handicrafts making such as weaving, carpet, and pottery.

As stated above, dry wood and leaf collection as the means of livelihood is one of the main sources of income due to their usage for making local drinks such as *'tella'*, and *'arekie'* and preparing food items like bread and *'injera'* for both family and market consumption. Female household head or/and wives of weavers including their daughters are traditionally responsible for these activities. Through out the year, these females expend long traveling time to collect the wet wood & leaf from very distant place like *Entoto* and *sulullta,* which indicates how difficult and tiresome such activity is.

Source of Capital

The study further enquired about the capital source of the respondents' to start and run their small scale business activities.

Table 27: Source of Capital to Start Business

	Frequency	Percent
From saving (*equb*(traditional way of saving), and Saving and credit association.	41	63
Loan from friends & relatives	14	21.5
Grant from friends & relatives	6	9
Inheritance	3	5
Loan from micro finance institutions (MFIs)	1	1.5
Total	**65**	**100**

As we can see from the table, the main sources of capital of the respondents to start up and run their micro-business are saving through '*equb*' (traditional way of saving), and loans from saving and credit association, which comprises 63% of the respondents. The second source of capital is loan from friends and relatives (21.5%). 9% of the respondents were reported that their capital source was grants from friends and relatives. The role of the micro finance institutions as a source of capital to respondents engaged in small business activities is found to be insignificant (only1.5%). The main reason for such situation is that most of the micro enterprise operators do not have fixed assets that can be used as collateral in financial institutions. Besides, a significant number of residents are also engaged in informal non-rewarding trading. Thus, none of the micro- finance institutions are interested in these types of non profitable and non-rewarding business activities.

very recently, the government owned micro finance institute, Addis Micro Finance Institution, has started offering saving and credit service at low interest rate and minimal collateral base to individuals engaged in micro and small enterprises in the study area.

CHAPTER FIVE

Summary, Conclusion, and Implication

Summary

As we can conclude from the literature part of the paper, the whole idea or concept of eco-city revolves around three essential interdependent elements, which are environment, economic and provision of social services. Eco-city intervention is an integrated approach with a long term vision and sustainable development of social, economic and physical environment of a given area (settlement) without or with very minimal relocation. Its ultimate goal is enhancing the well-being of people living within the eco-system's carrying capacity. The general objective of eco-city intervention is to create better socio-economic and physical environments that have long sustainability effect to the beneficiaries.

In nutshell, eco-city is a green city where emphasis is placed on pollution prevention, reusing, recycling and efficient use of resources from locally available sources. It is empowering the economically powerless, availing income and job opportunity for the poor and shelter to the homeless. Therefore, the assessment made based on these imperative elements of the eco-city concept, revealed the following findings.

The demographic structure of the sample respondents shows that females are more than males (52.08%) and the average family size is about 6-7 persons per household. Among the female respondents, 73.7% of them are taking care of their family as the major bread-winners as heads of the households. Age wise people between 25-49 years old are the highest proportion of the community of the study area.

This has great economic and social significance as they are the most productive group of the population. Designing development projects by involving these groups of people is very essential for the realization of social and economic improvement of the community.

As to the condition of education the highest proportion (majority) of the respondents are below certificate level. There are a considerable number of illiterate people among the study respondents. Due to various socio-economic problems, there are many households who do not send their children to school. Because there are no enough educational institutions, about 78-80 students are attending in a single class room with 1:78-80 teacher student ratio. Since there are no sport center, entertainment facilities and recreational places in the study area, the young population is exposed to many harmful practices and obliged to spend their time in chewing chat, drinking alcohols, sniffing '*shisha*', etc. In regard to development activities in the study area, the role of human service organizations such as CBOs and NGOs is insignificant.

Almost all of the houses, in which the respondents are living in, are made of simple materials like mud & straw, bamboo and wood. More than half of the houses have 1 or 2 rooms and used for multipurpose activities such as living, working, cooking and petty trades. Most of the houses are found in a poor condition and dilapidated, which do not undergo any maintenance since construction. Since some of the housing units do not have toilet facilities, some members of the community are obliged to defecate in the open spaces in the study area. Furthermore, nearly three quarter of the respondents have no sewage system and thus they use open spaces in front of their houses and the river passing adjacent to their houses to dispose liquid waste. Similarly,

those without any kind of facility to manage solid waste, compelled to use the surrounding rivers banks, rood side, open ditch and fields as damping alternatives, which contributes a lot in polluting and creating unhygienic environment. What is more, some of the respondents do not have access to clean water, which might be causes for epidemics and water born diseases.

As the study area is located at the foot of *Entoto* hill, it is exposed to flood, soil erosion and land sliding. Dry fire wood and leaf collection for cooking and commercial purpose from the nearby *Entoto* forest are also causes of ecological and environmental degradation.

The majority of the respondents are engaged in the informal small scale economic activities and almost all of them are living in extreme poverty. As reported by the respondents, the main reasons for their abject poverty are unemployment, shortage of raw materials, production/working place problem, lack of modern machinery, shortage of capital, absence of credit facility and problems related to market. As reported by respondents in weaving activities, for example, they do not have production/working places and as a result they use their small size rooms as working and living places. This creates a negative impact in the quality of their products. Weaver respondents have also financial problems in terms of buying raw materials and selling finished goods. Because they do not have enough capital they cannot buy large quantity of raw materials from wholesalers with a reduced price at a time.

Furthermore, none of the weaver respondents' posses selling shops privately or communally. As a result, instead of selling their products to consumers at negotiable prices they are obliged to sell their products with lower prices to retailers.

Almost all respondents, who are engaged in traditional handicrafts, are using very home-made and archaic manual instruments. Moreover, respondents who are engaged in the informal micro and small scale enterprises do not have access to credit facilities from financial intuitions, because most of them do not have fixed assets that can be served as collateral. In short, the whole socio-economic and environmental problems of the study area can be summarized as follows:

Socio-economic problems are- unemployment, lack of working places, shortage of capital and raw materials, lack of credit and market facilities, lack of access to social services, recreational and sport facilities, etc...are the major ones.

Physical (environmental) problems are access to roads, sanitation, solid and liquid waste management (disposal), housing, greenery and open space etc... are major concerns of the study area.

Conclusion

The study has attempted to asses the social, economic, and environmental situation of the respondents in Gulelle Sub- City of *Kebele* 07 based on the underlined concepts of eco-city perspectives. Accordingly, it was found that the respondents of the study area are living in extreme poverty and poor environmental conditions confronting with physical problems such as lack of access for social services, poor sanitation and waste disposal, unavailability of greenery and open spaces.

The survey result revealed that, most of the sample respondents' houses are characterized by small size and poor quality design, which is incompatible with the modern city plan. The houses, in addition to being inconvenient and wretchedly constructed, they are few in numbers when compared to the ever-increasing population

of the study area. It is common to see up to 15 persons living in one or two room houses. What is more, the houses are not only used for living purpose but also for cooking, working, and commercial activities. Such types of living arrangement are believed to negatively impact the mental and psychological wellbeing of the members of the households in general and children in particular. Furtherer more, the respondents' access to vital utilities such as kitchen, toilet, potable water and the like is very inadequate. In general, unless some sort of remedial measure is taken to improve the housing condition, it will be worsened from time to time up to a stage where it would be totally impossible to solve the problem. When we evaluate the over all living condition of the study area respondents against the concepts of eco-city; which are economically viable, environmentally sound, and socially acceptable settlement, it is found to be by far different and totally incongruent. Therefore, devising immediate intervention mechanisms seems very essential. As discussed earlier, the problems confronted with the study respondents are multidimensional and thus any development interventions directed towards addressing the problems should be multi-sectroral and integrated with active involvement of the residents.

Implications for Social Work Intervention

To improve or upgrade the poor living condition of the study area, the sub-city and Kebele administrations should be able to introduce an integrated housing development program which has been started in some parts of the city. Because almost all the house units of the respondents are made of simple materials before 40 years and as a result all are dilapidated.

Thus, to upgrade the area the houses should be maintained properly and those which are too old should be demolished completely and replaced by new condominium apartments or low cost houses which are affordable by the community of the study area. Implementing such interventions would bring the following benefits for the residents.

- It will improve the quality of housing units because it ensures that each house is equipped with modern kitchen and toilet facilities.
- It will create more additional open spaces which could be used for construction of multi purpose halls, sport facilities, recreational and refreshment centers and other community based institutions such as education and health facilities.
- It will also create an opportunity to reduce the congested settlement pattern of the residents of the study area which will create fertile ground to introduce and construct sewage disposal mechanisms like ditches, pit latrines, sewage and septic tanks in order to improve the environmental sanitation of the study area.
- Moreover, it will bring an opportunity to create road access for ambulances and fire brigade services during emergency time, and to access vehicles for liquid and solid waste removing from the area as well.

Furthermore, in order to solve the poor economic conditions of the respondents and thereby to improve the extreme poverty situation, the following strategies and measures should be designed and implemented.

- The *Kebele* administration's Micro and Small Enterprise Development Office should organize the respondents who are engaged in micro and small informal economic sector in the form of cooperatives.
- Following the organization into cooperatives, the *Kebele* administration should provide production/working places by constructing suitable workshops in the available open spaces.
- In order to alleviate capital shortage of the respondents who are organized in the form of cooperatives, the *Kebele* administration should arrange some sort of credit facilities in reasonable interest rate and soft collateral bases by negotiating with micro finance Institutions. Micro financial institutions have more confidence to provide loan to cooperatives than individuals. If the cooperatives have access to credit facility: first they can have financial capacity to purchase adequate quantity of raw materials at relatively lower prices from wholesalers. Second, they will have the opportunity to buy or rent a shop in market places such as *'merkaot', 'Addisu-Gebeya', 'Shiromeda'* which enabled them to sell their finished products to consumers directly at a fair prices rather than handing them to retailers in very low prices. As a result, members of the cooperatives benefit from the real market prices of their products.
- Moreover, the *Kebele* Micro and Small Enterprise Development Office has to support the cooperative members by creating market linkage to facilitate the selling of their products. For example, cooperatives that are engaged in food processing business need to be linked with hospitals, supermarkets, hotels,

universities, colleges, training and rehabilitation centers. Similarly, those weavers' cooperatives, which are producing cultural and traditional clothes, could be linked with Ethiopian Tourist and Trade Operation Enterprise. Moreover, the Office has to facilitate for promotional works of different productions of the cooperatives by organizing bazaars, exhibitions, and festivals. In addition, to address unemployment problem of the study area, organizing the youth in metal and wood work as well as construction types of cooperatives to enable them to become productive and self reliant citizens, is recommendable.

- Besides, the above mentioned Office should assist the cooperatives by providing skill trainings to upgrade basic business skill (BBS) and business development services (BDS). The training enables the cooperative members to acquire basic knowledge on how to start and run their business as well as how to be successful and competent in the market.

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Appendix 1

Questionnaire for situational and community need assessment of Gullele Sub-City keble 07 Households (2007)

- Sub locality (Zone)----------
- House No----------
- Are you willing to cooperate in giving information regarding your household?

  ☐ Yes ☐ NO
- If your answer is yes - signature ----------

Part One:- 1. Demographic and educational data of the sample respondents

1.1 Name of the head of the household ----------

Age____Sex___

1.2 Respondent's relationship with the head of the household

☐ Head of the household ☐ Father/mother

☐ Husband / wife ☐ Relative

☐ Son/daughter ☐ domestic worker/guard

☐ Sister

1.3. Size of the household ----------male----------female----------

1.4. Marital status

☐ Married ☐ Widowed

☐ Single ☐ Separated

☐ Divorced

1.5. Ethnic Background (group)

☐ Amhara ☐ Gurage

☐ Oromo ☐ Others, _____

☐ Tigray

1.6. Age and Sex of the family members

	Age	Sex		Total
		Male	Female	
1.	0-3			
2	4-6			
3	7-15			
4	16-24			
5	25-49			
6	50-65			
7	65+			
	Total			

1.7. Religion denomination

☐ Christian ☐ Traditional worshipers

☐ Muslim ☐ Others

1.8. Literacy background

1.8.1 Can you read and write?

☐ Yes ☐ NO

1.8.2. Academic level accomplished?

☐ Religious School ☐ Certificate

☐ Elementary (1-6) ☐ diploma

☐ J. High School (7-8) ☐ 1st degree

☐ Sec. High School ☐ 2nd degree (masters

☐ 3rd degree (PHD)

1.8.3. Type of Technical & Vocational Education training?

☐ Wood work ☐ Masonry

☐ Metal work ☐ Computer

☐ Electricity ☐ Secretarial science

☐ General mechanic ☐ handcrafts

- Carpet----------

- Pottery ----------
- Weaving----------
- Bamboo----------
- Singer ----------
- Food processing ----------
- Beauty----------

1.8.4. Are the children of the household enrolled in school currently?

☐ Yes ☐ NO

1.8.4.1. If there are children who have discontinued School what is the reason?

☐ Lack of support / economic problem ☐ Supporting family by generating additional income

☐ Absence /distance of the schools

☐ Health problem ☐ family problem

☐ Separation of family ☐ Illness

☐ Others

1.8.5. In what School type do the children are enrolled in?

☐ Governmental School ☐ Private school

☐ Public School ☐ Religious school

Part Two 2. Economic conditions of the sample respondents

2.1. What is your main means of income?

☐ Private business ☐ member of a cooperative

☐ Government employee ☐ Driver, mechanic

☐ International Orgn. Employee ☐ tailor

☐ NGO employee ☐ service giving (Beauty saloon, tele center, cobbler, washing, Garage, taxi)

☐ Formal small scale trade (restaurant, Grocery, fruit & vegetable, butchery,

☐ informal small scale (local beverage drinks, food items processing, back street vending, collecting and selling fire wood, leaf....

bakery & pastry, tea etc… ,

☐ Pension
☐ Broker
☐ begging
☐ prostitution

☐ Domestic worker (made, guard) ☐ Handicrafts (weaving, pottery, wood and metal work, construction

☐ Jobless

2.2. Amount of monthly income of the household?

☐ No income
☐ Less than birr 167
☐ Birr 168 -340
☐ Birr 341-670
☐ birr 671-1050
☐ birr 1051-1500
☐ birr 1501-2000
☐ birr 2001 and above

2.3. What is the source of monthly expenditure?

☐ From monthly income
☐ Partly from monthly income
☐ Donation (aid)
☐ begging
☐ others

2.4. Is there a member of your family who owns a private business?\

☐ Yes ☐ NO

2.5. If the answer for Q.2.4. is yes, what is the type of the business?

☐ mill
☐ cottage factory
☐ wood and metal work
☐ brick & hollow block
☐ garage
☐ butchery
☐ back street vending
☐ shop
☐ hotel and bar
☐ transport
☐ professional service
☐ food processing
☐ others,_____

2.6. .The house where the business carried out is?

☐ private house
☐ kebele house
☐ rented from individuals
☐ rented from housing agency

2.7. What was the source of the capital needed to start the business?

- ☐ From saving (*equb,* credit association)
- ☐ loan from a bank
- ☐ Loan from friends and relatives
- ☐ loan from micro- finance institution
- ☐ Grant from friends and relatives
- ☐ aid from donor organizations
- ☐ From inheritance
- ☐ others

2.8. What are the main obstacles (challenges) to expand your business?

- ☐ high tax
- ☐ market problem
- ☐ shortage of raw material
- ☐ lack of entrepreneurship
- ☐ production/ working place problem
- ☐ others
- ☐ lack of modern machinery
- ☐ shortage of capital
- ☐ absence of credit facility

2.9. Is your business profitable?

- ☐ Yes
- ☐ NO

2.10. If your answer for Q.2.9. is no, why?

Explain the reasons

2.11. Why did you choose this business?

- ☐ due to the culture of the family
- ☐ because it requires small capital
- ☐ because I like the work
- ☐ others
- ☐ because it generates high income

2.12. Members of the family who have reached productive age, but still unemployed?

male----------female----------Total ----------

2.13. When you compare your standard of living with the standard of living of others, where do you classify it?

- ☐ high income group
- ☐ poor
- ☐ middle income group
- ☐ very poor
- ☐ low income group

2.14. When you compare your current life status (standard of living) with the life status you had before ten years is there any improvement?

- ☐ it does not show improvement
- ☐ it has gone down
- ☐ it is highly improved
- ☐ it is below standard & is not able to fulfill the basic needs of the household members

Part Three: - 3. Housing, sanitation and waste disposal conditions

3.1. when was the house constructed?

- ☐ Within 10 years
- ☐ before 20 years
- ☐ Before 10 years
- ☐ before 30 years
- ☐ before 40 years

3.2. What type of building materials was the house constructed with?

- ☐ Stone
- ☐ corrugated iron
- ☐ Bricks/ hollow block
- ☐ plastics
- ☐ Mud, wood & bumboo

3.3. For what purpose do you use the house?

- ☐ For living purpose only
- ☐ for social services purpose
- ☐ For commercial activities purpose (activities related to education, health etc
- ☐ For rent purpose
- ☐ For living, cooking and working
- ☐ others, _____

3.4. Type of ownership (title deeds) of the house?

- ☐ Kebele's house
- ☐ private
- ☐ Agency for Rental Houses Administration
- ☐ Rented from individuals

3.5. Number of rooms in the house?

- ☐ Single roomed
- ☐ four rooms
- ☐ Two rooms
- ☐ above four rooms
- ☐ Three rooms

3.6. What is the condition of the house?

- ☐ Good
- ☐ It needs maintenance

☐ Bad ☐ because it is highly damaged it should be Abolished and constructed again

3.7. How is the management of the sewage disposal of the house?

☐ It has private sewerage sys.

☐ We use common drainage canal

☐ It does not have sewerage system at all

3.8. How is the solid waste management system of the house?

☐ Collecting and burning ☐ dumping in surrounding rivers

☐ Government garbage bin ☐ dumping on open space around

3.9. Does the house have its own toilet?

☐ Yes ☐ No private & common toilet at all

☐ we use common toilet with others

3.10. If you don't have toilet at all were do you use?

Explain ----------

3.11. How is the waste from the toilet disposed?

☐ Sending to surrounding river ☐ Any where

☐ Septic tank

3.12. Does the house have its own kitchen?

☐ Yes ☐ No at all

☐ We use common kitchen with other households

3.13. Does the house have its own separated compound?

☐ Yes ☐ No at all

☐ we do have common compound with other households

PART FOUR:'- 4. INFRASTRUCTURE AND OTHER UTILITIES

4.1. Is the house accessible to vehicles?

☐ Yes ☐ No

4.2 Does the house have a private water tap?

☐ Yes ☐ No at all

☐ we use common public water point (Bonno)

4.3. Does the house have telephone line?

☐ Yes it has regular telephone line ☐ no line at all

☐ it has mobile telephone

4.4. Does the house have its own electric power line?

☐ Yes ☐ No

4.5. The type of transport you use?

☐ Private car ☐ walk on foot

☐ Taxi/bus ☐ others

5. Is there recreation and sport centers in your kebele?

☐ Yes ☐ No

5.1. If your answer for the above question is no where do the youth of the kebele spent their part time? explain----------

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6. Are there areas in your kebele that are affected by flood, erosion & land slide?

☐ Yes ☐ No

7. If your answer for Q.6 is yes, which parts of the kebele?

---

8. How many Idris are there in your kebele? What type of services do they give to the community ? Explain ----------

---

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9. Are there NGOs in your kebele?

☐ Yes ☐ No

10. If your answer for the above question is yes, please indicate their names and the type of services they provide to the community?

Thank you

Appendix 2

Guiding questions for Key Informants

For Kebele Administration Representatives

1. Would you please briefly explain about the historical background, geographical location, and typology of the Kebele?
2. Which parts of the Kebele more susceptible or exposed to flood, land sliding, etc?
3. What would look like the housing situation of the kebele?
4. What is the conditions of housing facilities and utilities
5. What are the most prominent problems of the residents in the kebele?
6. Is there any center and/or facilities related cultural and recreational activities?

For representatives from educational sector

1. Would please explain to me about the conditions of the educational facilities and the different levels of education?
2. How many of the schools that are excising in the Kebele are belong to the government, public and private owners?
3. Explain about the school teaching learning process; is it full day or shift system?
4. What is the situation of student classroom, and teacher student ratio?

For Neighborhood Development Office Representative

1. What are the development works that have been done by the Office pertaining to neighborhood development in the area?
2. What are the major problems related to sanitation and environmental pollution in the area?
3. What is the system put in place to manage solid and liquid waste disposal?
4. Is there accessory internal roads in the area where by the residents can use in time of emergencies?

For Micro and Small Enterprise Development Office Representative

1. What are the Main Means of livelihood of the area dwellers?
2. What are the main economic activities that the residents of the area are engaged in?
3. What are the major problems related to micro and small enterprises operators which hinder to run and expand their business?
4. What do you think the solutions are for the problems you just mentioned?

DECLARATION

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

Name of the Student: Fisaha Teklat

Signature ---------- Date Oct 24th/2007

Place: Addis Ababa University, Ethiopia

Date of Submission:

This thesis has been submitted for examination with my approval as a university advisor

Name of Advisor: Professor Sandhya Joshi

Signature Sandhya Joshi Date Oct 24, 2007