

**A Critical Analysis of Urban Environmental Health  
Discourses in Promoting Community Participation:**

**Focus on Addis Ababa, Ethiopia**

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**A Critical Analysis of Urban Environmental Health Discourses  
in Promoting Community Participation: Focus on Addis  
Ababa, Ethiopia.**

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## **ABSTRACT**

This study analyzed environmental health, particularly sanitation discourses with a critical discourse analysis approach to see how community participation is promoted. Since the adoption of the Alma-Ata Declaration in 1978, community participation has been promoted as a global discourse of health promotion. This is based on the belief that health is a matter of life and death and it has to be owned by the people. Drawing on Norman Fairclough's (2003) approach to discourse analysis, global views on environmental health and approaches to the promotion of community participation, power relations in environmental sanitation discourses have been focused for investigation in this study.

The study employed mixed methods design although the emphasis is on the qualitative data. The required qualitative data were taken from 5 key policy and strategy documents, 13 environmental health communication resources, 4 scripts of environmental sanitation education lesson observations, 13 scripts of individual in-depth interviews and 4 scripts of focus group discussions. Survey data from 250 respondents were also used to complement the qualitative data. All in all, the study involved 281 participants including seven key informants, six individual in-depth interviewees, 18 FGDs discussants and 250 survey respondents. Participants were selected using multi forms of strategies. The data analysis utilized mainly latent level content and critical discourse analyses.

The findings revealed that though community participation has consistently been promoted as a nodal policy discourse of environmental health in general, and environmental sanitation in particular, communities were not participating in the planning, implementation, monitoring and evaluation of policies, programs and interventions as intended. The analysis also showed that in the environmental health education materials, as well as during the actual communication practices, the promotion of community participation has been left aside. The environmental sanitation packages and the awareness raising lessons were found dominated by bio-medical information;

whereas, community participation is a social practice which requires behavioral change. Moreover, though the policy discourses acknowledged the role of communities' indigenous knowledge to maintain sustainable environmental sanitation, the waste management and disposal oriented environmental sanitation discourses demonstrated the usual top-down flow of information. It also emerged from the analysis that the unspoken exclusion of communities from the process of designing, implementing, monitoring and evaluating their respective environmental health activities as promised in the policy and program documents resulted in silence and resistance. This is to say that communities were not empowered to develop attitudes of responsibility and participation essential to own the environmental sanitation interventions. They rather considered participation as political affiliation and developed sense of mistrust. The communities took the health extension workers as political agents of the government and resisted to take part even at grass-root level activities. In Ethiopia, low community participation is a contributing factor to poor environmental sanitation observed in the capital.

Finally, it is recommended that the Ethiopian government needs to use participatory communication where communities participate in agenda setting, operational strategies and accountability of results. The present health communication strategy is top down and does not impact change of behavioral practices towards environmental sanitation. It is also suggested that more research needs to be done on community health communication discourses to get better insight into community assumptions and beliefs of health in general and environmental sanitation in particular. There should be more studies on communication strategies and ways of operationalization of health communication activities and community actual responses to such communications. The author strongly believes that unless we bring transformation on community perceptions and beliefs on development, where health is an important component, we cannot ensure sustainable growth and better life style.

## **Declaration**

I, Getachew Alemu, hereby declare that this dissertation is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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## ACRONYMS AND ABBREVIATIONS

<b>AACA</b>	Addis Ababa City Administration
<b>AACG</b>	Addis Ababa City Government
<b>AACPA</b>	Addis Ababa Environmental Protection Authority
<b>AACA</b>	Addis Ababa City Administration
<b>BCC</b>	Behavior Change Communication
<b>CHEPs</b>	City Health Extension Packages
<b>CSA</b>	Central Statistics Agency
<b>CDA</b>	Critical Discourse Analysis
<b>EIAR</b>	Environmental Impact Assessment Regulation
<b>EPA</b>	Environmental Protection Authority
<b>EPE</b>	Environmental Policy of Ethiopia
<b>FDGE</b>	Federal Democratic Government of Ethiopia
<b>HEEC</b>	Health Extension and Education Center
<b>HEP</b>	Health Extension Package
<b>HSDPs</b>	Health Sector Development Programs
<b>HSEIG</b>	Health Service Extension Implementation Guideline
<b>IEC</b>	Information Education and Communication

<b>KAP</b>	Knowledge Attitude and Practice
<b>MEDC</b>	Ministry of Economic Development and Cooperation
<b>MoH</b>	Ministry of Health
<b>MOI</b>	Ministry of Information
<b>NHCS</b>	National Health Communication Strategy
<b>PCC</b>	Population Census Commission
<b>PHC</b>	Primary Health Care
<b>PRB</b>	Population Reference Bureau
<b>SBPDA</b>	Sanitation, Beautification and Parks Development Agency
<b>TGoE</b>	Transitional Government of Ethiopia
<b>WBDR</b>	World Bank Development Report
<b>WHO</b>	World Health Organization

## DEFINITIONS OF KEY WORDS AND CONCEPTS

The following terms and concepts may be defined in a number of ways by different scholars. In this particular study, however, I believe the operational definitions given below are consistent with the theoretical and methodological framework on which this study draws upon. The terms and concepts have been employed as the scholars define them.

**Community Participation:** the process of involving and engaging community members actively in cleaning and protecting their environment from in discriminatory human and household waste disposal activities (Meisner, 2009)

**Critical Discourse Analysis (CDA)** is a research approach which aims at systematically exploring often opaque relationships between discourse practices, texts, and events and wider social and cultural structures, relations and processes. It strives to explore how these non-transparent relationships are factors in securing power. It draws attention to power unbalance (Fairclough, 1995).

**Discourse Analysis (DA):** is a term for a broad area of language study, containing a diversity of approaches with different epistemological roots, and very different methodologies, but in general, it can be defined as a set of methods and theories for investigating language in use and language in social contexts (Wetherell, et al 2001)

**Discourse** refers to expressing oneself using words. It can be used for an assertion of power and knowledge. It can be used for resistance and critique. (McGregor, S.L.T. 2003)

**Environmental health communication:** It is the use of communication strategies to increase people's knowledge and awareness of environmental issues, problems or even solutions. It can influence perceptions, beliefs, and attitudes that may change negative behaviors (Mark and William, 2007).

**Environmental sanitation** is a system that protects human health especially from insanitary waste disposal (MOH, 2004).

# CHAPTER I

## GENERAL INTRODUCTION

### 1.0. Study Background

Community participation has long been associated with better health outcomes. Since the 1978 Alma-Ata Declaration, it has become a global discourse. The Alma-Ata Declaration underscores that people have to participate in health activities if better health is to be achieved and sustained (WHO, 1978). The advocacy for community participation in health since then has been intensified. Health promotion and communication have become important for improving public health outcomes (HEC, 2004). The Alma-Ata notion and principles of community participation were refined and extended during the subsequent international conferences on health promotion which were co-sponsored by WHO. The conferences endorsed the Ottawa Charter for Health Promotion (1986), the Adelaide Recommendations on Healthy Public Policy (1988), the Sundsvall Statement on Supportive Environments for Health (1991), Jakarta Declaration on Leading Health Promotion into the 21<sup>st</sup> Century (1997), the Mexico Ministerial Statement for the Promotion of Health (2000) and the Bangkok Charter for Health Promotion in a Globalized World (2005). In all these international instruments, the notion of community participation was emphasized in setting priorities, making decisions, planning strategies and implementing health improving interventions.

As a result, a number of international organizations have included community participation into their development works. For example, in 1979, WHO recognized

community participation and began to promote it in its health care and development activities. Similarly, in 1990, UNICEF undertook a formal examination of the usefulness of community participation in its work. Again, in 1993, the UN Organization for Economic Cooperation and Development did a detailed review of how community participation could improve the effectiveness of its work and considered it as a critical component of its programs. The World Bank in its part issued a major statement on the importance of community participation in health improving activities and took a decision to build participatory approach into its loan operation in 1994 (Kahssay and Oakley, 1999).

Ethiopia, as a member state of the UN, has endorsed many of these international conventions. Relevant to the present study, Ethiopia has ratified the principles of community participation in its health and other related policies and program documents. For example, it has been promoting the discourse- community participation- in its Health Policy formulated by the then Transitional Government of Ethiopia in 1993. Community participation is also promoted in the Environmental Policy of Ethiopia (FDGE, 1997), and the National Hygiene and Sanitation Strategy (MoH, 2005a) as one major strategic means to maintain sustainable environmental health, as well as an end to environmental health promotion interventions. The Environmental Policy of Ethiopia articulates “ensuring the empowerment and participation of the people and their organizations at all levels in environmental management activities” as one of its specific objectives (FDGE, 1997:4). In addition, in the Solid and Liquid Waste Management health extension

package (MoH, 2004a), enhancing community participation is listed among the main implementation strategies.

To facilitate the implementation of these policies and programs, and thereby to enhance community participation, the Ethiopian Government has given high prominence to health communication. It has considered Information, Education and Communication/Behavior Change Communication (IEC/BCC) as a major way forward to empower citizens with the right knowledge, information and skills of participation so that they can actively get involved in environmental health activities. As one of its general strategies, the Health Policy stresses that “health education shall be strengthened through the mass media, community leaders, religious and cultural leaders, professional associations, schools and other social organizations for inculcating attitudes of responsibility and participation in the community health development” (TGE, 1993:29-30). The Health Extension Program that the Ethiopian Government has been implementing since 2004 also aims mainly at ensuring community participation by increasing health awareness, knowledge, and skills among community members (HEEC, 2007).

In support to this endeavor, a National Health Communication Strategy and Health Education and Communication Manual for Health Extension Package was developed in 2004 by the Federal Ministry of Health. Communication offices have been opened at different levels (e.g. kebele<sup>1</sup>, woreda<sup>2</sup>, sub-city levels); a large number of urban health

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<sup>1</sup> Kebele is the smallest administrative unit. Currently, it has been replaced by woreda.

<sup>2</sup> Woreda is a higher administrative unit than kebele.

extension professionals took training and have been deployed to all kebeles and woredas in urban areas of Ethiopia to implement the health improving interventions (AACA Communication Affairs Bureau, 2010; HEEC, 2007). Moreover, the Ethiopian Government, in collaboration with its development partners (for example, UN-HABITAT, SOS Ethiopia, and Enda Ethiopia) has launched environmental health promotion interventions. These interventions include radio and television programs, mass media environmental health messages, interpersonal communication through health extension professionals and community health agents, environmental sanitation campaigns. They aim mainly at developing the public's positive environmental health behaviors so that people can be empowered to participate in efforts to address environmental health problems. As a whole, efforts have been made to inculcate knowledge, skills and attitudes that enhance community participation in environmental health. The efforts aim at bringing about positive behavior and practices among the urban dwellers so as to make them actively take part in improving and maintaining a sustainable and healthy environment.

However, despite the initiatives taken, “environmental health problems and their contribution to the occurrence of 60-80 percent of communicable diseases are still rampant in the country” (MoH, 2005b:1). The national environmental health coverage remains very low, and diseases caused by poor environmental health such as acute watery diarrhea affect many people and remain fatal (MoH, 2005b).

The environmental health problems appear more serious in the urban areas of Ethiopia, particularly in the capital, Addis Ababa. Almost all public spaces like roadsides and open

spaces attest eye-catching piles of garbage and rubbish, littering the spaces in the city indiscriminately. It has been frequently reported that this problem has been aggravated by lack of participation, apathetic attitude and ill-behavioral practices of the community (Solomon, 2006; Tadesse, 2004; Zerayakob, 2002). Serious problems are being reflected in the form of low level of utilization of even the available facilities such as public toilets, waste containers, waste bins, septic tanks, etc. (MoH, 2005b). Instead of keeping their environment clean and making it suitable for health, many people are seen contributing to the environmental health problems of the city. Poor waste disposal and management (throwing rubbish onto roads although waste bins, and waste containers are available) defecating in open spaces, even in parks while mobile toilets are available around is common.

This study attempts to explore the underpinning reasons why health communication activities have not yielded positive impacts and why community participation remains low and why community behavioral practice remains a problem in improving environmental health and sanitation.

## **1. 1. Problem Statement and Its Justification**

As stated earlier, Ethiopia has endorsed a number of international conventions and accordingly ratified the principles of community participation into its environmental health policy and programs. It has also launched various environmental health communication interventions for the realization of community participation in order to bring about a change in the sanitary behavioral practices of its people (MoH, 2004a).

Parallel with the environmental health communication efforts, attempts have been made to make sanitary facilities such as waste bins, public toilets and septic tanks available in urban areas of Ethiopia, particularly in Addis Ababa. A significant number of street sweepers and waste collectors have been providing sanitation services. For example, street sweepers are cleaning the streets of Addis Ababa regularly. Similarly, waste collectors are collecting dry solid waste from each residence on at least weekly basis.

Nevertheless, it appears challenging for the country to address urban environmental health problems, especially in Addis Ababa. It is still very common to see huge piles of garbage lying on the roadsides, streets, around bus stations, schools, hospitals, market places and on open spaces. The growing problem of improper disposal and management of human and household waste is still causing adverse effects on the health of the residents (MoH, 2005a). Besides, environmental health problems have been challenging the safety of Addis Ababa from time to time (Tadesse, 2004). All these indicate that the participation of the community members to keep their environment is low.

There could be a number of assumptions that can be forwarded with regard to the lack of community participation in environmental health and sanitation:

- The communication activities that are done routinely may not have succeeded in passing the messages of environmental health and sanitation. They may be top down prepared messages without considering the community assumptions and notions of clean environment and its impact on community health. The

interventions may not help communities to develop their knowledge and acquire skills and attitudes through a dialectical process of learning.

- The language used in the communication activities is may be a hindrance to the promotion of community participation although health promoters may not be aware of.
- The community's notion of participation may not match with that of the health promoters. There could be socio cultural processes, for example, bringing change of behavior, that are essential to ensure community participation.

The study explores these assumptions and also looks for other emerging themes affecting environmental health and sanitation.

## **1.2. Study Objectives**

The general objective of this study is to make a critical analysis of the discourses used in environmental health communication activities and explore the communication gaps that hamper from bringing about effective community participation in environmental health activities to ensure and sustain clean environment and better environmental health outcomes.

### **The specific objectives are:**

- examine the nature of the discourses of community participation and the communicative strategies used in key documents: program implementation documents, and the health promotion and education delivered by health extension professionals;

- describe how the key stakeholders namely policy makers, health practitioners, and the target community position themselves in the environmental health communicative events;
- investigate the power relations among these stakeholders- a key indicator of participation;
- describe the operationalization of public health discourses—how health communication is enacted at the community level.

### **1.3. Research Questions**

The main research question is: How are environmental health communication discourses made and operationalized? The specific research questions are:

1. How is the discourse of community participation structured and articulated in the key policy documents (e.g. Health Policy, and Environmental Policy), and implementation strategy documents (e.g. Health Education and Communication Manual, National Health Communication Strategy, National Sanitation Strategy for Ethiopia), health education materials (e.g. City Solid and Liquid Waste Management and Disposal Package, Health Service Extension Implementation Guideline, City Health Extension Program Implementation Manual), and selected public message discourses?
2. What are the strategies used in the operationalization of community participation discourses in environmental health?

3. How are the environmental health communication discourses enacted at the community level?
4. What are the roles of health programmers, health extension professionals and the community in the creation of knowledge and skills necessary to ensure and sustain environmental health? How are environmental health messages constructed at community level?

#### **1.4. Rationale for the Study**

Studies conducted on domestic waste disposal and management in Ethiopia, especially in Addis Ababa, have reported serious problem of environmental health and sanitation. For example, Enda Ethiopia (1999), in its study entitled *The Cycle of Waste in Addis Ababa*, has reported that the city has faced serious environmental health problems caused by the indiscriminatory disposal of wastes. Zerayakob (2002), who studied the analysis and development of solid waste management system of Addis Ababa, said that the lack of community knowledge and participation in controlling insanitary practices of waste disposal, particularly human and household waste has led to the epidemic plague. Taddesse, (2004) has also studied the dry waste management in Addis Ababa, and has found out that inadequate dry waste management has resulted in the accumulation of waste on open lands, in drains and in the living areas of many people. He added that the indiscriminately scattered waste has caused a nuisance and foul-smelling pools and environmental pollution through leaches from piles and burning of waste, clogging of drains and the possible spread of communicable diseases. Abera and Ahmed (2005) on their part have assessed the environmental health status in Ethiopia with particular

emphasis to its organization, drinking water and sanitation. They have reported that communicable diseases attributable to poor environmental health are still the major health threats in Ethiopia. Solomon (2006) has studied waste management in Addis Ababa, particularly household waste management in Arada Sub-city and found out that the area is severely polluted by domestic waste that exposes the residents to various respiratory illnesses. In his assessment of Policy and Legislative Measures for Environmental Management, Tekle, (2008) has underscored that the uncollected garbage has become a major cause of the ever increasing environmental health related problems and diseases in Addis Ababa.

All these studies mainly focus on the causes and impacts of poor environmental health. They are geared towards quantifying the waste generation and emphasize the waste disposal and management problems. As a result, many of these researchers came up with figures, which show the daily, weekly, or even yearly waste generation units. They have found out that the improper disposal and management of human and household waste and the apathetic attitude of the community has caused a threat to the public health and the environment. Furthermore, they reported that lack of community participation is a major contributing factor to environmental health problems (Solomon, 2006; Tekle, 2008)).

Whereas, none of these studies has gone beyond reporting the low participation of the community in environmental health and explored the underlying reasons for the apathetic attitudes toward environmental health and their low participation. Besides, methodologically they have not tried to look why the community is not assuming responsibility for its public health. They have not examined why the community is

behaving in the manner that exacerbates environmental health threat. This study attempts to address this gap by examining the environmental health discourses used and the way they are operationalized. It hopes that by doing so it can give some insights for enhancing community participation and good practice in environmental health and sanitation.

## **1.5. Scope of the Study**

Community participation could be broadly seen in relation to various aspects of environmental health communication interventions. This may include safe human solid waste disposal, solid waste management, medical waste management, household waste disposal, control of community water supplies, wastewater disposal, site drainage, personal hygiene facilities, refuse disposal, vector and pest control, housing conditions, food supplies and handling, atmospheric conditions, and the safety of the working environment (WHO, 2009). Since it is not possible to deal with all these discourses of environmental health in a single study, delimiting its scope has become necessary. Therefore, the scope of the current study is confined to the participation of the community as related to human and household waste disposal practices, more specifically, solid and liquid waste disposal. The study is also delimited to Addis Ababa. The reason is that Addis Ababa is very much affected by the problem and focusing on Addis Ababa by itself is a huge task.

## **1.6. Contributions of the Study**

The Study is hoped to generate on how environmental health communication discourses and messages could be constructed for enhancing community participation and promoting behavioral practices for ensuring clean environment and sustainable environmental health and sanitation.

The methodology used to answer the key questions on community participation is innovative in that it is able to describe how communication is operationalized and how the operationalization of communication discourses impacts the behavior of the major stakeholders, the community.

The study is hoped to have a positive impact in the construction and operationalization of community health discourses and messages. In this sense it is expected to contribute to knowledge.

## **1.7. Limitations of the Study**

As indicated in the background section of the study, NGOs are government partners who are working in environmental sanitation. However, this study is limited to the analysis of the policy and program documents and communication strategies utilized from the government side. The promotion materials and strategies used by NGOs have not been seen. The study is also limited to the analysis of public messages which were communicated through print materials such as brochures, pamphlets, and leaflets. Environmental sanitation messages that were aired on radio and television programs were

not considered. Finally, it was not possible for me to utilize software for doing qualitative data management. This was because I was not able to access those individuals who were professionals in the area. However, I was very careful when working on data management manually.

## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

#### **2.0. Introduction**

This chapter has two major sections. Section one provides the study context while the second section reviews the key concepts and social theories. The study context focuses on the brief discussion of urban environmental health situations in Ethiopia in general and environmental health practices in Addis Ababa in particular. It aims at throwing light on the magnitude of the problem. In the key concepts and social theories' section, the concepts of community participation, community empowerment, health communication as an essential component of environmental sanitation, among other things, have been reviewed.

#### **2.1. Study Context**

##### **2.1.1. Urbanization in Ethiopia**

The history of urbanization in Ethiopia dates back to the period of Axum civilization, i.e. around 1 A.D. Axum was the first ancient city, which flourished in the first to the seventh century A.D. However, when its civilization and influence declined, the town of Lalibela (built in the 13<sup>th</sup> century), Gonder (in the 16<sup>th</sup> century), and Harar (in the 11<sup>th</sup> century) were founded in different parts of the country. These towns are still serving as administration, economic, and cultural centers (Paulos, 1991 as cited in Regasa, et al 2011). Most of the important urban centers of Ethiopia were founded during the latter

part of the nineteenth century and the early part of the twentieth century. These modern centers include, Addis Ababa, which was founded by Emperor Menilik in 1888, Dessie founded in the second half of the nineteenth century, Mekele in 1871-89, Dire Dawa in 1904; and Nazareth (currently called Adama), Debrezeit (currently called Bishoftu), and Akaki in the first half of the twentieth century (UN- Habitat, 2007).

Today, the country has roughly 925 urban settlements, with 105 of them, having population over 20, 000 people, 2/3 have population not exceeding 5000 (UN-Habitat, 2007) spreading across the 9 regional states and 2 chartered cities (Addis Ababa and Dire Dawa). Majority of what fits into the definition of urban settlements (i.e. above 5000 habitats, CSA, 2008) are, therefore, small and medium sized localities with limited social and economic activities. The distribution, the size and spacing vary significantly. The Regional states of Afar, Gambella, Benishangul Gumuz and Somali have the lowest number of urban centers. Oromia, Amhara, SNNPR and Tigray have the highest concentration, comprising  $\frac{3}{4}$  of the entire population (Ministry of Works and Urban Development, 2008).

Currently, all of the cities with at least 50,000 people are geographically located in the four major regions (Oromia, Amhara, SNNPR, and Tigray). Since the 1994 census, new cities have been emerging and economically viable cities have experienced large growth in population count and density. The growth in the number of cities with at least 50,000 people mainly occurred in the four major regions (i.e. Oromia, Amhara, SNNPR, and Tigray). Thus, increased urbanization rates are primarily confined to these regions. The city administrative areas of Addis Ababa and Dire Dawa have been experiencing the

greatest urbanization growth over the 1994 to 2007 census period (Schmidt and Melkamu, 2009).

Parallel with this, the number of people living in urban areas of Ethiopia has been growing from time to time. For example, in the early 1940s, less than 3.5 per cent of the total population lived in urban areas. By 1960, the number increased to 8.5 per cent. In 1984, it increased to 11.4 per cent and 15 per cent in 2000 (Girma, 2004). In 2007, the urban population increased by 16 per cent (CSA, 2008; WHO, 2002; PRB, 2009), which makes the total population growth in urban areas of Ethiopia 16 per cent (Ministry of Works and Urban Development, 2007).

According to CIA World Fact book (2012), the urban population of Ethiopia is 17 per cent of the total population in 2010, and the annual rate of urbanization is 3.8 per cent (2010-2015 estimation). In comparison to other African countries, Ethiopia has a low urbanization rate. For example, according to the 2009 World Bank Development Report, Sub-Sahara Africa is 30 per cent urbanized, whereas Ethiopia is only 10.9 per cent urbanized (World Bank, 2009).

### **2.1.2. Urban Environmental Health Situations in Ethiopia**

Although urbanization can play an important role on the development of a country by bringing changes in attitudes and practices for improved livelihood, it can also turn cities into places of misery by damaging the quality of environment. It can cause high population pressure, along with poor environmental health, which can be a threat to the health of dwellers in cities (Solomon, 2006). Rapidly growing urbanization has led to an

increase in the quantity and complexity of generated waste, representing a phenomenal challenge (UNDP, 2004). This is also true in the urban areas of Ethiopia, where an ever-increasing volume of solid waste has been generated from time to time (Regassa, et al., 2011). As wastes in urban centers of Ethiopia are indiscriminately thrown away at typically empty lots scattered throughout the cities and towns, their impacts on health has become a critical issue in the country's urban areas (Mohammed and Elsa, 2003).

Rapid increase of urbanization has caused several problems out of which poor environmental health is a major one (Ministry of Works and Urban Development, 2007). Urban waste generation and disposal due to the fast growing of populations has posed several serious health challenges that are undermining living conditions. For example, disposal of wastes around nearby rivers and open spaces, littered and polluted waterways which are prevalent in most urban centers of Ethiopia have become the causes for poor environmental health (Roe, 2008). Some recent studies indicate that the wastes generated mainly are composed of domestic waste, which is organic waste which has caused massive impact on the quality of life of the Ethiopian population (AAEPA, 2006).

Like in many other developing countries, the majority of inhabitants in most urban areas of Ethiopia often use unsafe solid waste disposal practices. For example, the descriptive results of the study conducted by Degnet (2008) in Jimma town revealed that open dumping, burning, burying and composting are the four most common household waste disposal practices that have endangered the health of the people. The study conducted on Bonga town by Temesgen and Legesse (2005) also shows the presence of health problem as a result of the wide spread of poor waste disposal.

The situation in Addis Ababa is even worse. Unregulated dumping of wastes originating from households has created persistent threat to the health of the residents (Tekle, 2008). Liquid waste disposal is also an unresolved and mounting health problem in the city (MoH, 2005a). In sum, poor environmental quality of urban areas can deprive dwellers of a good quality life as it affects their health and consequently, adversely affects the productivity and economic development.

### **2.1.3. Environmental Health Practices in Addis Ababa**

The environmental health practices in Addis Ababa are grossly deficient as in most cities in Sub-Saharan African (Hutton, et al, 2007). Large amount of human wastes are discharged to the environment without adequate treatment. This is likely to have major impacts on infectious disease burden and quality of life. Most households (about 75%) have pit latrines discharging to open drains. About 15% have flush toilets and septic tanks. Likewise, they often discharge to open drains. A significant majority resort to open defecation. Even if public toilets have been recently introduced, people don't use them (Hutton, et al, 2007).

Among the daily waste generated in Addis Ababa, 25-30% is illegally disposed on roadsides, bridges, near residential areas. Regarding liquid waste, more than 25% of the dwellers do not use latrines, which are even available to them. As a result, they have been suffering from different communicable diseases. The case in point is the outbreak of Acute Diarrheal Watery Disease in Addis Ababa in 2009, which was caused due to mainly lack of sanitation (AACA, 2010). Large amounts of faecal waste are discharged

to the environment without adequate treatment. This is likely to have major impacts on infectious disease burden and quality of life (Hutton, et al. 2007). Rivers in Addis Ababa are widely used as disposal sites. Although the Hygiene and Environmental Sanitation Regulation issued by the Addis Ababa City Administration (Pro. No. 1, 1994) prohibits people from disposing waste along roadsides, avenues, rivers, ponds, and other sites, the Regulation is continuously violated by the people.

A considerable amount of human and household wastes end up in open dumps or drainage system, threatening both surface water and ground water quality and causing flooding, which provides a breeding ground for diseases – carrying pests (Tadesse, 2004). Human excreta are the major area of concern ever from the household wastes as the majority of the dwellers in Addis Ababa do not use even the available latrines. They experience open defecation. Hence, human waste takes proportionate share of the solid waste in the city. Moreover, latrines usually overflow and pollute most of the older and overcrowded inner city as for example, Arada. Ash and smoke are other major components of waste originating from households in Addis Ababa (Yirgalem, 2005).

The other household waste worth considering is *chat*<sup>3</sup> which is being increasingly used by some dwellers of the City. It is consumed as a means of recreation by many people and also serves as a stimulant. However, the increasing number of people using chat, its disposal in the ditches, open space and drainage systems litter the urban area and block the drainage systems to the detriment of the environment and the health of the people.

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<sup>3</sup> *Chat* is a green plant that is chewed by some people as a stimulant or pass time.

Besides, some dwellers do not properly use waste containers that have been made available at different places in the City. For example, they throw their household wastes around containers instead of throwing them into containers properly. What is more, the Addis Ababa dwellers are using the streets of the City as toilets, and as garbage disposal cans. Therefore, Addis Ababa cannot keep its streets tidy, clean and safe from environmental health related problems (Fitsum, 2007:1).

#### **2.1.4. Initiatives Taken**

##### **2.1.4.1. Policy Measures**

The Federal Government of Ethiopia has taken a number of initiatives. For example, the Health Policy was formulated in 1993. In this Policy, the Government has shown its commitment to community participation in health development. In particular, the Government fully appreciates the decisive role of popular participation and, therefore, is determined to create the requisite social and political conditions conducive to its realization (TGE, 1993).

One of the eight Millennium Development Goals of the United Nations Development Program by 2015 is ensuring sustainable environmental health by way of mobilizing people so that they get involved in all environmental health efforts. To this effect, the Federal Democratic Government of Ethiopia has been trying its level best to integrate environmental health in its public health improving programs. For instance, the MoH has developed a series of Health Sector Development Programs (HSDP) in which environmental health is included as one of the main components (MoH, 1996, 2002, and 2005c).

In order to speed up the implementation of the Health Sector Development Program, the Federal Government of Ethiopia introduced an innovative program called Health Extension Program (HEP) during the second HSDP (2002/03-2004/05). The Health Extension Program is an innovative community-based program with the aim of creating healthy environment and healthful living by making available community (kebele) based essential health communication services at the grass roots level. It contains sixteen health extension packages categorized under three major areas one of which is hygiene and environmental health.

The Solid and Liquid Waste Management Extension Package and Personal Hygiene Extension Package (which are more relevant to this Study) are two of the packages that come under the Hygiene and Environmental Health category. In the Solid and Liquid Waste Management Package, the MoH (2004a) promises to ensure the prevention of environmental pollution by solid and liquid wastes through the participation of the community. Similarly, the MoH (2004e) has shown its commitment in the Personal Hygiene Extension Package that healthy and productive society be created if people participate in the efforts to prevent and control communicable diseases that occur due to poor personal hygiene.

The Federal Democratic Government of Ethiopia also came up with a comprehensive Environmental Policy in 1997 so as to harmonize development with sustainable environmental health. One of the aims of this Policy is to ensure the empowerment of the people that enable them participate at all levels in environmental health management activities (FDGE, 1997).

A National Health Communication Strategy (NHCS) was also developed to facilitate the advocacy, communication and promotion activities. This Document has spelt out that citizens should be provided with the necessary knowledge of participation so that they can actively participate in the process of preventing and controlling major health problems in all aspects including environment. To this effect, therefore, health communication interventions have been taken as vital tools in order to be able to inculcate the essential knowledge and skills of the discourse- 'community participation' so that Ethiopians can develop favorable attitude and behavior that will enable them get involved in an endeavor to achieve sustainable environmental health (MoH, 2004b).

In 2005, Ethiopia set a National Sanitation Strategy. The Strategy primarily aims at enabling one hundred per cent adoption of improved environmental sanitation and hygiene through the participation of the community, which is believed to contribute to better health, a safer and cleaner environment (MoH, 2005a).

In order to minimize health risks that emanate from contaminated environment, the Federal Democratic Government of Ethiopia also established legally empowered Environmental Protection Authorities both at Federal and Regional levels. These Authorities have been given the responsibility to mobilize community members so that they (community members) take part in an endeavor to secure healthy and clean environment (FDGE, 1997).

The Addis Ababa City Government on its part set an Environmental Impact Assessment Regulations (EIARs) in 2006. This is because it became necessary to enact law so that

dwellers will show their participation by not polluting the City. Other than this, the EIARs aim at enabling the community to take part in the planning and decision-making on environmental health practices (AACG, 2006).

As can be understood from the discussion above, the Federal Democratic Government of Ethiopia has taken various policy measures to improve the existing poor environmental health situations prevailing in the country. Despite all these initiatives, environmental health is still a problem in Ethiopia.

#### **2.1.4.2. IEC/BCC Intervention Efforts**

Information, Education and Communication (IEC) mainly focuses on passing new information to clients. Behavior Change Communication (BCC) is believed to be interactive process aiming at changing social and individual behavior as opposed to simply increasing knowledge.

The Health Policy gives due emphasis to IEC/BCC as a way of passing information on health and changing the behavior of communities. The Policy mentions that health education shall be strengthened through the mass media, community leaders, religious and cultural leaders, professional associations, schools and other social organizations for encouraging the participation of the people so that the development of health promotion life-styles and personal hygiene and healthy environment can be maintained (TGE, 1993).

The IEC/ BCC interventions, which aim at the promotion of the notion of community participation, has also been given due attention in the Health Sector Development

Programs and Health Extension Program. As articulated in the Documents, for promoting IEC/BCC interventions, the principle of audience segmentation, use of multiple-strategy and methods, and participation and empowerment, among other things, have been central. Empowerment enables individuals or groups to make informed decisions and informed choice of behaviors. So, people have to be empowered by being provided with correct and up-to-date information about the bad consequences of poor environmental health so that they will be able to positively change their behavior (MoH, 2004d).

The Federal Democratic Government of Ethiopia and its partners have exerted efforts to enhance community participation in environmental health through the use of ICC/BCC activities. For example, the government has carried out IEC/BCC activities through mass media, leaflets, pamphlets, posters, brochures, and slogans. The partners, especially NGOs have also been helping. For example, they have been engaged in raising public awareness and skills training about environmental health (MoH, 2004a).

However, it looks that all these efforts have not made positive impacts to increase community participation. Studies made by Zerayakob (2002); Tadesse, (2004); MoH, (2005b); and Solomon (2006) confirm this (see Chapter five, 5.1. for the detailed discussions).

### **2.1.5. Studies Related to Environmental Health**

In this section, an attempt has been made to review empirical studies carried out on urban environmental health particularly with reference to waste disposal practices. Environmental health and sanitation is a worldwide problem. The United Nations

Environmental Programs – Post Conflict and Disaster Management Branch in collaboration with the Environmental Protection Agency in Liberia (2008) found out that Waste Management is a problem in Liberia. The study indicated that low awareness and participation on the part of the people was a major factor. Babayemi and Dauda (2009) found out that open defecation and waste disposal are common practices in cities in Nigeria. They further pointed out that while some employ the service of streams to transport their household wastes out of their sight; some directly dump their wastes and defecate by the road sides. The study has revealed that several Nigerians have considered it a cheap way of disposing off their household wastes by setting the mixed wastes on fire in a little corner in their backyard or in a very open place. Even, mountains of mixed domestic wastes in so-called designated places are set on fire. The key finding of the study is that such ill sanitary practices have caused serious and dangerous environmental health problems in Nigeria. The study concludes that the percentage of those who used other indiscriminate household waste disposal methods like open dumping, open burning, and dumping in drainages was higher. The study recommended that popular participation in environmental health is the way forward.

In another study conducted on Chinhoyi town in Zimbabwe, which was concerned with the challenges of the town in waste management, it was reported that municipality household wastes generated in the town was 2.7 kg per household per day out of which 47% biodegraded. It was reported that residents resort to illegal dumping, burning and burying the waste. As a result, residents became increasingly vulnerable to communicable diseases such as cholera and diarrhea. The case of cholera outbreak in

2008-2009, which claimed over 3500 human lives in Zimbabwe, was cited as a direct consequence of poor environmental health. The study recommends that active participation of the community members in activities such as clean up campaigns is a long lasting solution for the problem the town is facing (Downmore, et al. 2011).

In a case study about environmental management measures and current practices in household waste management in Vientiane, Laos, the general practices and environmental measures used in waste management were identified and assessed. The study discovered open burning of waste without segregation, use of open dumpsites that pose health and environmental risks, dumping waste in the bank and tributaries of a river, and low awareness about solid waste management among residents as major environmental health problems. To overcome all these environmental health problems, however, the study recommends that active community participation is crucial for possible effective waste management (Souksavath and Khanal, 2007).

In an attempt to propose for waste management – environmental protection that benefits the poor, an NGO by the name ‘Hand in Hand’ (2008) pointed out that despite concerted efforts by policy makers to create a legal framework around the issue, waste in India is still in need of massive attention. For example, the average Indian generates about 490 grams of household waste per day (Central Pollution Control Board). Out of the total waste generated, 94 per cent is disposed unscientifically. It has been indicated in the proposal that the waste is often left unattended at disposal sites, creating a health hazard. What is more, improper handling of waste and its indiscriminate disposal in open spaces, road margins, and tank beds give rise to numerous potential risks to the environment and

to human health. According to the proposal, the most obvious environmental damage caused by waste is aesthetic, i.e. waste that litter public areas is ugly and smelly. Hence, the study proposes that in order to obtain long- term sustainable changes, people at the grassroots level must feel ownership and commitment to all environmental health interventions. It has been further proposed that it is important to motivate and engage the public by raising its awareness based on the IEC/BCC strategy.

In another study conducted in India, College of Home Science, on problems of household waste, Kaundal et al (2007), it was found that the huge quantity of waste production and improper methods of waste disposal were found to be causing health threats in the campus. The researchers further indicated that the situation has direct and indirect effects on human, animals and plant life alike. The study revealed that about three-fourth of respondents considered choking of drainage system with garbage as a major problem faced outside the house. The study also discovered that all the respondents disposed off the polythene in the open and used to burn them along with other waste. It further noted that the improper disposal of plastic gave a dull and dreary look at the disposal site besides devastating effect on the environment as polythene is non biodegradable in nature.

The situation in Addis Ababa is the same if not worse. In the work of Camilla (2005), an MA thesis conducted on the cycle of plastic waste in Addis Ababa, it has been noted that the management of waste is a growing problem in many urban areas in Africa today including Ethiopia. One of the reasons for the escalation of the problem as mentioned in the study is the rapid urban area growth due to rapid population growth and high rates of

migration from rural areas. Camilla's study further shows that people dispose their waste illegally in open fields, rivers, streets, and ditches. Containers overflow with garbage and rain causing streets to flood as a result of the waste clogging the drainage channels. This represents a source of water, land and air pollution affecting the urban environment and health of people living in the city. The thesis acknowledges the essentiality of the participation of the people to improve the overall waste management system in Addis Ababa.

Degnet (2008), points out that like in many other developing countries, the majority of inhabitants in most towns of Ethiopia often use unsafe solid waste disposal practices such as open dumping, burning, burying and the like. For example, in Jimma town, where the study was conducted, many households practice uncontrolled open dumping and others employ various household solid waste disposal practices like burning, and burying, all of which do not guarantee cleanliness and safety.

More recently, Regassa et al (2011) carried out a research on waste management in Addis Ababa city specifically in Bole and Akaki sub-cities. They found out that Addis Ababa is facing problems associated with poor environmental health one of which is the indiscriminatory waste disposal. For example, disposing household waste into a river, drainage, and any open place, is a common practice in the study area. The study deals with the analysis of the City's current solid waste management problems and the existing solid waste management practices. The researchers showed in their study that there has been low performance of solid waste management the reasons being lack of public awareness, illegal dumping, lack of community involvement, among other things. As

indicated in the study, scenes of scattered waste are common in the most part of the City. This has caused bad smells and attracts various disease vectors and pests resulting in deteriorated aesthetic quality of the City. The findings of the study show that the health situation of the community is under threat. Moreover, the study revealed that the willingness of the population to cooperate in the waste collection and pay for the service is low.

Selamawit (2007), on her part conducted a similar study in Addis Ababa, specifically in Addis Ketema sub-city. The study was conducted to investigate to what extent all actors, particularly, the community, have been participating to solve the problem of waste management in the study area. The researcher discovered that the participation of the people in most cases is low. The researcher recommended that the awareness of the community about waste handling and disposal methods must be raised as participatory decision making processes are required to achieve sustainable results.

Similarly, Solomon (2006) conducted a study on household waste management in Addis Ababa with special reference to Arada Sub-city, for his MA degree. The study mainly focuses on the participation of the community in the process of solid waste management. The result of his study indicates that the community in Arada Sub-city, (not all), do not have a concern in solid waste management. It further noted that there is improper use of public containers deliberately or unknowingly by some households. Also, there is lack of taking initiatives on the part of some households to participate in sanitary campaigns that are organized by kebeles and NGOs. The study comments that though there have been efforts to mobilize the residents in the Sub-city from time to time to clean their

immediate neighborhoods, the piles of wastes dumped illegally on open areas, in river courses etc are undisputable evidences of the poor environmental health that prevails in the Sub-city.

The review shows; however, brief it is that the major challenge in environmental health and sanitation comes from lack of effective participation of the community. While the theoretical precepts of community participation require community empowerment in the development and construction of health messages and ultimately building the capacity of communities to assume responsibility for maintaining and keeping their environment clean and their livelihood safe. The empirical studies made in some countries including Ethiopia show that the community's behavioral practices remain a serious threat and challenge in environmental health and sanitation. The question is WHY are people endangering their health and livelihood and those of others? This would lead us to examine the discourse enacted in health messages particularly environmental health discourses and the process followed in health communication activity.

## **2.2. Key Concepts and Social Theories**

### **2.2.1. Community Participation: a Conceptual Review**

The concepts - *community* and *participation* are controversial and subject to varied understandings among policy makers and planners. For example, a politician may conceptualize the term *community* as something related to political constituencies. An urban planner may take *community* to represent agreed geographical boundaries. A public health physician may sense it as a group of people who need health services. A member

of a public may see it as a community or communities of which s/he feels to be part. Still others may conceptualize the term *community* to refer to people grouped on the basis of either geographically and / or common interest, identity, or interaction. It can thus be understood as a group of people who share an interest, a neighborhood, or a common set of circumstances (Smithies & Webster, 1998). Heterogeneous groups and individuals can become a community and collectively take action to attain shared and specific goals (Mattessich and Monsey, 1992).

Similarly, *participation* is understood in various ways. It can be understood as a process by which people are enabled to become actively and genuinely involved in defining the issues that concern them; in making decisions about factors that affect their lives; in formulating and implementing policies; in planning, developing and delivering services and in taking action to achieve (Bracht, & Tsouros 1990). The term is also used by various actors to mean, collaboration, or target beneficiaries just receiving program benefits, or involvement (active engagement in some activities) or gaining information, understanding, skills and power necessary to articulate their concerns, ensure that action is taken to address them, and more broadly, gain control of their lives (Freire,1992).

Participation can be seen both as a means and an end. Participation as a means ensures people's cooperation or collaboration with development programs such as health extension programs or sector development programs. In this case, participation facilitates the effective implementation of such initiatives. On the other hand, participation can be seen as a goal in itself. It can be expressed as the empowerment of people in terms of their acquisition of the skills, knowledge and experience to take greater responsibility for

their development. In this case, participation is an instrument of change to improve people's lives (Kahssay & Oakley, 1999).

When the two words are brought together, they still cause a wide range of understanding in different disciplines. For example, it has been found necessary to develop a common understanding of the concept of community participation especially for those national and international bodies that make strategic declarations and statements in the area of health so that member countries can have a common understanding of the concept.

The WHO Study Group on the discourse of 'community participation' after reviewing a range of definitions and meanings finally came up with a working definition. It has defined community participation as *a process whereby people both individually and in groups exercise their right to play an active and direct role in the development of appropriate health services, in ensuring the condition for sustained better health and in supporting empowerment of communities for health development* (WHO, 1991).

Based on the WHO's Study Group definition of the discourse of 'community participation', the Ministry of Health of Ethiopia coined its own working definition. For example, as articulated in the City Health Extension Program manual, the discourse of 'community participation' has been defined as

*the process by which community members are enabled to take part starting from planning up to implementation to maintain their own health. It is a process by which community members cooperate with those organizations working in the area of health by contributing their knowledge, labor, money, and materials. It is a system that helps to materialize City Health Extension Program* (MoH, 2009:3).

The question is, did the MOH implement community participation as per the definition given? Did the government and its partners like NGOs engage communities in the identification, construction of environmental health messages? Did they allow communities to decide on the issues affecting sanitation and environmental health? Did they help communities engage themselves in recognizing their roles and responsibilities? What processes have been followed in the development and implementation of environmental health discourses to engage the target communities to actively participate in mitigating the problem?

### **2.2.2. Community Participation - a Global Discourse**

The idea of making people participate dates back to the 1950s and 1960s when urban community health development initiatives sought to involve local people in the management and decision making of their own health problems. However, with the increasing technological complexity, relative sophistication and centralization of national health services, the management and decision making of health problems became the exclusive responsibility of professional health staff, who increasingly took control of health care delivery systems (Smithies & Adam, 1990).

Recognizing the need to change this trend of top-down approach, the Alma-Ata conference came up with the notion of ‘community participation’ so that effective health services were to be extended to the majority of people, particularly in developing countries. The Declaration makes clear that people have the right and duty to participate individually and collectively in the planning and implementation of their health care. A

critical element in the Declaration emphasizes that the participation of people should not be just in the support and functioning of health services, but more importantly in the definition of health priorities and allocation of health resources at the local level (WHO, 1986).

Strengthening community participation as one of its five action areas, the Ottawa Charter for Health Promotion states that health promotion should use of concrete and effective community participation in setting priorities, making decisions, planning strategies and implementing them to achieve better health (WHO, 1986).

The subsequent Jakarta Declaration reinforces this notion by giving priority to community participation. It emphasizes the necessity of participation, with actions being carried out by the people, not on or to people (WHO, 1997).

The World Health Organization (WHO) has integrated the principles set out in Agenda 21 (UN, 1993) and Health 21, the revised Health for All Policy. Agenda 21, which was a major output of the 1992 United Nations Conference on Environment and Development, suggests that active community participation is essential for sustainable environmental development (WHO, 1998).

WHO has been promoting community participation in health care and development since the Alma-Ata Declaration. For example, in 1985, WHO convened an inter-regional meeting on the subject of community participation in health (WHO, 1985). It was at this meeting that the discourse 'community participation' in health development was first used explicitly as the term to describe a basic principle of health care and promotion. In

1989, WHO published the first substantive study of the concept of community participation (Kahssay and Oakley, 1999). In the same year, it convened a Study Group both to examine the concept and to review the practice to date (WHO, 1991).

WHO further points out that participation of people in decisions and actions that affect their health build self-esteem and encourage a sense of responsibility. As a principle, WHO considers community participation as it is an intrinsic value in the general community development and, therefore, should be promoted by member countries as the basic approach to health development.

Ethiopia, as a member country endorsed the discourse of community participation on the basis of the WHO. For example, the Dergue regime that came to power in the mid-seventies formulated a health policy that gave emphasis to the promotion of community participation. Appreciating the decisive role of community participation, the Federal Government of Ethiopia in its part has ratified it in its National Health Policy and other program documents (detailed discussions of the policies and program documents have been given in Chapter 5) by considering the tenets of WHO on community participation in health. The key question is, as indicated earlier, did the construction and development of health messages and discourses involve community participation?

### **2.2.3. Conceptual Approaches to Community Participation**

Three conceptually different approaches to community participation have been debated in the literature, i.e. top-down approach, bottom-up approach, and partnership or cooperative approach.

The 'top-down' approach entails centralized development of objectives and action plans for community participation by policy makers and professionals who then endeavor to convince communities to actively participate in their implementation. In 'top-down' approach, main activities of health development are initiated by the government or authority. In this kind of approach everything is managed by government, and community members are passive (Rifkin, 1996).

In top-down approach the development agency has the upper hand and controls the community in its development efforts. The development agency, whether it is a government agency or a non-government organization, tries to develop the community according to its own purposes, whether the community wants it or not. People are not allowed to get involved in the process. So, they wouldn't get skills, knowledge, etc and then community will be dependent to government and other agencies. Therefore, this approach could not lead a community to empowerment and sustainable health development (Nikkhah & Redzuan, 2009).

On the contrary, 'bottom-up' approach to community participation seeks to engage and support communities in identifying and prioritizing their own health concerns (Rifkin, 1996). In this kind of approach participation is initiated and managed by the community for the community. Government and service providers play merely a supportive role as facilitators and consultants. In other words, the active role in the process of health development is played or initiated by the community itself (Nikkhah & Redzuan, 2009). The process of developing individual and community empowerment through this

'bottom-up' approach to participation is valuable for creating positive and sustainable health behavior change (Javan, 1998).

In the 'bottom-up' approach, members of a community involve in the whole process, from decision making till evaluation. The community has more power and control over the decisions. Since people can do everything to improve the quality of their health, they will become independent and empowered. This approach can bring sustainable health development because the community members can meet their needs beyond the government assistance. It is more close to communication as an end, because people get power and control and directly involve in the health development process (Nikkhah & Redzuan, 2009).

When people are able to define their own problems and have ability and capacity to solve them through participating themselves, the bottom-up approach of community participation could be developed (Nikkhah & Redzuan, 2009). According to Finger (1994), the bottom-up approach emphasizes community participation, grass root movements and local decision-making.

On the other hand, scholars came up with a middle ground, i.e. partnership or cooperative approach. In the partnership approach or cooperative, the health development attempts can be combined or initiated by both the government and the community. The partnership approach of community participation could be initiated when an attempt of government authority united with those of people to promote better health for the whole community with the active participation of the individuals of community. In this kind of approach,

community works together with government or another agency. However, they can participate in the health development activities at the medium level. In this approach, sometimes community has more power and control than the government and vice-versa. People can learn some skills, knowledge, and so on. It is much closer to bottom-up or change from below rather than the top-down approach. This approach can lead to moderate level of empowerment (Nikkhah & Redzuan, 2009).

#### **2.2.4. Community Participation in Environmental Health**

Participation in environmental health development builds self-esteem and encourages a sense of responsibility. It can help make the available health resources more responsive to the basic needs of the people. Local knowledge and resources can be used to complement those provided by the formal health services. It can increase the possibility that health programs will be appropriate and successful in meeting the health needs defined by local people as opposed to those defined by the health practitioners. Health programs will have a better chance of success when health services are consistent with local perceptions of health needs and managed with the support of local people. Moreover, participation breaks the bond of dependence that characterizes much health development work and generally creates awareness among local people of their potential development (WHO, 1985).

Refkin (1996) as cited in Kahssay and Oakley (1999) on his part argues that participation would make people better use of existing health services and would ensure the sustainability of new services by being involved in decision making about their health

development. He believes that participation would enable people to contribute resources of money, labor and materials to support the resources allocated to health care. People would change their poor behavior if they had been involved in exploring its consequences. Refkin further points out that through participation people would gain experience and information which would help them to gain control of their own lives.

Community participation can increase the possibility that health programs will be appropriate and successful in meeting the health needs defined by local people as opposed to those defined by the health practitioners. Health programs will have a better chance of success when health services are consistent with local perceptions of health needs and managed with the support of local people (WHO, 1985). Participation would make people better use of existing health services and would ensure the sustainability of new services by being involved in decision making about their health development. Through participation, people would gain experience and information, which would help them to gain control of their own health (Refkin, 1996 as cited in Kahssay and Oakley, 1999). Community participation can make an important contribution in combating exclusion and in ensuring ownership and sustainability of programs (Walter, 1998).

Community members can participate in environmental health activities in various ways in addition to getting involved in agenda setting all the way through implementation and evaluation environmental health interventions. For example, they can participate in managing and disposing wastes without polluting the environment. This involves actions like storing waste in a proper way in a bag or bin, separate recyclable or organic materials from other wastes, offering waste at the right place and time for collection, cleaning

around their houses, and taking care of all places. Apart from individual responsibility, communities can also be collectively responsible in more or less organized activities, like meetings, clean-up campaigns, and awareness – raising activities. Furthermore, community participation in environmental health may involve making materials, financial or physical contributions to activities of waste management as for example, working as a sweeper, and paying fees for waste collection (Moningka, 2000).

They can take social and procedural actions against those individuals who pass urine, throw rubbish things, and defecate in prohibited spaces. They can cooperate with those who are engaged in collecting wastes and sweeping streets. They are also expected to show their willingness to take part in the education programs that health extension professionals organize (AACCA, 2010).

A step further is actively participating in meetings and expressing opinions and ideas about the objectives of activities related to insanitary human and household waste disposal practices. Individuals may become a member of local health committee and get involved in the controlling of the insanitary human and household waste disposal activities. Being accountable to other members of the community about environmental health is also another sign of participation (Subash, 2001). Are these community behaviors being realized in environmental health and sanitation? If, not why?

### **2.2.5. Community Empowerment**

Empowerment in its general sense refers to the ability of people to gain understanding and control over personal, social, and economy in order to improve their life situation

(Zimmerman and Rappaport, 1988). It is related to community participation since by participating people expand their power from within to create needed behavioral changes (Labonte, 2005). An empowered community is one in which individuals apply their skills and resources in collective efforts to meet their health needs. Through such participation, individuals within an empowered community provide enhanced support for each other and control over the quality of health in their community. An empowered community has the ability to influence decisions and changes in the larger social community (Schulz, et al, 1994).

Community empowerment is the individuals' ability to make decisions and have control over their health. It is similar to other constructs such as self-efficacy and self-esteem in its emphasis on the development of a positive self-concept or personal competence (Rosenberg, 1995). It is the ability of community members to gain control of their own health situation through access to: 1) information, knowledge, and skills; and 2) decision making. In other words, empowerment is the process of change by which individuals or groups with little or no power gain the power and ability to make choices that affect their health (Rappaport, 1987). Reinforcing this concept, Rifkin & Pridmore (2001) describe 'empowerment' as the process and outcome of those without power gaining information, skills, and confidence and, thus, control over decisions about their own health.

The concept of community empowerment gained attention in the Ottawa Charter (WHO, 1986) in health promotion. The Ottawa Charter identified community empowerment as being a central theme of health promotion discourse. Soon afterwards, community empowerment became a topical issue in the health promotion literature. The Charter

makes clear that community participation is unattainable without empowering individuals so that they would be able to own and control their own endeavors and destinies. Subsequent international conferences that addressed health promotion have also reinforced this concept. For example, the Jakarta Declaration (WHO, 1997) underlines that priority should be given to increase the empowering of individuals so that they actively participate in health programs.

In recent years, the concept of community empowerment in health programs has received greater attention. Nations have understood that community empowerment is unavoidable features of health communication interventions which play an important role in the processes of influencing individuals and transforming power relations so that they show active participation in health developments (Laverack & Wallerstein, 2001). The question remains, do the health communication activities in environmental health work towards empowering communities? If not, why?

#### **2.2.6. Health Communication as an Essential Component to Promote Community Participation**

Communication enables to pass information among or between participants to achieve a set of predefined behavioral goals. It can lead to improved understanding, shared knowledge, and identification of possible effective actions (Smith and Hornik, 1999). According to New South Wales Department of Health, Australia (2006), health communication is a key way of informing the public about health concerns and maintaining important health issues on the public agenda. For Freinmuth et al (2000), health communication is a means to disease prevention through behavior modification.

Exchange (2006); Smith and Hornik,(1999) see health communication as a process for the development of diffusion of messages to specific audiences in order to influence their knowledge, attitudes and beliefs in favor of healthy behavioral practices.

Concerning change of behavior, Clift and Freinmuth (1995) underscore that health communication, like health education, attempts to change a set of behaviors in a large-scale target audience regarding a specific problem in a predefined period of time. It is a way to increase knowledge and understanding of health related issues and to improve the health status of the intended audience (Muturi, 2005). For Muturi (2005), health communication empowers people by providing them with knowledge and understanding about specific health problems as for example, communicable diseases that emanate from poor environmental health (Muturi, 2005). Again, Exchange (2005) on his part emphasizes that health communication is a process for partnership and participation that is based on two-way dialogue, where there is an interactive interchange of information, ideas, and knowledge between senders and receivers of information on an equal footing, leading to improved understanding, shared knowledge, greater consensus, and identification of possible effective action (e.g. active participation of the receivers). It is a process that begins and ends with the audience's desire and needs. In health communication, the audience is not merely a target but an active participant in defining and implementing key strategies and activities (Schiavo (2007).

Health communication “encompasses the study and use of communication strategies to inform and influence individual and community knowledge, attitude and practices (KAP) with regard to health and health care” (p.2) (Thomas 2006). Through this process of

communication, information is shared, new knowledge is created and mutual understanding is generated. This then becomes the foundation for active community participation in making decisions about their own health. Health communication helps to develop and diffuse messages to specific audiences in order to influence their knowledge, attitudes and beliefs that will enable them make informed decisions about their own health (ODPHP, 2000). According to the American Public Health Association (2000) effective health communication is the art and technique of informing, influencing, and motivating individuals and large public audiences about their participation in taking important actions about issues regarding their health. It aims at informing, influencing, and motivating audiences about health issues (Ray, E.B. and Donohew, L. (eds.) 2005). So as to achieve this aim, it has to involve setting communication objectives, analyzing and segmenting target audiences, selecting channels of communication, implementing the communication strategy, evaluating the effectiveness of the activities, and providing feedback for improvement (Thomas 2006).

Health communication links the domain of communication and health and is increasingly recognized as a necessary element of efforts to improve personal and public health. It can contribute to all aspects of disease prevention and health promotion. It is relevant in a number of contexts, for example, exposing individuals to use health information, constructing public health messages and disseminating health messages through public education campaigns that seek to change attitude and motivate individuals to adopt recommended behaviors (Jackson and Duffy, 2000).

Communication is conceptualized as the central social process in the provision of health care delivery and the promotion of public health. The centrality of the process of communication is based upon the pervasive roles communication performs in creating, gathering, and sharing health information. Health information is the most important resource in health promotion because it is essential in guiding strategic health behaviors (Kress, 1988).

In brief, the end product of communication is behavioral change of the interactants about their health. To what extent the communication activities have impacted the health behavior of communities is the question to be asked along the other questions mentioned earlier?

### **2.2.7. Environmental Health Communication**

Environmental health addresses all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviors. It encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing disease and creating health-supportive environment (WHO, 2009). It involves protection, prevention, education and advocacy around acute, chronic and sometimes fatal diseases that result from environment. It refers to environmental factors such as contaminants in water, air, and food that affect our health. These contaminants may result from natural sources or human activities and include chemical, biological, physical and radiological agents. Human exposures to such

hazardous agents in the air, water, and food and to physical hazards in the environment are major contributors to poor environmental health (WHO, 2009).

Environmental health comprises those aspects of human health, including quality of life, that are determined by physical, chemical, biological, social, and psychosocial factors in the environment. It also refers to the theory and practice of assessing, correcting, controlling, and preventing those factors in the environment that can potentially affect the health of present and future generations (WHO,1998).

Considering the global impact of environmental health, health communication has become a key issue to influence health behavior so that individuals can reduce risk. In order to keep the environment clean and make it suitable to live in, therefore, at least the basic knowledge and understanding of the relationship between environment and health is crucial. To this effect, environmental health communication plays a pivotal role. Environmental health communication enables people to become more aware of the health risks they face from polluting their environment and in the meantime understand the importance of their participation to take preventive measures that they should take to lower the risks (Mark and William, 2007). It is a necessary element of all efforts to promote environmental health. It can increase people's knowledge and awareness of environmental issues, problems or even solutions to problems. It can influence perceptions, beliefs, and attitudes that may change negative behaviors.

Environmental health communication is communication about environmental affairs. As with other forms of communication, environmental health communication is both an

activity/phenomenon and a field of study that studies the activity/phenomenon. As an activity/phenomenon, environmental health communication is all of the diverse forms of interpersonal, group, public, organizational, and mass communication that make up the social discussion/debate about environmental issues and problems, and our relationship to non-human nature. Loosely speaking, environmental health communication refers to discussion/debate about environmental issues and problems as "environmental discourse." It can even refer to the broader social discussion about Nature as the discourse of Nature. Environmental communication manifests as the discourse of Nature and its subset, the environmental discourse (Mark and William, 2007).

As a field of study, environmental health communication is a diverse synthesis of communication and environmental theory that examines the role, techniques, and influence of communication in environmental affairs. It is a pragmatic and constitutive vehicle for our understanding of the environment as well as our relationships to the natural world. It is a medium that we use in constructing environmental problems and negotiating society's different responses to them. It has an instrumental function of educating, alerting, persuading, mobilizing people, and solving problems by themselves (Cox, 2006). To what extent has our environmental health activities brought the community to be an active players in keeping and maintaining their environment clean and their life style healthy? If not, why?

### **2.2.8. Designing Environmental Health Messages**

Environmental health messages that are designed appropriately can empower people. They enable audiences to interpret health concerns into action. They can make people to take steps to improve their health. Such messages, therefore, should be clear enough. They should assist the target audiences to make informed decisions. They should presuppose a clear definition of the specific attitudinal behavioral changes a particular community member is expected to make.

Truly persuasive environmental health messages may be difficult to design, regardless of the change we are trying to elicit in audiences. When seeking a behavioral shift, the challenge is even greater. Nevertheless, the environmental health messages should get and maintain the attention of the audience. If the messages cannot capture and maintain the attention of the audience throughout the communication process, they do not have a chance of achieving the set objectives. The more audience members can be engaged to actually think about the messages (including imagined or actual rehearsal of the recommended behavior), the more likely they are to experience appropriate change in knowledge, attitudes, and practice (Malbach & Flora, 1993).

Environmental health messages should be clear to the audience. They should be designed in such a way that they are easy for target audiences to point out the actions the messages require to be taken, the incentives or reasons for taking those actions etc. Elements that hinder the clarity of messages include: language (vocabulary) and reading skill, amount of content, background, and repetition. Statistics should be used with caution in

messages. Most people overestimate the risk of things like car and airplane accidents, but underestimate things like diarrhea and cholera. People also underestimate the cumulative probability that an event will occur even if they correctly understand the odds that the event will occur on any one occasion. Thus, expressing cumulative probabilities can be effective means of enhancing the perceived relevance of a risk. Qualitative expressions of risk (e.g. 'many') could be used with caution, as they may be understood in different ways by different people. Messages that attempt to convey risk information should, when possible, use both quantitative and qualitative expressions to increase audience comprehension (Holtgrave et al, 1995).

The actions the audiences are asked to take have to be reasonably easy. Sometimes a behavior is not acceptable to the audiences because it may take much effort, money, time, and sacrifice. This can be overcome by presenting easier behaviors that have fewer barriers and are more easy and appealing. Environmental health messages have to use incentives. Creating persuasive environmental health messages involves more than simply asking the audience to do what we want. We must explain to them why they should be interested in changing their behavior. Incentives for changing behavior can be physical, economic, psychological, moral-legal, or social, and they can either be 'for' or 'against' a behavior i.e. 'why or why not' adopt recommended action For example, in the social dimension, 'for' incentives might include acceptance, coolness, physical attractiveness, being considered normal, being liked, acting for the greater good, increased power, respect, and friendship. 'Against' incentives might include rejection, embarrassment, appearing unappealing, being socially deviant, and losing trust of others.

Incentives will be most effective if the audience thinks they are extremely negative or extremely positive and very likely to happen to them. If we cannot find an incentive that the audience thinks is extremely positive or negative and very likely, we need to use one that is not as severe/positive, but very likely (Atkin, 2000).

Also, environmental sanitation messages must be realistic. This means they should not make extreme claims or use extreme examples. They should provide accurate information. The message has to use an appeal that is appropriate for the audience. Rational appeals work with audiences that are already interested in the issue (Atkin, 2001) and emotional appeals work better with audiences that are not already in the issue. For example, if we frighten the audience, we must be sure to give them a relatively easy way to alleviate the threat. If we make our audience anxious, without a way to reduce the anxieties, they will block out the messages or do the behavior we don't want them to do (Baker, et al, 1992)

The environmental health messages need not be offensive to people who see it. This includes avoiding victim blaming. In a message, identity is displayed throughout. A campaign identity includes a logo, a slogan, and possibly other images. Identity amplifies the impact of a campaign in a number of ways. First, it helps people to remember the key campaign messages because they can connect discrete messages with each other and the bigger picture of the campaign. Second, it stimulates more conversation and comment, an outcome that is particularly important for behavior change campaigns. The unifying features themselves could come to represent the messages and the image of the campaign,

leading people to recall immediately the key campaign messages every time the symbol is presented (McGuire, 2001).

Environmental health messages should be prepared taking into consideration the audience's age, sex, level of education, income, belief, attitude, behavior, desire and value system (MOH, 2004d). Also, careful consideration of the situation, opportunities, and communication needs of the target audiences, among others, are key elements of successful designing of environmental health messages (Schiavo, 2007). The question that follows is that to what extent has the construction of environmental health messages made the environmental health discourses palatable to communities? If not, why?

## CHAPTER III

### RESEARCH METHODOLOGY

#### 3.0. Introduction

This chapter focuses on the discussion of the methodology employed in the study. The first section discusses and explains discourse analysis, which is used as the research methodology in this study and as a basis for explaining behavioral actions and their underpinning assumptions. Section two presents the discussion of Critical Discourse Analysis (CDA) as a research approach in communication and the reasons why I chose CDA. It is demonstrated by reviewing some studies that utilized CDA. They have been discussed briefly to show how researchers used CDA to reveal communication gaps. The third section presents the research design: the study site; type of data; data collection methods; selection of participants; report on the pilot study; data collection procedures; data processing and analysis; and ethical considerations.

#### 3.1. Discourse Analysis: a method of explaining community behavioral practices and their underpinning assumptions

Different researchers have perceived the term discourse differently. For example, Hall (1992) defines discourse as a production of knowledge through language. For Hanks (1996), *discourse* is language in action. Blommaert, (2005) sees *discourse* as something that comprises all forms of meaningful semiotic human activities seen in connection with social, cultural, and historical patterns and developments of use. McGregor (2003) on his part refers to *discourse* as using words to express one self. For him, discourses are

ubiquitous ways of knowing, valuing, and experiencing the world. He explains that discourses can be used for an assertion of power and knowledge, and they can be used for resistance and critique. Fairclough on his part sees *discourse* as something not necessarily restricted to language but also language as a form of social practices (Fairclough, 2001).

Similarly, discourse analysis is open to various interpretations. An example would be using discourse analysis solely for the spoken word. Another interpretation of discourse analysis is the use of discourse for talk, text, and visual images and non-verbal movements that communicate ideas (Wood and Kroger, 2000). Common to varied perceptions of discourse analysis is that it is a method for investigating language in use and language in social contexts. In discourse analysis, language is not simply taken as a tool for description and a medium of communication but also as a social practice, as a way of doing things through language. In brief, discourse analysis assumes that behavioral practices of people are constituted in and through the language they use (Wetherell, et al, 2001). Its major aim is to analyze what people do with language in a given communicative event (Potter, 1997).

### **3.2. Critical Discourse Analysis (CDA) as a Research Method in Communication**

Critical discourse analysis (CDA) is a method that aims at uncovering the assumptions that are hidden in a discourse be it written texts or talk. It is concerned with what is not said, i.e. looking for the veiled meaning in the process of communication (Fairclough, 1993; 2001). The ‘critical’ component of CDA approach implies the investigation of the causes of hidden assumptions in a given communicative event.

In the works of CDA, discourse is conceptualized as something that combines both the linguistic structure and social practices, i.e. how meanings are constructed through the use of language (Koteyko, 2006). It is understood as not only discursive practices of people, but also how their power relations and ideologies shape it. This direction of discourse analysis brings out hidden meanings and implicit assumptions that would otherwise escape critical attention (Fairclough, 1992).

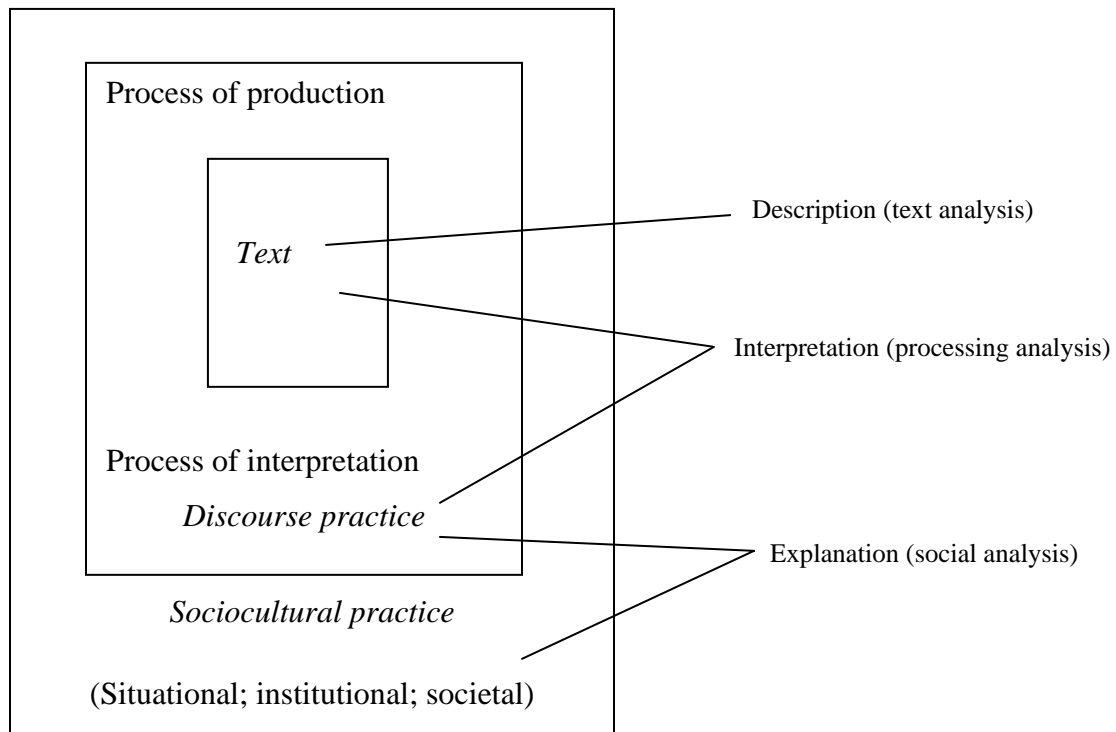
Through the use of CDA as a research method, it is possible to describe, interpret, and explain how people position themselves in communication (Fairclough, 1995, 2001). For example, Saichaie (2011) utilized CDA as a method to examine the language use of 12 colleges and universities in communicating information about their admissions and marketing prices on websites in the United States. He reported that colleges and universities utilize common promotional discourse to market. By drawing upon CDA as a research path, Symthe (2006) examined the language use of over 300 literacy advice texts published in Britain and North America since the 19<sup>th</sup> century. He concluded that the communicative strategies used in the texts act not as truths but as discourses that act in the world in ways that both define and distribute power. By employing CDA as a research method, MacCulloch (2011) also uncovered that the discourses communicated through the texts he selected for the study contain the potential to oppress and disempower health professionals.

Similarly, I have chosen CDA as a method of analysis to reflect on the existing health communication activities from making the discourse on environmental health to that of the operationalization of health messages. It is used as an innovative method of

explaining the strengths and weaknesses of health discourses and as a logical tool to explain why all the efforts made in health communication by the government and its development partners are not bringing about the desirable behavioral changes in communities as expected. CDA is utilized to seek answers to the following research questions:

1. How are health communication discourses enacted at the community level?
2. What are the roles of health programmers, community health professionals and the community in the creation of knowledge and skills that are necessary to ensure and sustain environmental health?
3. How are environmental health messages constructed at community level?; and
4. What are the discourse strategies used in environmental health communication during community participation?

The research is guided by Fairclough's Three-Dimensional Model of discourse analysis which is an analytical framework for empirical research on communication: text, discursive practices, and social practices. Fairclough's model to discourse analysis is widely used and is considered to be "the most developed model for research in communication" (Phillips and Jergensen, 2006: 60). Thus, as the current research is concerned with the critical analysis of environmental health communication discourses, I found that the Model is suitable (See Figure 3.1 below).



**Figure 3.1: Fairclough’s three-dimensional model for critical discourse analysis (1995).**

Every instance of language use in a given communicative event consists of these three dimensions of analysis (Fairclough, 1995; 2001). Text analysis focuses on the linguistic features of the messages. It concentrates on formal features such as wordings, grammar, and metaphor. This is because words, grammar, and metaphor give insight into the ways in which texts treat communicative events and social relations and thereby constitute particular versions of reality (Jorgensen & Phillips, 2002). Analysis of discursive practicess deals with a process related to the use of language to produce and consume messages. It focuses on how health programmers and community health professionals draw on already existing environmental health discourses to promote community participation and also on how the target community apply them.

Analysis of social practices focuses on the wider social practices to which the communicative event belongs (Fairclough, 1992; 1995). The analysis of a communicative event, thus, includes: (i) analysis of the discourses, which are articulated in the production, and the consumption of the text (ii) analysis of linguistic structure and (iii) considerations about the discursive practices. The main aim of CDA is to explore the interplay between language use and social practices. The focus in this research is on the role of discursive practices in the maintenance of sustainable environmental health and social behavior change. Investigation, therefore, proceeds by the analysis of specific instances of language use or analysis of the communicative events in relation to the order of discourses. Every communicative event functions as a form of social practice in reproducing or challenging the order of discourse. That means, “communicative events shape and are shaped by the wider social practice through their relationship to the order of discourse” (Jorgensen & Phillips, 2002: 89).

In brief, the general purpose of the Model is to provide an analytical framework for discourse analysis. It is based on the principle that messages can never be understood or analyzed in isolation. “They can only be understood in relation to social context” (Ibid: 103).

### **3.3. Research Design**

The study has selected a qualitative discourse analytic paradigm to explore to what extent environmental health discourses have been operational to inculcate the notion of community participation. It also uses quantitative method to collect supplementary data.

### **3.3.1 Study site: Addis Ababa**

Addis Ababa, the capital city of Ethiopia was founded in 1887. It is one of the oldest and largest cities in Africa. Geographically, Addis Ababa is located between 8055' and 90 0 5'N Latitude and 380 40' and 38050' E Longitude. The city is located at the center of the country with an area of 540 km<sup>2</sup> of which 18.174 m<sup>2</sup> is rural (at present the coverage is more as the City is expanding), and its altitude ranges from 2000m - 2800 m (AACAA, 1998). It has an elevation of c.2400 meters over sea level. The fact that Addis Ababa has a high elevation makes it to have a comfortable climate. The City's average rainfall is 1200 mm per year, and it has major rainfall between July and September.

Addis Ababa has a topography that slopes down from the Entoto Mountain in the north to the southern border of the City, cut by a number of steep-sided valleys with rivers and streams (Girma, 2004). This chartered city has an estimated density of 4630 inhabitants per square kilometer. All the Ethiopian ethnic groups are represented in Addis Ababa, and this ethnic blend gives the City a diversity of culture making it even more attractive (ENDA Ethiopia, 1999). It might be due to unbalanced urbanization that the only prime city in the country is Addis Ababa (Selamawit, 2007). The country's biggest educational institutions, social and cultural organizations, commercial and business centers, factories and industries, and better infrastructure are found in Addis Ababa (Shewaye, 1999).

Addis Ababa is one of the fastest growing cities in Africa. Hosting more than 30 per cent of the urban population of Ethiopia, it is the dominant political, economic, cultural and historical city of the country. The 2007 Population Census shows that Addis Ababa has a

total population of 2,738,248, consisting 1,304,518 men and 1,433,730 women (PCC, 2008). However, other sources such as Yirgalem (2005), Fitsum (2007) and UN-HABITAT (2008) report that the City's population has nearly doubled every decade. In 1984 it was 1, 412, 575, in 1994 it was 2,112, 737, and it is currently estimated to be over 4 million. In 2024 it is estimated that the population of Addis Ababa will continue to rise reaching 12 million (UNHABITAT, 2008). The household size varies from 7.6 to 6.5 persons per household in lower, middle, and higher income families respectively (Benti, 2007).

Its geographic location, combined with its political and socio-economic status has made Addis Ababa a melting pot of hundreds of thousands of people coming from all corners of the country in search of employment opportunities and services. This has put tremendous pressures on the City in terms of poor environmental sanitation (AAEPA, 2006).

Currently, Addis Ababa is divided into ten sub-cities: Addis Ketema, Gulele, Bole, Kirkos, Nifas Silk Lafto, Akaki Kaliti, Yeka, Kolfe Keraniyo, Arada, and Lideta.



Figure 3.2: Sub-cities of Addis Ababa (Source: Addis Ababa City Administration, 2011)

### **Why Addis Ababa?**

Four main reasons why I decided to work in Addis Ababa as a study area are:

- (i) Addis Ababa is the only prime city of Ethiopia serving not only as the capital of the country but also as the capital of Africa.

- (ii) The environmental health status of the city is one of the worst as compared with other urban areas in the country (UN-HABITAT, 2008). The amount of waste generation and improper disposal which has resulted in poor environmental sanitation is increasing from time to time in Addis Ababa (Enda Ethiopia, 1999).
- (iii) Though the Federal Government of Ethiopia together with the Addis Ababa City Government and other development partners have been taking encouraging measures to mobilize the residents and make Addis Ababa clean and green, studies done on the city's environmental sanitation indicate that people have shown insignificant participation (Zerayakob, 2002; Taddesse, 2004; and Meheret, 2006).
- (iv) It is the most populous city. According to the report of CSA (2008) based on the population census conducted in 2007, Addis Ababa had a population of 2,738,248 among which 1,304,518 were male and 1,433,730 were women. However, currently the city is estimated to accommodate over 5 million people although the result of the 2012 Population Census has not been made official yet.

For these reasons, Addis Ababa has been chosen as a research area of the present study.

### **The Field-Work Sites**

So as to conduct the field work and collect the required data, the study is further delimited to Arada Sub-city which is situated in the inner core of Addis Ababa. Arada Sub-city includes ten woredas, of which five woredas: Woreda 3, 5, 6, 7 and 9 were chosen as particular data gathering sites. According to the information obtained from the

Sub-city's Information Bureau, Arada Sub-city possesses a total area of 9.91 square kilometers. According to the 2007 population census, Arada Sub-city had a population of 212,009 among whom 99,392 were men while the remaining 112,617 were female (CSA, 2008). Although the result of the 2012 population census was not been reported until the time this research was conducted, Arada sub-city is estimated to have more population. This part of the city was founded together with the establishment of Addis Ababa during the reign of emperor Menilik II. Therefore, it is one of the earliest settlements in the city; it has been the nucleus of the city since the establishment of the city.



Figure 3.3: Woredas in Arada Sub-city (Source: Addis Ababa City Administration, 2011)

Arada Sub-city was chosen as a specific study site because

- It is one of the oldest settlements;
- It has been considered as a city center for a long period of time;
- It is heavily crowded and sanitation is a challenge; and
- It is also accessible for the researcher.

In order to get a cross sectional view of the inhabitants, quantitative survey method was used focusing on community's environmental sanitation knowledge, attitudes and behavioral practices. Purposely selected participants were used for collecting qualitative data that was analyzed using critical discourse analysis focusing on the nodal discourse of representation.

### **3.3.2. Data Collection Methods**

The core data for the study are both primary and secondary qualitative data. In addition, quantitative data were collected from the wider community.

#### **3.3.2.1. Primary Qualitative Data**

The primary qualitative data were collected from 31 participants including: seven key informants, six individual interviewees and eighteen focus group discussants in four groups. Data were also obtained from observations of environmental health communication practices.

The key informants included a woreda waste disposal management officer, a woreda health bureau officer, two city health extension workers (clinical nurses), a woreda health extension program supervisor, a woreda communication officer, and a woreda environmental health officer . They were selected based on their positions, duties and responsibilities in implementing environmental health programs. The individual interviewees and the focus group participants were recruited from the community with the help of the city health extension professionals and health officials at each Woreda.

They were selected purposefully for their being expressive, resourceful and able to provide rich and varied data on the issue under study.

The interviews with key informants and individuals selected from the community were tape recorded. Similarly, to ensure full records of what was said while the discussion was going on, every one's comments were noted and focus group interviews were video-recorded with the assistance of a co-researcher. This made the data collection easy for me as it was possible to concentrate only on the discussions. The focus group interview was used to generate discourses that were used by the discussants themselves. It is important as it promotes self-disclosure among discussants and enables to know what people really know, think and practice. All the interviews were conducted in Amharic language as all the participants were able to listen to and speak Amharic.

I also used observation as a method of gathering primary qualitative data from environmental health education sessions. The purpose of observing the health education sessions was to see how environmental sanitation messages were communicated to participant learners. I observed four different sessions at four different sites.

The environmental health education sessions were video recorded with the permission of the health extension professionals who were teaching the participant learners. The recordings were done with the help of trained assistant researcher. Each session lasted for half an hour on average. The purpose of video recording was to capture the whole lesson presentations so that the necessary data would not be missed. While my assistant was video recording the sessions, I was writing descriptions of the interactions in my own

words making brief notes. Right after the session was over; I made detailed notes in the narrative form to provide a deeper insight into the interactions. I tried to check and compare what I observed with what was video recorded (see Appendix I).

### **3.3.2.2. Secondary Qualitative Data**

Relevant documents in environmental health were identified and reviewed. This includes key policy documents (e.g. Health Policy (1993), Environmental Policy (1997), and implementation strategies (e.g. Health Education and Communication Manual (2004), National Health Communication Strategy (2004), National Sanitation Strategy of Ethiopia (2004) and City Solid and Liquid Waste Management and Disposal Package (2008) which is a health education material. The key nodal discourses analyzed are:

- Increased awareness and understanding of environmental issues;
- Adoption of improved sanitation;
- Realization of community empowerment and responsibility;
- Promotion of community participation; and
- Environmental health communication and promotion.

Out of the twenty-five public messages collected, nine were picked using a lottery method and analyzed.

### **3.3.2.3. Quantitative Data**

Quantitative cross-sectional data were collected from the wider community so as to supplement the core qualitative data. The purpose of collecting quantitative data was to know the wider community's knowledge, attitude, and behavioral practices.

The cross-sectional data were collected through the use of a structured survey interview consisting twenty one close-ended items, organized under four major sections. The first section deals with the personal information (e.g. age, sex, educational level, occupation, and residence) of the respondents. Section two aims at exploring the respondents' knowledge about their participation in environmental health and sanitation while section three focuses on their attitude. The fourth section deals with the behavioral practices of the respondents.

The structured survey interview was initially prepared in English language but later on translated into Amharic and administered in Amharic language. Its translation was done again with the help of a lecturer who specialized in teaching Amharic and who has rich experience of translation.

In conducting the survey, five woredas (i.e. Woredas 3, 5, 6, 7, and 9) were selected randomly using a lottery system from the ten woredas in the Arada sub-city. Once the woredas were selected, the next task was to identify the sites in each woreda. Each woreda had varying number of sites ranging from 7-9. Also, each site was named after the health extension professional assigned to work there. According to the information obtained from the health extension officials, the sites were named after the health

extension professionals deliberately to identify one site from the other and make the supervision easy. However, as it was unethical to mention names of the health extension professionals, the sites were coded as Site1, Site 2, Site 3, etc. as per an agreement made with the heads of the health offices in the selected woredas.

All in all, ten sites, two from each woreda were randomly picked by employing the same procedures used in the selection of the five woredas, i.e. a lottery system. Then, to identify the households in each site, systemic sampling was used. 50 households were picked from each site by taking every tenth household from the master list. The number of households in each site was 500. Totally, 500 households were identified to make up the sampling frame. Such a wider sampling frame was taken thinking that people in some of the selected households might not be available or might not be willing to respond to the interview.

Within the wider sampling frame of the households, it was possible for the interviewers to reach twenty-five respondents from each site. That constituted a total number of 250 respondents for the intended structured survey interview.

### **3.3.3. Developing, Piloting and Conducting the Survey Interview**

During the proposal writing, tentative structured survey interview questionnaire was prepared based on the related literature, and with the consultation of my research supervisor. Taking the feedback and comments from the proposal defense into account, it was further improved and piloted with forty eight randomly selected respondents in 25

households in woreda 3, Gulele sub-city, Addis Ababa. The pilot study was conducted from February to April 2011.

The improved survey interview questions were then developed considering the constructive comments I received from my examiners and immediate supervisor during the pilot study report. The structured survey interview questions were again pre-tested with 20 randomly taken respondents, four from each selected Woreda where the pilot study was conducted.

The final version of the survey interview questions for collecting data for the main study was checked for reliability and validity. Statistical Package for Social Sciences (SPSS) version 20.0 for windows was used. A Cronbach Alpha coefficient of 0.872 was computed. Some items (for example, items 7 and 19) were rephrased and the 0.985 of scale of Cronbach Alpha coefficient was obtained. This shows very good internal consistency of the items (Pallant, 2007).

To ensure the content validity of the items, the structured survey interview questions were reviewed for content and clarity by my research supervisor, two professors who have rich experiences in research work at Addis Ababa University and a PhD researcher in Applied Linguistics and Communication. The items were found to cover the key areas of environmental health.

At last, the structured survey interview was carried out with 250 respondents with the assistance of a supervisor and ten interviewers (two from each site). The supervisor and the interviewers were recruited from the selected research sites considering their

experiences in conducting similar survey interview for local as well as international NGOs. They all completed 12<sup>th</sup> grade and had relatively good communication skills. The members of the survey interview team knew the residences of the respondents as they were living in the same area. This made the data collecting task relatively easier. The supervisor had an experience of supervising such a team in a field and was available for full survey time period.

So as to make the interviewers successful in conducting the survey interview and generating the desired data, the team members were given a half-day orientation. The orientation focused on the objectives and contents of the structured survey interview, supervisor's duties, interviewers' roles and responsibilities, interview techniques, among other things. After the half-day orientation, they were made to rehearse the interview in pairs so that they could develop a general understanding of the whole interviewing process.

Before the survey interview team went to the sites they were assigned to, they were each given the list of 50 selected households. They were also instructed to go to each household and ensure their willingness to be interviewed. Ensuring the willingness of the respondents was necessary for ethical consideration and for increasing the reliability of the information. It was also necessary to check if all the residents knew Amharic language as the language used in the interview was Amharic. Finally, they were advised to be modest and establish a good rapport.

The supervisor had the responsibility to visit the interviewers frequently and monitor how they were doing their interview. He was always around to assist the interviewers in case they encountered problems. The interviewers had a short meeting with their supervisor every other day so that they could exchange information and could plan their next day's job. The supervisor in turn had to report the progress of the survey interview every three days to me. Once in a week I had a meeting with all the members of the survey interview team. In this way, the cross-sectional data were collected through seven weeks time (i.e. from 10 January to 30 February, 2012).

### **3.3.4. Data Collection Process**

The data collection process was carried out with the assistance of a qualified person, a note-taker and a video camera person.

The key informant interviews were conducted in the respective participant's office while the in-depth interviews were conducted at the participants' own residences. The focus group interviews were carried out in halls and in Idir<sup>4</sup> offices, while data from the environmental health education sessions were collected from field sites where the lessons were conducted.

Before collecting data, attempts were made to create good rapport with the participants, and all helpful arrangements were made. For example, the participants were approached and informed about the purpose of the research.

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<sup>4</sup> Idir is a civic association established by people who live in a certain area to provide financial and material support when a member of idir or a family member passes away.

### **3.3.5. Data Processing and Analysis**

The process of data analysis involved organizing and preparing the data for analysis. The purpose of processing data was “to ensure the data are ‘clean’, i.e. free from inconsistencies and incompleteness (Kumar, 1999).

#### **3.3.5.1 Analysis of Statistical Data**

The data from the survey interview were first coded for quantitative and categorical variables. Then, the data were entered into SPSS version 20.0 involving creating the data file, defining coding frames and keying in the data. The open ended quantitative data were condensed and grouped into common categories and entered to an SPSS 20.0 version for analysis. Finally, the analysis was done using descriptive statistics (i.e. frequency and percentage).

#### **3.3.5.2 Analysis of Qualitative Data**

The primary qualitative data processing and analysis involved as suggested by Creswell (2003): transcribing interviews, typing up field notes, sorting and arranging the data into themes. The process started while I was in the field collecting data. Each day after the interviews, I wrote my field notes in detail and listened to the recordings to familiarize myself with all the voices and ensure that they were all well recorded (audible).

After data generation, I started the process of transcribing the recordings. I carefully listened to the interviews and typed the responses verbatim. I did not include interruptions, pauses, repetitions, and other verbal sounds for they were beyond the scope

of my research. I only concentrated on the discourses (words), sometimes phrases, sentences, or even paragraphs.

I read each transcript carefully by replaying the tapes or videos to verify the transcripts. This process was repeated several times as each time I discovered that I had missed a few words and some statements were not clear.

The next stage involved careful reading of the transcripts and field notes several times, a process of familiarizing myself with the data. I used the data coding system and the coding was done manually. All the research participants were allocated codes. Codes were initially a combination of letters and numbers, for example, [KI-2] to mean Key Informant 2.

After re-reading data carefully, that is, field notes, documents and transcriptions, I grouped all data according to the questions and follow up questions. I then read through the data carefully several times. Coding, re-coding, replacing, shifting and transcribing data from one theme to another characterized the focus of analysis. A careful reading of the data led to re-grouping of thematic categories by using text analysis to identify theme represented. I also read through the field notes jotting down what seemed on the surface to be relevant for sorting the data. Throughout this process I ensured “that the categories should have some relationship with the research questions not simply be random words that seem to occur with some regular frequency” (Berg, 2004:285).

Another careful reading led to further refinement of thematic categories. The main criteria guiding the refinement of the categories were the research questions and the

common discourses emerging. Once the categories were refined, I sorted the data accordingly, color coding for easy differentiation. This, according to Newman (2000) helped me to see the emerging themes.

After most of the data had been categorized and described into six major themes, i.e. (knowledge of the concept of environment, knowledge of environmental sanitation, knowledge of principles of participation, participants' attitude, participants' beliefs, and participants' behavioral practices), I began the process of interpreting and explaining them by making a reference to the literature review where appropriate. This led to a mapping out of the patterns in the data in relation to their underpinning assumptions. This also necessitated further reference to the research questions to verify the relevance of data.

Data from key documents were also examined. For example, each document was re-visited again and again to see how the environmental health discourses are structured, articulated together, and their rhetorical move. The aim of describing language use as rhetorical is to identify the positions and arguments being addressed in the key documents and also to see the political commitment of the Government towards the operationalization of the discourse- community participation.

### **3.3.6. Ethical Considerations**

In the current study, some ethical considerations have been made in order to protect the rights and values of the study participants. All ethical questions were addressed and observed before and during data generation and collection 'by seeking subject's

agreement to be interviewed and quoted (Gough, 2003:3). Participants were briefed about the purpose of the study and their rights as participants in the study before data collection. This was done to ensure that there was an informed consent, free choice to take part and to place some form of responsibility with participants with regard to what answers they would be giving (Cohen & Manion, 2000).

I avoided violation of privacy by acting with the necessary sensitivity where privacy of subjects is relevant and by respecting anonymity and confidentiality of the information provided on or by respondents. However, there were incidents where interview participants felt that their names or what they were saying needed protection and confidentiality. I paid particular attention when probing 'sensitive and personal information from subjects' (De Vos et al. 1998: 25) to avoid exposing respondents to the possibility of emotional harm.

Ethical consideration was also made during the administration of survey interview. I oriented interviewers about the purpose of the survey interview that they had to explain to respondents. I told them that respondent could even remain anonymous if they wish. This was done to allow the respondents to freely provide information and also to give them informed consent. In the final analysis and write up of this study, the real names of the participants have been removed from the text for ethical reasons. Instead, codes were used in reporting the information so as to protect the identities of the participants. To explain further, I made clear to the participants that the information they gave would be kept confidential. I told them that their identities would not be disclosed to anyone and would be kept hidden by using codes (e.g. KI-2 to refer to Environmental Health

Supervisor) in the reporting. Moreover, all the participants involved in the study were first requested for their oral consent, and their informed consents were obtained before any attempt to collect data was made. All these allowed the participants to feel at ease and give information in confidence.

## **CHAPTER FOUR**

### **DATA AND ANALYSIS**

#### **4.0. Introduction**

In this Chapter, I have presented the detailed analysis of the data and the findings of my research. During the analysis to the findings, I identified three contexts that are relevant to the study of environmental health communication, particularly environmental sanitation discourses on community participation. First, I analyzed policy and strategy documents that currently guide the environmental health communication and promotion activities in Ethiopia. These documents are intended to demonstrate the Government's intentions, assumptions and political commitments with regard to environmental health programs. After identifying the policy discourses or political discourses as Fairclough (2003) calls them, I analyzed environmental health communication resources, health promotional messages and communication practices which are developed to facilitate the enactment and realization of the policy discourses. These resources which were produced by the Federal Ministry of Health and its development partners about environmental health have a role in establishing knowledge and skills about the causes and prevention of environmental sanitation problems. In other words, the environmental health education materials in conjunction with the actual communication and promotion practices are targeted at developing positive sanitary behaviors among the beneficiary communities. Finally, I examined some of the practicalities associated with community participation in environmental sanitation activities in relation with the policy and communication

discourses that I explored in the policy and strategy documents and in the health education resources. I explained the practicalities by examining the community's knowledge, attitudes and behavioral practices through my participants' narratives about their experiences and ability to negotiate their responsibilities in environmental sanitation.

#### **4.1. Policies and Strategies Governing Environmental Health Communication**

The Federal Democratic Government of Ethiopia and the regional states have been formulating sectoral and cross sectoral policies and strategies aimed at improving the public health - a key to the socioeconomic developments of the country. Among these policies and strategies, four national and one regional document which are particularly relevant to the purpose of this research were picked and analyzed. The structure and contents of these policy and strategy documents were analyzed to explore the key environmental health discourses and representations, and to examine how 'community participation' is constructed in them. In doing so, the section begins with a brief overview of the selected documents and is intended to provide a context for the foregoing analysis. It then continues with the constructs of environmental health.

#### 4.1.1. An Overview of the Selected Policy and Strategy Documents

**Table 4.1.** Desk Review of Selected Policy and Strategy Documents

No	Document	Producer	Year Produced	Language
1	National Health Policy	Transitional Government of Ethiopia	1993	Amharic and English
2	Environmental Policy of Ethiopia,	Federal Democratic Government of Ethiopia	1997	English
3	National Sanitation Strategy for Ethiopia	Ministry of Health, Federal Democratic Republic of Ethiopia	2005	English
4	Solid Waste Management Proclamation No, 513/2007	House of Representatives, Federal Democratic Republic of Ethiopia	2007	Amharic and English
5.	Waste Management, Collection and Disposal Regulation	Addis Ababa City Government	2009	Amharic

#### 4.1.1.1. The National Health Policy

Ethiopia had no enunciated health policy up to the fifties. Towards the end of the Imperial period a comprehensive Health Service Policy was adopted through initiatives from the World Health Organization. The *Dergue*<sup>5</sup> regime that came to power in the mid seventies also formulated a more elaborated health policy that gave emphasis to disease prevention and control, priority to rural areas in health service and promotion of self-reliance and community involvement. But in both of the previous regimes, there was no meeting ground between declaration of intent and demonstrable performance (TGoE, 1993). Particularly, “the totalitarian political system (of the *Dergue* regime) lacked the commitment to address and maintain active popular participation in translating the formulated policies into action” (Ibid .22). Therefore, the present Health Policy of Ethiopia was formulated in 1993 by the then Transitional Government of Ethiopia<sup>6</sup> (Ibid. 22) to fill in this gap. The document indicates its point of departure stating, “The Health Policy of the Transitional Government of Ethiopia is the result of a critical examination of the nature, magnitude and root causes of the prevailing health problems of the country and awareness of newly emerging health problems” (Ibid., 22). It is also noted that the Health Policy is “founded on commitment to democracy and the rights and powers of the

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<sup>5</sup> *Dergue* was the military government of Ethiopia which came to power following the Imperial regime.

<sup>6</sup> Transitional Government of Ethiopia was established by the Ethiopian Peoples’ Revolutionary Democratic Front who overthrew the Durgue regime came into power in May, 1991. After two years it evolved into the present Federal Democratic Government of Ethiopia. The existing national Health Policy of Ethiopia was formulated by the then Transitional Government and remains not revised for about 21 years.

people ... it proposes realistic goals and the means to achieve them based on the fundamental principles that health, constituting physical, mental and social well-being, for the enjoyment of life and for optimal productivity (Ibid.,:23).

The Policy further explains that the Ethiopian Government accords health a prominent place in its order of priorities and is committed to the attainment of the goals utilizing all accessible internal and external resources. It also says, “In particular, the Government fully appreciates the decisive role of popular participation and the development of self-reliance in these endeavors and is therefore, determined to create the requisite social and political conditions conducive to their realization” (p.23). Generally, in this Policy, health development is considered “not only in humanitarian terms but also as an essential component of the package of social and economic development as well as being an instrument for social justice and equity” (p.24). The key discourses are further explored in Sections 5.1.2 and 5.1.3 below.

#### **4.1.1.2. Environmental Policy of Ethiopia (EPE)**

In Ethiopia, balancing poverty and socioeconomic needs with environmental concerns has created very pressing problems. Although environmental sustainability is recognized in the Constitution and in the national economic policy and strategy as a key prerequisite for lasting success, there was no overall comprehensive formulation of cross-sectoral and sectoral issues into a policy framework on natural resources and the environment to harmonize these broad directions and guide the sustainable development, use and management of the natural resources and the environment (FDGE, 1997). Therefore,

taking the current stage of the country's political and policy development into account, through Proclamation No. 9/1995, the Ethiopian Environmental Protection Authority (EPA) came up with the Environmental Policy of Ethiopia, as well as legal and regulatory reforms to manage its environmental and natural resources.

Written in the document, “the first comprehensive statements of Environmental Policy for the Federal Democratic Republic of Ethiopia were approved by the Council of Ministers in April 1997 to counteract the short term results of economic and technical policies of the past and to meet the needs of present and future generations”(FDGE, 1997:2). The need to develop this Environmental Policy was rooted in the natural resource and environmental problems that the country has faced. However, environmental sanitation problem is worth noting for this research. For example, the Policy reports that about 31 per cent of households in Addis Ababa have no sanitation facilities, while in other urban areas the proportion is about 48 per cent. The serious deficiencies in sanitation services and the inadequacy of sewerage infrastructure and random defecation in urban areas have created dangerous health and environmental problems. Rivers and streams in the vicinity of Addis Ababa and other large urban centers have become open sewers and are one of the main sources of infections resulting in diarrhea and other diseases (FDGE, 1997:2).

The overall policy goal of the Environmental Policy of Ethiopian is,

To improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the sound management and use of natural, human-made and cultural resources and the environment as a whole so as to meet the needs of the present

generation without compromising the ability of future generations to meet their own needs (FDGE, 1997:3).

Among the nineteen key guiding principles of EPE, the following are found worth mentioning to the present research:

- Every person has the right to live in a healthy environment;
- Sustainable environmental conditions and economic production systems are impossible in the absence of peace and personal security. This shall be assured through the acquisition of power by communities to make their own decisions on matters that affect their lives and environment;
- Conditions shall be created that will support community and individual resource users to sustainably manage their own environment and resources;
- Regular and accurate assessment and monitoring of environmental conditions shall be undertaken and the information widely disseminated within the population;
- Increased awareness and understanding of environmental and resource issues shall be promoted by policy makers, by government officials and by the population, and the adoption of a "conservation culture" in environmental matters among all levels of society shall be encouraged (pp.4-6).

The overall all goal of the Environmental Policy is further elaborated in its sectoral environmental policies. However, the Human Settlement, Urban Environment and Environmental Health Policies are particularly worth noting to the purpose of this

research. Among the policy statements articulated in this section the following evidence has this link:

- To incorporate rural - urban migration, human settlement and environmental health concerns into development activities’,
- To integrate harmoniously, human-produced and natural elements in the development and management of urban areas
- To ensure that improved environmental sanitation be placed highest on the federal and regional agendas for achieving sustainable urban development;
- To promote the construction by individual families of their own houses and create conducive conditions for communities and individual families to make improvements to their immediate habitats as well as to provide human and domestic waste disposal facilities;
- To ensure that housing and sanitation technologies and regulatory standards are set at a level and cost that are within reach of the users and flexible enough to be adaptable to the very varied socio-economic, epidemiological, climatic and physical site conditions which are found in urban areas;
- To give priority to waste collection services and to its safe disposal show the seriousness of urban environmental sanitation problems (FDGE, 1997:14-15).

Nevertheless, the conceptual framework of the Environmental Policy of Ethiopia appears too general. It is not systematically formulated to meet the strategic management process. In its strategic objectives stated above, the Policy does not include strategies for rigorous implementation, monitoring, or evaluation. In addition, the implementation of its

functions is hindered by the lack of institutional frameworks. The capacity to initiate and sustain change and mobilize adequate resources linking activities effectively among sectors is hardly visible. Moreover, the mission of the Environmental Policy should have been designed to raise the awareness and empowerment of the Ethiopian people to use environmentally sound technology and the best practices in order to achieve sustainable development. To say it differently, EPE should include environmental health education, communication and promotion among its priorities. Such lacks otherwise can have negative implications to the realization of its imagined goal. i.e. cleaner and healthier environment.

#### **4.1.1.3. The National Hygiene and Sanitation Strategy for Ethiopia (NHSSE)**

The National Hygiene and Sanitation Strategy for Ethiopia (NHSSE) was developed in 2005 by the Ministry of Health, Federal Democratic Republic of Ethiopia. It was developed to complement the existing Health Policy and the National Water Sector Strategy (developed by the Ministry of Water Resources) in placing greater emphasis on ‘on-site’ hygiene and sanitation. The primary focus is on blocking faeces from entering the living environment through the safe management of faeces.... The vision of this National Strategy for Improved Hygiene and Sanitation is “100% adoption of improved (household and institutional) sanitation and hygiene by each community which will contribute to better health, a safer, cleaner environment, and the socio-economic development of the country” (MoH, 2005:5). The following are prerequisite conditions the Strategy points out for successful attainment of its vision:

- Getting consensus that the current limited and inappropriate access to sanitation and hygiene is a problem;
- Ensuring dedicated political commitment, support and action;
- Achieving accountability through ‘minimum’ performance contractual agreements at all levels;
- Allowing for minimum contact time of health extension workers (guidance and health education) with households;
- Realizing community empowerment and responsibility through using viable local solutions; and
- Implementing effective supportive supervision and monitoring processes which are linked to performance contractual agreements (p. 5).

In line with these prerequisite conditions, the NHSSE also identifies its three Strategic Pillars:

- An enabling framework to support and facilitate an accelerated scaling-up through policy consensus, legislation, political commitment, intersectoral co-operation, partnership, capacity building linked to performance contractual agreements, supportive supervision, research and monitoring.
- Sanitation and hygiene promotion through participatory learning, advocacy, communication, social marketing, incentives or sanctions to create demand and forge behavior change.

- Improved access to strengthen the supply of sanitation through appropriate technology solutions, product and project development, and support to local producers and artisans (p.5).

The underpinning reason for the formulation and implementation of the NHSSE is that “60 to 80 per cent of the disease burden in the country is related to poor environmental sanitation” (p. 5). Among the expected outcomes of the Strategy are, therefore, in terms of health, diarrhea prevention, mortality decreased, curative care reduced and nutrition improved. In terms of socio-economic, it imagines fitter work force, less time caring for the sick, and less money consumed treating sickness, and social privacy, dignity, safety and a cleaner environment.

#### **4.1.1.4. Solid Waste Management Proclamation, No. 513/2007**

The Solid Waste Management Proclamation, No.513/2007 was adopted by the House of Representatives of the Federal Democratic Republic of Ethiopia in 2007. Its objective is “to enhance at all levels capacities to prevent the possible adverse impacts while creating economically and socially beneficial assets of solid waste” (p.3525).

The Proclamation begins by referring to the key role of community participation in solid waste management activities. It states, “WHEREAS, it is essential to promote community participation in order to prevent the adverse effects and to enhance the benefits resulting from solid waste” (p. 3524). It also adds, “WHEREAS, solid waste management action plans designed by, and implemented at the lowest administrative units of urban administrations can ensure community participation” (p. 3524). It then pronounces solid

waste collection, transportation and disposal as nodal discourses. Within these nodal discourses: manufacturing and importing of glass containers, tin cans, plastic bags and used tires; management of household solid wastes from residential areas, food related solid wastes from industries and restaurants, and construction debris and demolition wastes; and construction and auditing of solid waste disposal sites are the major concerns of the Proclamation.

So as to address these environmental sanitation problems, it further specifies the roles, duties, and responsibilities of urban administrations, regional states and communities at large. For example, it is noted, “Urban Administrations shall ensure the participation of the lowest administrative levels and their respective local communities in designing and implementing their respective solid waste management plans” (p.3526). It is also stated, “The head of each household shall ensure that recyclable solid wastes are segregated from those that are destined for final disposal and are taken to the collection site designated for such wastes” (p. 3528). Moreover, the Proclamation underscores, “It is prohibited to dispose of litter on streets, waterways, parks, bus stops, train stations, sport fields, water bodies in urban areas or in other public places while litter bins are available” (p. 3528).

The Solid Waste Management Proclamation, No.513/2007 is generally intended as one implementation tool to the Environmental Policy of Ethiopia and other sectoral policies and strategies of environment and health. The demonic modality ‘*shall*’ which is deployed throughout the statements of the Proclamation emphasizes necessities. This modality with the frequently used expression ‘It is prohibited...’ also indicate obligations

– the dos and not to dos of the stakeholders in the solid waste management activities. Further, these predominantly used expressions reflect the power relationship between the authors and the representations, in this case, the Federal Democratic Government of Ethiopia and urban administrations, among urban administrations at various levels, and urban administrations and communities. They also demonstrate the usual top-down flow of messages. On the other hand, this Proclamation does not incorporate any strategic means, especially to develop positive sanitary behavioral practices among communities that would enable them to act accordingly.

#### **4.1.1.5. Addis Ababa City Government Solid Waste Management, Collection and Disposal Regulation**

The Addis Ababa City Government Solid Waste Management, Collection and Disposal Regulation was formulated in 2009. It can be taken as an extension of the Solid Waste Management Proclamation, No. 513/2007 by the Federal Government of Ethiopia. The objective of this Regulation is to address the problems in the solid waste management, collection and disposal services that have been provided by private sanitation enterprises and micro and small sanitation associations, and thereby accomplish effective job that can improve the overall sanitation of Addis Ababa city (p.1).

**ግልጽ:** በግል የዕዳት አገልግሎት ሰጪ ድርጅቶች በጥቃቅንና አነስተኛ የዕዳት ማህበራት እየተሰጠ ባለው የደረቅ ቆሻሻ አያያዝ አሰባሰብና አወጋገድ የሚታየውን ችግሮች ለማስተካከልና ውጤት ያለው ሥራ በማከናወን የከተማዋን ዕዳት ሙሉ በሙሉ ማሻሻል ነው።

**[Alama:** begil yetsidat agelgilot sechi dirizitoch betiqaqinina anestegna yetsidat mahiberat eyetesete balew yedereq qoshasha ayayaz asebasebina awegaged yemitayewen chigeroch lemastekakelina wutet yalew sira bemakenawen yeketemawan tsidant mulu bemulu mashashal naw]

As stated in the document, the establishment of this Regulation is necessary because:

Solid wastes are disposed illegally and there is no proper waste management and disposal system because of which the City’s sanitation cannot be improved as intended;

**ህገ ወጥ በሆነ መልኩ ቆሻሻ ያለአግባብ መጣሉና ተገቢ የቆሻሻ አያያዝና አወጋገድ ሥርዓት ባለመኖሩ የከተማዋ ዕዳት ተጠበቀውን ውጤት ያላመጣ በመሆኑ፤ -**

[hige wot behone melku qoshasha yalagibab metaluna tegebi yeqoshasha ayayazina awegaged sirat balemeneru yeketemawa tsedat yetetebeqewin wutet yalameta bemehonu]

There is no timely collection of solid waste and piles of waste are scattered everywhere;

**የተጠራቀመ ደረቅ ቆሻሻ በወቅቱ አለመነሳቱና በየአካባቢው ተዘረክርኮ በመገኘቱ፤**

[yeteteraqem dereq qoshasha beweqitu alemenasatuna beyakababiw tezerekeriko bemegegetu]

The time for the provision of solid waste collection and disposal services is not suitable;

**የደረቅ ቆሻሻ አሰባሰብና አወጋገድ የአገልግሎት አሰጣጥ ጊዜው ምቹ ባለመሆኑ፤**

[yedereq qoshasha asebasebina awegaged yagelgilot asetat gizew michu balemehonu]

The participation of all bodies in the City’s sanitation activities is low;

**በከተማው የዕዳት አገልግሎት ሥራዎች የሁሉም አካላት ተሳትፎ በማነሱ፤**

[yeketemaw yetsidat agelgilot sirawoch yehulum akalat tesatifo bemanesu]

There is no a system to decrease waste from its source and to segregate wastes, and this resulted in high cost;

**ቆሻሻን ከምንጩ የመቀነስና በዓይነት ለይቶ የማስቀመጥ ሥርዓት ባለመኖሩና ከፍተኛ የአገልግሎት ወጪ በማስከተሉ-**

[qoshashan keminichu yemekenesina bayinet leyito yemasqemet siriati balemeneruna kefitegna yagelgilot wechi bemasketelu]

The Regulation pronounces the following solid waste management discourses:

- ✓ Proper handling of solid waste; (ደረቅ ቅሻሻን በሰግባቡ ስለመደዘ)- [dereq qoshashan bagibabu silemeyaz]
- ✓ Disposal of solid waste at prohibited places; (ደረቅ ቅሻሻን ባልተፈቀዱ ቦታዎች መጣል ስለመከሰከሱ)- [dereq qoshashan baltefeqedu botawoch metal silemekelkelu]
- ✓ Reducing and recycling solid waste; (ደረቅ ቅሻሻን መቀነስና መሰሪ መጠቀም)- [dereq qoshashan meqenesina meliso meteqem]
- ✓ Utilization and handling of solid waste bins and containers; (ስለደረቅ ቅሻሻ ማጠፊቀሚያ ስቃዎችና ገንዳዎች ስጠቃቀምና ስድድድ)- [sile dereq qoshasha materaqemiya iqawochna gendawoch ateqaqemina ayayaz]
- ✓ Transportation and conditions of vehicles of solid waste; (ስለደረቅ ቅሻሻዎች ማጓጓዣና የማጓጓዣ ተሽከርካሪዎች ሁኔታ)- [sile dereq qoshashwoch magugaza teshikerkariwoch huneta]
- ✓ Handling and disposal of wastes that emanate from animals; (ከሕንፃሳት ስለሚመነጨት ቅሻሻዎች ስድድድና ስደገገድ)- [ke ensesat silemimenechut qoshashawoch ayayazena awegaged]
- ✓ Management and disposal of decayed wastes; (ስለብስባሽ ቅሻሻዎች ስድድድና ስደገገድ)- [sile bisibash qoshashawoch ayayazena awegaged]
- ✓ Management and disposal of constructions and demolition waste; (ስለ ግንባታ ወይም ፍርስራሽ ቅሻሻ ስድድድና ስደገገድ)- [sile genebata weyim firseshash qoshash awegaged]
- ✓ Management and disposal of special wastes; (ስለልዩ ቅሻሻ ስድድድና ስደገገድ)- [sileliyou koshasha awegaged]

- ✓ Management and disposal of hazardous wastes; (ከስኬደገኛ ቅሻሻ ስያያዝና አሠጋገድ)- [sele adegegna qoshasha awegaged]
- ✓ Burning solid waste (ስለቅሻሻ ማቃጠያ)- [sele qoshasha makateya]

As in the Federal Government’s Solid Waste Management Proclamation, No. 513/2007, this Regulation also emphasizes power relationships among the authors, implementers and the public. It mainly focuses on the duties, responsibilities and obligations of city administrative units and dwellers regarding solid waste collection and disposal. This has been evidenced through the modalities used in the following example statements.

The residents of the city are responsible to clean and safeguard their environment by arranging and participating in voluntary sanitation day and other ways (p.3).

**የከተማው ነዋሪዎች ቤጊዜው በመላ አዲስ አበባ የበጎ ፈቃደኝነት የፅዳት ቀን በማድረግ በሌሎችም የተለያዩ ስልቶች በመጠቀም አካባቢን የማፅዳትና የመንከባከብ ኃላፊነት አለባቸው**

[yeketemaw newariwoch beyegizew bemela adis ababa yebegofeqadegenet yetsedaet qen bemaderegena belelochem yeteleyayou seletoch bemeteqem akababin yematsedata yemenkebakeb halafinet alebachew]

Any person or organization is prohibited from improper handling and scattering waste from his/her home or organization (p. 4).

**ማንኛውም ሰው ወይም ተቋም ከመኖሪያ ቤቱ ወይም ከድርጅቱ የሚወጣውን ቅሻሻ ባግባቡ አለመያዝ ወይም አዝረክርኮ መያዝ የተከለከለ ነው**

[manegnawem sew weyem tequwam kemenoreya betu weyem kederejitu yemiwotawen qoshasha bagebabu alemeyaz weyem azerekereko meyz yetekelekele new]

Every person must pay for the sanitation service s/he is provided (p. 4).

**ማንኛውም ሰው ለሚያገኘው የፅዳት አገልግሎት ክፍያ የመፈፀም ግዴታ አለበት።**

[manegnawem sew lemiyagegnew yetsedat agelgilot kifeya yemefetsem  
gedeta alebet]

Another worth noting point regarding this regional Solid Waste Management Regulation is that it also lacks the strategic means, i.e. education, communication and promotion which can help raise the peoples' awareness about solid waste management and enable them act accordingly.

#### **4.1.2. Discourses of Intents**

The above overview of the selected documents reveals that the Ethiopian Government has consistently been promoting the discourse 'cleaner and healthier environment' as an imagined goal of its health-related programs, and as a lasting strategic means to sustainable socioeconomic developments. This section examines how the documents under review use particular terms to articulate this policy discourse the vision and mission, or objective and strategy statements that reflect the Government's political intentions, assumptions and commitments. Examining the key terms would help to construct an understanding of environmental health and to postulate how these terms contribute to the textual (re)production or suppression of the ideological discourse of 'the right to live in a healthy environment'.

To begin with the National Health Policy, in its Preamble, the expressions: 'critical examination of the nature, magnitude and root causes of the prevailing health problems', 'commitment to democracy and the rights and powers of the people', suggest the Governments' intention to address the health problems of the people of Ethiopia. Moreover, the phrases: accords appropriate emphasis', 'proposes realistic goals', accords

health a prominent place’ and ‘determined to create the requisite social and political conditions’ reinforces the Government’s commitment. The reference to the global definition of health, that is, “the fundamental principles that health, constituting physical, mental and social well-being, for the enjoyment of life and for optimal productivity” also implies that the Ethiopian Government is keen to international instruments. It reflects the global discourses: ‘everyone has the right to health’ and ‘everyone has the right to live in a healthy environment’. This may emanate from the power relationship between the Ethiopian Government and the international organizations such as the UN and WHO.

The Governments’ political intention and commitment is further demonstrated in the remaining sections of the National Health Policy. For example, in its General Policy section, it includes, “*Development of the preventive and promotive components of health care*” (p. 24). Again, “*Emphasis shall be given to: the control of communicable diseases ... and poor living conditions, and the development of environmental health*” (p.26) is among the Priorities of the Policy.

In its General Strategies section, the National Health Policy also states, that intersectoral collaboration shall be emphasized particularly in:

- accelerating the provision of safe and adequate water for urban and rural population; and
- developing safe disposal of human, household, agricultural and industrial waste, and encouragement of recycling”

- Promotive and preventive activities shall address prevention of environmental pollution with hazardous chemical wastes (pp. 28-29).

In these statements, the phrases : ‘preventive components of health care’, ‘control of communicable diseases’, ‘provision of safe and adequate water’, ‘safe disposal of waste’ and ‘prevention of environmental pollution’ reflect that the Government has given due attention to the environmental health problems in general, and environmental sanitation problems in particular. By the same token, the terms, ‘accelerating’ and ‘developing’ and the modalities ‘shall be emphasized’ and ‘shall address’ imply that the Government has considered health development as essential and obligatory.

The overall goal of the Environmental Policy of Ethiopia is Congruent with the objective and strategic statements of the National Health Policy. It says “to improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the sound management and use of natural, human-made and cultural resources and the environment as a whole so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs” ( FDGE, 1997:3). Among the listed specific objectives of the EPE, “*Improve the environment of human settlements to satisfy the physical, social, economic, cultural and other needs of their inhabitants on a sustainable basis*” and “*Prevent the pollution of land, air and water in the most cost-effective way*” are relevant to this research. These objective statements depict the Governments’ policy assumption through the dialectical relationship (i.e. as strategic goals and strategic means) among the key discourses: *improved health and quality of life, sustainable social and economic development, sound*

*management of social, human, cultural and environmental resources, and meeting the needs of the generations.* Moreover, the key discourses pronounced in the guiding principles of the EPE: *'the right to live in a healthy environment', 'communities' decision-making power on matters affecting their lives and environment', 'communities' management of their own environment and resources', 'information dissemination within the population' and 'increased awareness and understanding of environmental and resource issues'* are consistent with the key discourses of the Health Policy.

In the Human Settlement, Urban Environment and Environmental Health policy statements, the phrases:

- incorporate environmental health concerns into development activities;
- integrate harmoniously, human-produced and natural elements in the development and management of urban areas;
- ensure that improved environmental sanitation be placed highest on agendas for achieving sustainable urban development;
- create conducive conditions for communities and individual families... to provide human and domestic waste disposal facilities;
- ensure that housing and sanitation technologies and regulatory standards are set ... adaptable to the very varied socio-economic, epidemiological, climatic and physical site conditions; and
- *give priority to waste collection services and to its safe disposal* suggest the seriousness of urban environmental sanitation problems and also imply the emphasis given to address the problems.

The analysis of the policy discourses in the remaining documents also shows similar key discourses being promoted with regard to environmental health as a precondition for improved public health and for lasting socioeconomic developments of the nation. For instance, as mentioned above, the vision of the National Hygiene and Sanitation Strategy is “100% adoption of improved (household and institutional) sanitation and hygiene by each community which will contribute to better health, a safer, cleaner environment, and the socio-economic development of the country” (MoH, 2005:5). “The case for 100% sanitized households and consequently villages have its roots in terms of ensuring maximum public and private health benefit. It is also a strong political statement designed to elevate the status of sanitation to achieve parity with other development imperatives. It represents an important paradigm shift from a long-standing curative focus to one of prevention” (pp. 10-11).

The Federal Solid Waste Management Proclamation No. 513/2007 aims “to enhance at all levels capacities to prevent the possible adverse impacts while creating economically and socially beneficial assets of solid waste” (p.3525). Similarly, the objective of the Addis Ababa City Government Solid Waste Management Regulation is “to address the problems in the solid waste management, collection and disposal services that have been provided by private sanitation enterprises and micro and small sanitation associations, and thereby accomplish effective job that can improve the overall sanitation of Addis Ababa city” (2009:1).

In short, while the National Health Policy provides the foundation, the other four documents are developed as implementation tools. They all promote shared goals,

objectives and roles with regard to improved environmental health in general and environmental sanitation in particular. The analysis indicates that the issue of 'cleaner and healthier environment' is recognized as a precursor to eradicate poverty. Although there is some variance in emphasis, the policy discourses converge around overall environmental health goals which emphasize sanitation and hygiene promotion as key interventions to prevent disease, protect the environment and enhance socio-economic development.

### **4.1.3. Community Participation for Sustainable Environmental Health**

A further analysis of the objective and strategy statements of the selected documents revealed that community participation is consistently considered not only as a strategic goal, but also as a strategic means of creating partnership and collective responsibility which is decisive for environmental health program implementation. For instance, the National Health Policy states, "In particular the government fully appreciates the decisive role of popular participation and the development of self-reliance in these endeavors and is therefore determined to create the requisite social and political conditions conducive to their realization" (p. 23). It also lists, "Promotion of attitudes and practices conducive to the strengthening of national self-reliance in health development by mobilizing and maximally utilizing internal and external resources" (p.25) as its policy priority. In addition, "Democratization within the system shall be implemented by establishing health councils with strong community representation at all levels and health committees at grass-root levels to participate in identifying major health problems, budgeting, planning,

implementation, monitoring and evaluating health activities” (p.28) is articulated among the General Strategies of the Policy.

In the other selected and analyzed documents too, as they build on the National Health Policy, community participation is taken as a critical element. The Environmental Policy of Ethiopia, for example, throughout its most of policy statements, specifies community participation. “Ensuring the empowerment and participation of the people and their organizations at all levels in environmental management activities” (p. 4) is one of its specific policy objectives.

In its Sectoral Environmental Policies section, “To bring about a sound partnership between the government and communities in the development of an integrated sanitation delivery system, and to foster the supplementary role of NGOs” (P.14) is included among Human Settlement, Urban Environment and Environmental Health Policies. Again, in the Cross-sectoral Environmental Policies section, “To ensure that all phases of environmental and resource development and management, from project conception to planning and implementation to monitoring and evaluation are undertaken based on the decisions of the resource users and managers” (pp. 19-20), and “To develop effective methods of popular participation in the planning and implementation of environmental and resource use and management projects and programs” (p.20) are of the Community Participation and the Environment policies. Furthermore, in the Policy Implementation section: one of the Institutional Framework, Responsibilities and Mandates Policies is “To give political and popular support to the sustainable use of natural, human-made and cultural resources and environmental management for effectiveness at the federal,

regional, zonal, wereda and community levels” (p.26). In the Legislative Framework section, it is also stated that the Law should: “provide a framework for encouraging participation by the people of Ethiopia in the development of federal and regional policies, laws and plans for the sustainable use and management of the natural, human-made and cultural resources and the environment” (p.27)

Similarly, the National Hygiene and Sanitation Strategy acknowledges the need for community participation with its community based program approaches. First, the new health extension program launched by the FMOH is “perceived to be a primary vehicle for driving sanitation improvement at the community/kebele level” (p.23). The objective of the FMOH/RHB/UNICEF Supported WatSan Program is also “community based approaches and improved, decentralized service delivery” (p.23). The World Bank supported national rural water supply, sanitation and hygiene (RWSSH) program again “positions the community as the initiator, contributor, owner and manager which is enabled by the government which assists in contract management with local service providers (p.23). Moreover, in its Institutional Framework section, this Strategy puts community responsibility in the first rank. It says, “Sanitation is a basic right for all Ethiopians but it is also a responsibility. Individuals will have collective responsibility for creating and sustaining 100% sanitized households” (p.25). In the same way, the Policy objectives aim to,

- Increase awareness and participation of communities to assume responsibility for their own health and well-being

- Promote the sanitation service based on participation-driven and responsive principles without compromising social equity (p.35).

Community Based Leadership is the other thing through which the National Hygiene and Sanitation Strategy emphasizes the issue of community participation. It notes, “The focus will be on creating a sense of responsibility for sanitation at the household and the community level so that 100% sanitized households create 100% sanitized villages. The community should empower themselves to lead the management of their environmental health risks more effectively”. (p. 41)

The other selected and analyzed document was the Solid Waste Management Proclamation no. 513/2007. The analysis shows that this document begins with two strong statements focusing on community participation. It states, “WHEREAS, it is essential to promote community participation in order to prevent the adverse effects and to enhance the benefits resulting from solid waste” and “WHEREAS, solid waste management action plans designed by, and implemented at, the lowest administrative units of urban administration can ensure community participation” (p. 3524). It also remarks that “*urban administrations shall ensure the participation of the lowest administrative levels and their respective local communities in designing and implementing their respective solid waste management plans*” (p.3526).

Finally, the Solid Waste Management Regulation formulated by the Addis Ababa City Government, though not explicitly, informs the issue of community participation with the

inclusive term, ‘any person/organization’ in the various discourses of responsibility and obligation in solid waste management. For instance, it declares that,

The residents of the City have the responsibility to clean and take care of the environment across the City through voluntary sanitation day and other mechanisms”

**የከተማው ኗሪዎች በየጊዜው በመላ አዲስ አበባ የበጎ ፈቃደኝነት ቀን በማድረግና በሌሎችም የተለያዩ ስልቶች በመጠቀም አካባቢን የማፅዳትና የመንከባከብ ኃላፊነት አለባቸው**

[yeketemaw newariwoch byegizew bemela adis ababa yebego feqadegnoch yetsidat qen bemaderegena belelochem yeteleyayou seletoch bemetekem akababin yematsedatna yemenkebakeb halafinet alebachew].

In brief, the analysis of the documents indicates that communities are at the center of the environmental health policies as well as implementation strategies and regulations. Community participation is recognized as a way forward starting from the planning throughout the implementing, monitoring and evaluating the integrity of the environmental health improving interventions with the communities’ real life experiences. The documents use different terms: *popular participation, community representation, empowerment and participation of the people, sound partnership between government and communities, popular support, community-based approaches, participation-driven and responsive principles, household and community level involvement and community-led*. But all signal that the Government’s approach to community participation is based on the idea that environmental health is a plural concept with diverse stakeholders and interventions designed by their use in particular contexts.

#### **4.1.4. Environmental Health Communication for Behavioral Change**

Health education and communication is the other policy discourse that is given high prominence across the analyzed documents. The National Health policy puts it in the first rank among its priorities. It notes, “*Information, Education and Communication shall be given appropriate prominence to enhance health awareness and to propagate the important concepts and practices of self-responsibility in health*” (p.26). The environmental health education component of the primary health care is particularly indicated in the General Strategies: “Health education shall be strengthened generally and for specific target populations through the mass media, community leaders, professional associations, schools and other social organizations for:

- inculcating attitudes of responsibility for self-care in health and assurance of safe environment;
- encouraging the awareness and development of health promotive life-styles and attention to personal hygiene and healthy environment (pp.29-30)

In the same way, the Environmental Policy of Ethiopia emphasizes the need for increased health and environmental awareness and behavioral change in its sectoral and cross-sectoral policy statements. The quotes below evidence this,

- Raise public awareness and promote understanding of the essential linkages between environment and development [Specific policy objective, P.4)

- To recognize the importance of and help bring about behavioural change through education and public awareness of environmental sanitation problems in trying to achieve demand-driven community led programs of improved urban environments as well as the sustainable use and maintenance of sanitation facilities [Human Settlement, Urban Environment and Environmental Health policies, P.14)
- To ensure information flow among all levels of organization including the Federal and Regional States and the people at the grassroots level by developing a two way mechanism for data collection and dissemination [Community participation and the environment policies, p.20).

The Environmental Policy also includes a separate section, Environmental Education and Awareness and further lists nine policy statements focusing on the promotion of environmental education. Of those policy statements, the following are worth noting.

- To promote the teaching of environmental education on a multi-disciplinary basis and to integrate it into the ongoing curricula of schools and colleges and not treat it as a separate or additional subject, though this should also be done at the tertiary level and
- To target the public, particularly those involved in public and private sector activities that have significant environmental impacts, for environmental education and awareness programs (p.25).

Of the three strategic pillars of the National Hygiene and Sanitation Strategy for Ethiopia, ‘sanitation and hygiene promotion’ is one. The document further outlines its policy objectives with regard to environmental education,

- Increase awareness and participation of communities to assume responsibility for their own health and well-being
- Promote the sanitation service based on participation-driven and responsive principles without compromising social equity
- Promote sanitation and hygiene education at federal, regional and community level by developing promotional and educational materials
- Promote the development of attitudes and practices conducive to the strengthening of community self-reliance in EH issues by mobilizing and optimally utilizing internal and external resources (pp.35-36).

These policy imperatives imply a shift from traditional teaching approaches to the process of facilitating people’s participation. To do so, the strategy requires the health extension workers to develop new attitudes, skills and tools which enable and support the empowerment of the people and push the process one step further. Another underlying message is that facilitating participation is about attitude and willingness to “hand- over the stick and listen”. The ‘participation-driven and responsive principles’ are also to move all stakeholders away from a “top-down” methodology to the process of bottom-up (participatory) where the community can own and manage the process.

The Federal Solid Waste Management Proclamation, No.513/2007 and the Addis Ababa City Government Solid Waste Management Regulation do not explicitly promote the need to raise the public's awareness with regard to solid waste management. But as stated earlier their objective statements indicate that these proclamation and regulation are developed as implementation tools for the other health and environment policies and strategies.

In general, environmental health communication and promotion appears a nodal discourse across the analyzed policy and program documents. It is given due emphasis and promoted as a way forward to the realization of the imagined goal, improved environmental health for sustainable socio-economic development. It is given appropriate prominence to enhance the public's health and environmental awareness and to propagate the important concepts and practices of self-responsibility in health so that citizens would be able to take part in all endeavors in the struggle to maintain sustainable environmental health. This suggests that environmental health communication/promotion is taken as a key strategy to inculcate attitudes of responsibility and participation in environmental health development efforts.

## **4.2. Environmental Health Communication Resources**

Environmental health communication resources play a decisive role in enhancing the awareness and knowledge of the target community about keeping their own health and their environment. They are tools through which health messages are communicated. The way environmental health communication resources are executed may negatively or

positively impact the inculcation of attitudes of responsibility and community participation in environmental health. In this section, efforts have been made to analyze some key environmental health communication resources that are related to the promotion of community participation. These are the City Solid and Liquid Waste Management and Disposal Package, the Health Education and Communication Manual for Health Extension Package, Health Service Extension Implementation Guideline, the National Health Communication Strategy: 2006-2015, City Health Extension Program Implementation Manual, Public Messages, and the actual environmental health education practices.

#### **4.2.1. Environmental Health Communication Materials**

In this section, four communication materials related to environmental health are analyzed. They are:

1). The National Communication Strategy; Health Service Extension Implementation Guideline;

2). በከተማ ጤና ኤክስ-ቴንሽን ፕሮግራም የደረቅና ፍሳሽ ቆሻሻ አያያዝና አወጋገድ ፓኬጅ- [beketema tena eksitenshin program yedereqna fisash qoshasha ayayazina awegaged pakej ]

3).City Health Extension Program Solid and Liquid Waste Disposal and Management Package; and

4). የከተማ ጤና ኤክስቴንሽን ፕሮግራም የአተገባበር ማኑዋል - [yeketema tena eksitenshin program yategebaber manual] (City Health Extension Program Implementation Manual).

The analysis of these materials mainly focuses on the key discourses and implementation strategies deployed to communicate environmental sanitation issues and thereby promote community participation.

The National Health Communication Strategy was prepared by the Health Education Center of the Federal Ministry of Health in 2004. The material was written in English language. As indicated in the Foreword section of the material, though efforts have been undertaken in the area of health education and promotion, they were not found effective in achieving positive behavior change among the intended audiences. Therefore, cognizant of the shortcomings, the Ministry of Health came up with the National Health Communication Strategy to address the problems through a health education strategy to achieve the ‘Health for All’ goals approach (p.viii). The strategy emphasized high commitment to the facilitation of the implementation of health extension package program at community level.

A brief assessment of health communication in Ethiopia was made. As indicated in the strategic material, ‘an assessment of the overall situation of IEC/BCC reveals that it is characterized by poor planning and ineffective methods’ (p.8). Therefore, to realize the national health communication objectives it was of a paramount importance to have a strategy to guide the process.

The application of the principles below has been identified as necessary to implement communication strategies and behavior change interventions:

- Use of IEC/BCC approaches (for details see 2.4.2.).
- Audience segmentation: Audience segmentation has to do with the need to focus health communication messages for specific target groups. ‘Health communication should be designed in a way that is understood by the target population and contributes to the intended changes in behavior at an individual, group or community level’ (p.14).
- Multi-strategy and multiple methods: an effective communication intervention program uses different strategies that increase participation, collaboration and entertaining education. There are no readymade strategies and methods but the use of traditional means of communication such as telling stories, cultural ceremonies, social gatherings, dramas, traditional songs etc can facilitate health communication programs. Moreover, expanded application of social marketing concepts and practices, interpersonal communication and mobilization strategies need to be effectively used (p.15).
- Technology and Research/evidence base: health communication uses technologies depending on the task requirement and audience analysis.
- Analysis of health problem (environmental, behavioral, channel analysis)
- Participation and empowerment: Empowerment is enabling individuals or groups to make informed decisions and informed choice of behavior.

Individuals or community participation is not only necessary for program accomplishments but are also means of creating partnership and collective responsibility. Empowering people starts from providing correct and up-to-dated information and the appropriate skills needed for behavior change (p.16).

- Collaborative nature: Different sectors, program implementers, community, and individuals need to collaborate.
- Sustainability: health communication programs require continuous support, monitoring, evaluation, redesign, and implementation. Sustainability could be ensured through empowering individuals, communities, and through advocacy and securing resources to continue the program (p.17).
- Community based participatory approach of communication is taken as the best strategy.

Among the eight tasks and roles mentioned at community level, the following are relevant to the current research:

- Health communication designs shall involve communities and health extension workers
- Communities will be made to discuss on health messages, methods and teaching and materials;
- Community learners will be made to participate in the process of designing and pretesting messages; and

- Community based organizations (CBO) such as ‘Idir’ and ‘Mahibers’ shall be used as forum of communication (p.32).

Cognizant of the fact that Health Service Extension Program implementation throughout the country should be consistent; the Federal Ministry of Health developed an implementation guideline in 2005. The guideline is thought to be the best tool for the regional health bureaus, woreda health offices and health extension workers to implement community based household focused health care services (p.2).

Two of the specific objectives of the guideline relevant to the research are: to deepen and strengthen the decentralization process to shift decision making closer to the grass-root population to improve responsiveness and delivery of health service extension programs in the communities; to strengthen community empowerment and community participation (p.4).

Among other things, the guideline has made the duties and responsibilities of woreda health office and kebele council clear. Woreda health offices are given the authority to coordinate, design, develop, produce and distribute health service extension IEC materials in addition to other duties and responsibilities. Similarly, kebele councils are given the power to strengthen community involvement and participation in decision making and also manage health information system (p.18).

The City Health Extension Program Solid and Liquid Waste Disposal and Management Package (በከተማ ጤና ኤክስቴንሽን ፕሮግራም የደረቅና ፍሳሽ ቆሻሻ አያያዝና አወጋገድ ፓኬጅ- [beketema tena eksitenshin program yedereqna fisash qoshasha ayayazina

awegaged pakej] was prepared by the Federal Ministry of Health in 2008. The package is written in Amharic language.

The specific objectives of the package are:

- **ስለ ደረቅና ፍሳሽ ቆሻሻ አያያዝና አወጋገድ በመኖሪያ አካባቢ እንዲሁም በት/ቤትና በወጣቶች ማዕከል ህብረተሰቡ ግንዛቤ ዕውቀትና ክህሎት እንዲኖረው ማድረግ**

[sile dereqna fisash qoshasha ayayazina awegaged bemenoriya akababi indihum betimeherit betna bewetatoch maekel hebretebebu ginzabe iweqetna kihilot indinorew madereg]

To enable the community have knowledge and awareness about solid and liquid waste management and disposal around residential areas, schools and youth centers

- **ባግባቡ ያልተወገደ ደረቅና ፍሳሽ ቆሻሻ በጤና ላይ የሚያስከትለውን ችግር ለህብረተሰቡ ማስገንዘብ**

[bagibabu yaltewegede dereqina fisash qoshasha betena lay yemiyasketilewn chigger lehibretebebu masgenzeb]

To aware the community how inappropriate disposal of solid and liquid waste can cause health problem

- **በደረቅና ፍሳሽ ቆሻሻ ውሃ ፣ አየር እና አፈር እንዳይበከል ማድረግ**

[bedereqna fisash qoshasha wuha ayer ena afer endaybekel magireg]

To protect the contamination of water, air, and soil by solid and liquid waste

- **እያንዳንዱ ቤተሰብ እና ህብረተሰብ ደረቅና ፍላሽ ቆሻሻን በተገቢው መንገድ የማስወገድ ልምድ እንዲያዳብር ማድረግ**

[iyandandu beteseb ena hibreteseb dereqina fisash qoshashan betegebiw menged yemasweged limid indiyadaber madrege)

To enable each family and community to develop the habit of disposing solid and liquid waste in a manner that is acceptable

- **የመኖሪያና በመኖሪያ አካባቢ የሚገኙ አካባቢዎችን በንፅህናና በመያዝ ለዝንቦች፣ ለትንኞች፣ ለዐይጦችና ለልዩ ልዩ ጎጂ ነፍሳት ምግብ መጠለያና መራቢያ እንዳይሆኑ ማድረግ**

[yemenoriyana bemenoriya akababi yemigegnu akababiwochin benitsihina bemeyaz lezinboch, letinignoch, le ayitochna le liyou liyou nefsat migib meteleyana merabiya endayhonu madrege]

Making the residences and residential areas clean so that they won't be shelters and breeding places for flies, rodents, and rats.

- **ምግብ በደረቅና ፍላሽ ቆሻሻ እንዳይበክል ማድረግ**

[migib bedereqna fisash qoshasha endaybekel madrege]

To protect food from being contaminated by solid and liquid waste

Regarding the Solid and Liquid Waste Management and Disposal, seven areas of activities have been mentioned. Three of them are relevant to this research.

**ህብረተሰቡን ያሳተፈ የሥራ ዕቅድ ማውጣት**

[hibretesebun yasatefe yesira iqid mawitat]

Developing work plan with the participation of the community

- ✓ Preparing action plan involving the community.
- ✓ Drawing up weekly, monthly, and yearly program schedule as appropriate.

**ህብረተሰቡን በማስተማር፣ በማስተባበር፣ መቀስቀስና ተሳትፎውን በማሳደግ የባህርይ ለውጥ እንዲያመጣ ማድረግ**

[hibretesebun bemastemar, bemastebaber, bemeqesqesina tesatifowen bemasadeg yebahiry lewt indiyameta madireg]

Enable the community to bring change of behavior by teaching, coordinating, and awakening it to enhance its participation

- ✓ Give education at a family level, in schools, in youth health centers about why the disposal of solid and liquid waste is necessary and how it can be disposed
- ✓ Give education in meetings, idir, religious institutions, public holy days, schools, markets etc about the need to dispose solid and liquid waste

The main topics for teaching activity are:

- sources of solid and liquid waste
- impacts of solid and liquid waste
- burning of waste
- drainages
- disposal of hazardous wastes

**አጭር የመልዕክት ማስተላለፊያ ዘዴዎች [achir yemelikit mastelalefiya zedewoch]**

Short methods of communicating messages

- Person to person
- Meetings

- In groups
- Drama, music, poem
- Exhibition
- Through different activities on holidays
- Using tape recorder
- Poster, leaflets, magazines, brochures
- Newspaper, radio and TV

The messages communicated are based on the content of the package.

The City Health Extension Manual was also developed by the Federal Ministry of Health in 2008. It was written in Amharic language. As indicated in the introduction, the manual was prepared to alleviate the problem of urban area environmental health problems based on community-based approaches (p.1). The manual was prepared to enable city health extension workers to implement health extension program at kebele level so that the community will benefit from the program (p.13).

The manual has made clear that city health extension workers have been given a responsibility to sensitize, organize, coordinate, teach and provide the support to the community so as to enable the community to produce its own health (p.10). To this end, the health extension workers have been given the authority to carry on their duties properly (p.11). It has been stated in the manual that,

**እንደቀድሞው አሠራር የህብረተሰብን እምቅ ዕውቀት ችላ በማለት እኔ  
አውቅልሃለሁ በሚል ዘወትር ራስ ብቻ ተናጋሪ፤ ዕቅድ አውጪ ገምጋሚና**

**ወላኝ የሆነ ሥራ ሂደትን መከተል ከፕሮግራሙ የሚጠበቀው ውጤት እንዳይመጣ መሰናክል መሆን ማወቅ ይገባል'**

[ende qedemow aserar yehibretesebun imiq iwiqet chila bemalet ine aweqilihalehu bemil zeweter ras bicha tenagari, iquid awchi, gemgamina wesagn yehone sira hidetin meketel keprogramu yemitebeqew witet indaymeta mesenakil mehon maweq yigebal] p.12.

Like the previous system of work, neglecting the potential knowledge of the community and following limited ways of thinking like 'I know for you' and always taking the chance to speak, to plan, to evaluate is like becoming an obstacle to the achievement of the intended results of the program.

Therefore, the health extension worker should always ask herself as to how the community will participate in the implementation process of the program (p.12).

The manual presents the detailed activities that a health extension worker has to carry out. For example, the health extension worker should know the community and her area very well; she should prepare problem-solving plan of action (pp. 18-25).

#### **4.2.2. Environmental Sanitation Messages**

Environmental sanitation messages, in this particular research, include printed messages such as slogans, leaflets, brochures, and pamphlets communicated to the general public through about environmental sanitation issues.

Twenty-five public messages were collected from various expert sources for this research. The main purpose of collecting the public message discourses was to see to what extent the construction of environmental sanitation messages made the environmental health discourses palatable to the communities.

All the public message discourses were written in Amharic language. However, for the purpose of this particular research, they were translated into English language. This is because the language used in the research is English.

**Table 4.2. Selected Public Environmental Sanitation Messages**

Code	Message	Phonemic transcription	Translation	Developer	Source
PM 8	ሁሉም አካባቢውን ቢያፀዳ ጤናችን በአስተማማኝ ይጠበቃል	<i>Hulum akababiwen biyatseda tenachin bastemamgn yitebekal</i>	<i>If all clean their environment, our health becomes sustainable</i>	Office of Woreda 9 Administration	Pamphlet
PM 12	ሁሉም ግቢውንና አካባቢውን ካፀዳ የቆሻሻ ክምችት አይኖርም	<i>Hulum gibiwenena akababiwen katseda yeqoshasha kimechet aynozem</i>	<i>If all clean their compounds and their environment, there won't be any piles of waste</i>	Woreda 9 Sanitation Management Bureau	Pamphlet
PM 13	በየቀኑ ጥቂት ጥቂት ቆሻሻ ብናነሳ አካባቢአችን ነፁህ ይሆናል	<i>Beyeqenu tiqit tiqit qoshasa benanesa akababiachin netsuh yihonal</i>	<i>If we show at least little efforts to pick small wastes every day, our environment will become clean</i>	Woreda 6 Sanitation Management Bureau	Pamphlet

PM 14	<b>በጋራ ጥረታችንን አካባቢያችንን ነፁህና ውብ እናድርጋት</b>	<i>Clean, beautify And cooperate</i>	<i>Let's make our environment clean and beautiful through our cooperative efforts</i>	Office of Woreda 3 Administration	Brochure
PM 16	<b>በየስፍራው ቆሻሻ የሚጥሉትን ሰዎች እንቆጣጠራቸው</b>	<i>Control</i>	<i>Let's control those who dispose waste everywhere</i>	Office of Woreda 5 Administration	Leaflet
PM 17	<b>በመንገድ ላይም ሆነ በህዝብ መዝናኛ አካባቢ ሲንቀሳቀሱ ደረቅ ቆሻሻዎችን በቆሻሻ ቅርጫት ውስጥ ብቻ ይጣሉ</b>	<i>Throw wastes into waste bins</i>	<i>While you move on roads and public places, throw your dry waste into only the dust bins</i>	Woreda 9 Sanitation Management Bureau	Leaflet
PM 22	<b>አካባቢን መጠበቅና መንከባከብ የሁሉም</b>	<i>Protect and safeguard</i>	<i>It is the responsibility of all to protect and safeguard</i>	Woreda 3 Sanitation Management Bureau	Brochure

	<i>ሀላፊነት ነው</i>	<i>environment</i>	<i>the environment</i>		
PM 21	<i>ዐይናችን ጥሩ እንዲያይ አፍንጫችን ጥሩ እንዲያሸት አፅምሮአችን እንዲዝናና ፅዳት ነው ዋስትና!</i>	<i>Keep sanitized</i>	<i>Sanitation is a guarantee if we want our eyes to see good things, our noses to smell good things, and for the refreshment of our minds</i>	Woreda 7 Sanitation Management Bureau	Brochure
PM 25	<i>ለአካባቢ ፅዳት መጠበቅ የሀብረተሰቡ ተሳትፎ ወሳኝ ነው</i>	<i>Participation</i>	<i>For environmental sanitation, the participation of the people is decisive</i>	Woreda 5 Sanitation Management Bureau	Brochure

As can be seen the public health messages aim at promoting the participation of the community in keeping the environment cleaner and safer. For example, the discourses: ሁሉም [hulum] – ‘all’; ብናነሳ [binanesa]- ‘if we collect’; ብጋራ ጥረታችን ውብ እናድርጋት [begara tiretachin wub enaderegat]- ‘make it clean through our joint effort’; እንቆጣጠራቸው [iniqotaterachew] – ‘let’s control them’; የሁሉም ኃላፊነት ነው [yehulum halafinet new]- ‘it is the responsibility of all’, call for the collaboration of all residents to keep Addis Ababa clean. The example messages are all inclusive. They all imply the first person pronoun ‘we’. The implication is that keeping the environment clean and safe is not only the responsibility of the government but it is also the responsibility of all people.

Similarly, the discourses ‘በቆሻሻ ቅርጫት ውስጥ ብቻ ይጣሉ’ [bekoshasha qirichat wisit bicha yitaly]- throw waste only to waste basket; ‘የህብረተሰቡ ተሳትፎ ወሳኝ ነው’ [yehibrete sebu tesatifo wesagn new]- the participation of the community is decisive, externalize the responsibility of keeping the environment clean and safe to the community only as if such things are not the concern of the implementers. This understanding of externalizing responsibility and participation was also reflected in what one health extension worker explained ‘It is the community itself that pollutes environment. It is also the community that has to clean. If environment is clean, it is the community that is benefited. Most of the time it is the community who creates problem of sanitation’ (KI-7: 13).

The discourse ‘በቆሻሻ ቅርጫት ውስጥ ብቻ ይጣሉ’ [bekoshasha qirichat wisit bicha yitaly]- throw waste only to waste basket, is not reasonably easy for the community as the number of waste baskets that are made available in the city may not be adequate. Similarly, the discourse: *ዐይናችን ጥሩ እንዲያይ አፍንጫችን ጥሩ እንዲያሸት አዕምሮአችን እንዲዘናና ዕዳት ነው ዋስትና!* [Aynachen teru endiyay afenchachen teru endiyashet aemeroachin endizenana tsedat new wastena] Sanitation is a guarantee if we want our eyes to see good things, our noses to smell good things, and for the refreshment of our minds, does not provide accurate information. When designing public messages care should be taken to present realistic and easier behaviors (Atkin, 2001). The discourse ‘በየስፍራው ቆሻሻ የሚጥሉትን ሰዎች እንቆጣጠራቸው’ [Beyesefersw qoshasha yemiteluten sewoch enqotaterachew] Let’s control those who dispose waste everywhere, does not demand an easy action to take for the community as almost all individual and focus group interview participants reported. For example, here is what one of the participants revealed ‘I don’t speak when I see someone defecating or urinating even on prohibited places. Why should I care when others don’t care? He can insult me. I don’t want to be insulted’ (FGI1-3:10).

The discourse ‘He can insult me. I don’t want to be insulted’ implies running away from responsibility and at the same time absence of the implementation of sanitation proclamation and regulations on the ground (see 4.1.1.4 and 4.1.1.5 above).

In summary, it emerged that the construction of environmental health public messages did not make the environmental health discourses palatable to promote community

participation. This is because as the data has revealed they are waste management and disposal oriented.

### 4.2.3. Actual Environmental Health Education Practices

In addition to key document analysis and interviewing, I also used observation as a method of gathering primary data from sites. I managed to observe four health education<sup>7</sup> sessions. I did the observation to verify and validate data from the key documents and interviews. I also wanted to obtain additional information about the communication strategies used to teach health messages.

The observations were restricted to the lessons the health extension workers were teaching. The topics of the lessons observed were:

- ደረቅ ቆሻሻ ምንድነው? [dereq qoshasha mindinew]? What is dry waste?
- ፍሳሽ ቆሻሻ ምንድነው? [fesash qoshasha mindinew]? What is liquid waste?
- ደረቅና ፍሳሽ ቆሻሻን ማስወገድ [dereqina fisash qoshashan masweged]-  
Disposing dry and liquid waste
- ደረቅና ፍሳሽ ቆሻሻን በአግባቡ ባለማስወገድ የሚፈጠሩ የጤና ችግሮች እና የመከላከያ ዘዴዎች [dereqina fisash qoshashan bagibabu balemasweged yemifeteru yetena chigiroch ena yemekelakeya zedewoch]-

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<sup>7</sup> Health education, starting from planning, implementation, monitoring, and evaluation stages involves active and full participation of the concerned audiences and not limited to program heads and administrative officials (WHO, 2004).

Health problems created as a result of not disposing waste and liquid waste and prevention methods

The environmental health education lessons were prepared in accordance with what was given in the City Health Extension Program Solid and Liquid Waste Disposal Package (MoH, 2008).

As can be seen above, the first two lesson topics ‘**ደረቅ ቆሻሻ ምንድነው?**’ [dereq qoshasha mindinew]? What is dry waste? and ‘**ፍሳሽ ቆሻሻ ምንድነው?**’ [fesash qoshasha mindinew]? What is liquid waste?- emphasize on informing the differences between solid and liquid wastes. The assumption is that people would be able to separate solid waste from liquid waste. It became clear from the lesson topics that they focus on bio-medical information.

Similarly, in the second two topics ‘**ደረቅና ፍሳሽ ቆሻሻን ማስወገድ**’[dereqina fisash qoshashan masweged]- Disposing dry and liquid waste, and ‘**ደረቅና ፍሳሽ ቆሻሻን በአግባቡ ባለማስወገድ የሚፈጠሩ የጤና ችግሮች እና የመከላከያ ዘዴዎች**’ [dereqina fisash qoshashan bagibabu balemasweged yemifeteru yetena chigiroch ena yemekelakeya zedewoch]- Health problems created as a result of not disposing solid and liquid waste and their prevention methods- the discourses ‘**ማስወገድ**’[masweged]- dispose, and ‘**የመከላከያ ዘዴዎች**’[yemekelakeya zedewoch]-ways of prevention- suggest that they are more of waste disposal and management oriented.

The activities that I observed were mainly the discussion of bio-medical information, for example, how dirty environment can breed rodents, flies and rats. Other activities that I

observed had to do with what communicable diseases the indiscriminate disposal of solid and liquid could cause as for example, cholera, cancer, typhus, and respiratory illnesses. I also observed that as a solution to be protected from these communicable diseases, the participant learners were advised by the health extension worker to dispose their solid and liquid wastes properly.

As indicated in the National Health Communication Strategy of Ethiopia, single communication strategy can never be effective in achieving change in knowledge, attitudes, skills and behavior. Delivering different health messages through the use of various strategies could facilitate the communication efforts better (MoH. 2004a). During the environmental health education presentation, I observed the strategies the health extension workers were using to deliver the lessons. It emerged from the environmental health education lesson presentation that the approach was top-down where knowledge relation became evident. I observed the health extension workers using the traditional way of teaching whereby they were reading and explaining their teaching notes (for detailed narration of the observation, (see Appendix 9).

It came out clearly during my observation that the environmental health education practices were essentially dissemination of ES information. The messages focused on communicating bio-medical information. Besides, they were waste management and disposal oriented.

## **4.3. Analysis of Interview Data**

### **4.3.0. Introduction**

In sections 4.1 and 4.2 above, I have tried to provide insights into the ‘intentions’ and ‘assumptions’ of the environmental health programmers as articulated in the policies, the strategies and health education materials. This section (section 4.3.) extends deeper into the exploration of the operationalization of environmental health discourses to promote community participation by focusing on the research participants’ viewpoints.

### **4.3.1. Demographic Characteristics of Participants**

A total of 31 subjects from 5 different woredas took part in the process of collecting core qualitative data among which 7 of them hold key positions.

The minimum qualification of the key informants is 10+3 (diploma) while the highest is first degree. Three health extension professionals have a diploma whereas the remaining four hold first degree. Those who have first degree hold higher position, for example, woreda health officer. As shown in Table 5.1 below, their fields of study vary. Only one participant, that is, woreda 3 health extension program supervisor, holds a degree in environmental science from Jimma University. One participant who is a woreda health officer holds a first degree from Addis Ababa University in Pharmacy. The remaining two participants obtained their degree in English Language and Literature and Management respectively.

**Table 4.3. Key informants' profile**

No	Contact date	Time	Code	Age	Sex	Education	Occupation	Woreda
1	18 April 2012	9 A.M.- 10 A.M.	KI-1	33	M	BA degree in Pharmacy	Head, Woreda Health Office	5
2	4 April 2012	3 P.M. – 4 P.M.	KI-2	23	F	BA degree in Environmental Science	Environmental sanitation supervisor	3
3	6 April 2012	2 P.M. – 3 P.M.	KI-3	21	F	Diploma in clinical nursing	Health extension worker	6
4	20 April 2012	10 A.M. -11 A.M.	KI-4	33	F	Diploma in clinical nursing	Health extension worker	7
5	13 April 2012	3 P.M. – 4 P.M.	KI-5	26	F	Diploma in clinical nursing	Health extension worker	9
6	24 April 2012	1:30 P.M. – 2:30 P.M.	KI-6	27	M	BA in English and Literature	Woreda communication officer	5
7	28 April 2012	5 P.M. – 6 P.M.	KI-7	23	M	BA in Management	Head, Solid Waste Management Office	3

Similarly, 6 individuals who were selected from the community interviewed over a period of one month. Their ages range from 18 to 73. An attempt was made to pick them from all walks of life. Their qualification ranges from 6<sup>th</sup> grade to a college diploma. They were selected from different woredas.

**Table 4.4:** Individual in-depth interviewees' profile

No	Contact date	Time	Code	Age	Sex	Education	Occupation	Woreda
1	6 May 2012	6 P.M. – 7 P.M.	II-01	73	M	6 <sup>th</sup> grade complete	Retired	3
2	7 May 2012	2 P.M. – 3 P.M.	II-02	56	M	12+1	Civil servant	5
3	13 May 2012	6 P.M. – 7 P.M.	II-03	47	F	10 <sup>th</sup> grade complete	House wife	6
4	18 May 2012	7 P.M. – 8 P.M.	II-04	55	M	Diploma	Private company employee	7
5	25 May 2012	9 A.M. 10:30 A.M.	II-05	34	F	12 <sup>th</sup> grade complete	House wife	9
6	1 June 2012	5 A.M.-6 A.M.	II-6	23	F	High school student	Student	3

The focus group interviews were conducted in four groups (groups 1, 2, 3, and 4). The discussions were conducted over one month at different places. The number of participants was 18 (10 females and 8 males).

**Table 4.5. Summary of FGI participants**

No	Contact date	Time	Place	Group	Code	No of Participants
1	5 June 2012	3 P.M. – 4:30 P.M.	Woreda 3 Health Office	One	FG1	5
2	9 June 2012	11 A.M. – 11:50 A.M.	Woreda 9 Health Office	Two	FG2	5
3	17 June 2012	2 P.M. - 4 P.M.	Idir Office(woreda 5)	Three	FG3	4
4	25 June 2012	3 P.M. – 4: 45 P.M.	Idir Office (woreda 6)	Four	FG4	4

Besides, 250 respondents participated in the process of generating supplementary data from the wider community (see Appendix B for the demographic characteristics of the respondents).

### **4.3.2. Deepening the Interpretations of Environmental Sanitation Discourses through Interview Analysis**

This section provides detailed interpretations of the discourses of major themes. Six major themes have been identified as:

- knowledge about the concept of ‘environment’;
- knowledge about ‘environmental sanitation’;
- understanding of the concept of ‘participation’;
- attitude toward environmental health education;
- beliefs about participation; and
- behavioral practices

The interpretations provide insight into the implications of the ‘lived’ ideology <sup>8</sup>of the environmental sanitation discourses as constructed by the individual and group interview participants. It also deals with the interpretation of views of key informants <sup>9</sup>regarding the participation of the community. The interpretation of key informants’ view provides insight into and informs the exploration of issues such as the enactment of environmental sanitation discourses, the roles of health professionals, and what discourse strategies are used in environmental health communication during community participation.

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<sup>8</sup> Lived ideology refers to the beliefs, values, and practices of a society. They are its way of life, its common sense (Williams, 1965 as cited in Wetherell, et al, 2001: 203).

<sup>9</sup> Key informants were community health professionals, for example, woreda health officer, communication officer, waste disposal and management head, and health extension workers.

#### 4.3.2.1. Participants' Knowledge of 'አካባቢ' [akababi]-Environment

The participants shared their knowledge or perception of the word 'አካባቢ' environment. Participants were asked a question on their understanding of አካባቢ, 'environment' to establish their knowledge of the content, how this influences their participation in environmental sanitation activities.

One participant explained that 'ለእኔ አካባቢ ማለት የራሴ ግቢና ደጃፊ ነው' [lenene akababi mallet yerase gibina dejafe naw] environment means my own compound and my compound area (FG4-1:1). Sharing a similar view, another participant defined the word 'አካባቢ' [akababi] environment as 'አዎን የሚያመለክተው የምኖርበትን ሥፍራ ነው' [awon yemiyamelekitew yeminorebetin sifira naw] Yes. Environment refers to the area I live in (FG3-2:2). Another respondent (II-02: 4) explained environment as his surroundings. 152 (60.8% of the survey interview respondents used the word 'ሠፈር' neighborhood to refer to the environment. Some demonstrated their understanding by giving examples of what the environment entails. For instance, they explained that it includes anything up to Piazza (II-3:7).

It emerged from the interview that participants have narrow understanding of the word 'አካባቢ' environment. This narrow understanding of the word 'አካባቢ' environment is in circulation amongst the community members. It might have ranged from the teaching of health professionals. For example, this is what one of the key informants, who was a health extension worker, had to say 'አካባቢ የምትኖሩበት ሠፈር ነው ብለን

**እንግራቸዋለን** we tell them (the community members) that environment refers to their compounds and their neighborhood (KI-2: 19). This definition of **‘አካባቢ’** an ‘environment’ is not consistent with the definition given in the Environmental Protection Organs Establishment Proclamation 295/2002 set by the Council of the Federal Democratic Republic of Ethiopia. It reads

“Environment" means the totality of all materials whether in their natural state or modified or changed by human, their external spaces and the interactions which affect their quality or quantity and the welfare of human or other living beings, including but not restricted to, land atmosphere, weather and climate, water, living things, sound, odor, taste, social factors, and aesthetics (p.1939).

I would think that because of this misleading teaching about what **‘አካባቢ’** an environment is ‘People are seen defecating everywhere, throwing waste on public places, on roadsides, and recreational places thinking that these areas do not belong to them and do not affect their health (II-02:29).

#### **4.3.2.2. Participants’ Knowledge of የአካባቢ ፅዳት [yakababi tsedat] Environmental Sanitation**

The individual and focus group interview participants shared their knowledge of environmental sanitation. Similar to the meaning of the word **አካባቢ** [akababi]‘environment’ they were asked a question on their understanding of ‘environmental sanitation’ in order to establish to what extent their knowledge of environmental sanitation influences their behavioral practices. One participant explained that **‘የአካባቢ ፅዳት ማለት የራሴን ግቢ ወይም ከደጃፊ ጀምሮ እስከ 25 ሜትር ድረስ ማፅዳት ማለት ነው ከራሴ ግቢና ቤቴ ውጭ አይታየኝም’** environmental sanitation

refers to cleaning my own compound or areas up to 25 meters from my gate. I don't see outside of my own compound and own house (III-02:1). Another participant indicated that 'ከግቢዬ ውጭ የሚጣሉ ቆሻሻዎች አይመለከቱኝም' 'wastes disposed outside of my compound do not concern me' (FG3-2:2). The community's understanding of environmental sanitation is also explained by one key informant as,

**ብዙ ሰዎች ከግቢአቸው ውጪ የሚመለከታቸው መሆኑን አያውቁም ሰዎች ስለሌላው አካባቢ ግድ የላቸውም። ኃላፊነት እንዳለባቸው አያውቁም። ማንኛውም ከግቢአቸው ውጭ የሚደረግ ነገር የሌሎች ሰዎች ኃላፊነት ይመስላቸዋል። ከግቢአቸው ውጭ ለሚጣል ቆሻሻ ትኩረት አይሰጡም።**

Outside of their compounds, many people don't know it concerns them. People don't care about other areas except their own areas. They don't know they are responsible. They think that anything outside of their compound is other people's responsibility. They don't pay attention to a waste outside of their compounds (KI-3: 2).

The understanding of environmental sanitation of the wider community members was also explored. Accordingly, 80 (32%) of the survey interview respondents reported that 'environmental sanitation' refers to cleaning their own compounds while 113 (45.2%) of them explained that it refers to cleaning their neighborhood.

The responses indicate that 'የአካባቢ ፅዳት' 'environmental sanitation' has been constructed as cleaning ones' own compound or cleaning neighborhood areas.

Participants were asked if they knew anything about waste disposal and management regulation and proclamation. One participant explained that 'ስለ ቆሻሻ አወጋገድ የወጣውን ሕግ ምንም አላውቅም። ለመጀመሪያ ጊዜ መስማቴ ነው። ማህበረሰቡም ተመሳሳይ ይመስለኛል'። 'I don't know anything about waste disposal regulation. It is my first time to hear. I think the community is also the same (II-02:13). Another

participant revealed that he heard that there is a waste disposal and management regulation but he disclosed that ‘ህጉ ወይም ደንቡ አልተተገበረም’ ‘the proclamation or regulation hasn’t been put into practice (II-01:4). He further explained that

የመንግሥት አካላት ለምሳሌ የአካባቢ ዕዳት ተቆጣጣሪዎች በተግባር ላይ አያውሉትም። እነዚህ የአካባቢ ዕዳት ተቆጣጣሪዎች ራሳቸው አያከብሩትም። አዲስ የተቀጠሩ የአካባቢ ዕዳት ተቆጣጣሪ ተብዬዎች አሉ። በዕድራችን አማካይነት ገንዘብ እንድንከፍል ይጠይቁናል። ከውሃ ቢል ጋር እንድንከፍል ያስገድዱናል።

The government organs such as environmental sanitation inspectors don’t put the regulation into practice. These sanitation inspectors themselves do not respect the regulation. There are the so called newly employed sanitation inspectors. They ask us to pay one or two birr through our *Idir*<sup>10</sup>. They make us pay for waste together with water bill (II-01:4).

This suggests that there is a communication gap between the health practitioners and the health program implementers which in turn might have influenced the community’s knowledge to discharge its responsibility.

#### **4.3.2.3. Participants’ knowledge about ‘ተሳትፎ’ [tesatifo] – Participation**

The participants were also asked if they knew that they had the right and responsibility to participate in environmental sanitation matters. Most of them agreed that they knew they had to participate. For example, 201 (80.4) of the survey interview respondents indicated that they knew they should participate in environmental sanitation activities. To further probe about their participation, I asked them in what types of environmental sanitation activities they participate. The responses were contradictory. One of the in-depth

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<sup>10</sup> Idir is a civic association where people contribute money to help members in time of condolence

interview participants reported that ‘ቆሻሻ ለቆሻሻ ሰብሳቢዎች ከመስጠት በስቀር በአካባቢ ዕዳት እንቅስቃሴዎች ውስጥ የምንሳተፍበት ምንም አጋጣሚ የለም’ ‘there is no opportunity as such to participate in environmental sanitation activities other than giving solid waste to waste collectors’ (II-3:1). Another participant (II-4) explained that she participates in cleanup campaign during *Hidar Sitaten*<sup>11</sup>. For example, the result of survey interview also shows that 166 (66.4%) of the respondents participate in sanitation meetings.

The participants also expressed their dissatisfaction. One participant complained that ‘የጤና መልዕክቶቹ መንግሥት የመሰለውን መልዕክት ለማስተላለፍ በመንግስት የሚዘጋጁ መሆናቸው መረሳት የለበትም’:: ‘the health messages are prepared by the government to convey information what it thinks, but it shouldn’t be forgotten that the community may have also its own say’ (II-4:4) as a result of which ‘ከላይ የሚፈሱ መልዕክቶችን የመቀበሉ ሁኔታ ዝቅተኛ ነው’ ‘accepting what flows from above is low’ (II-2: 5).

Another participant further commented that,

የፖሊሲና የፕሮግራም ዶኪመንቶች ዝግጅት ከላይ ወደታች የሚፈስ ነው::  
ማህበረሰቡ እነዲተችበት ዕድሉ መስጠት ነበረበት:: ከታች ወደላይ መሄድ  
ነበረበት:: ምክንያቱም ምክንያቱም የሚጫወተው ሚና ትልቅ ስለሆነ::  
ማህበረሰቡ ቢሳተፍ ጥሩ ነው:: ትልቅ ለውጥ እናሳይ ነበር::

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<sup>11</sup> Hidar Sitaten is an annual environmental sanitation day in the month of Hidar (December). It is associated with a belief that the smoke that comes out of the burning of garbage will eradicate diseases.

The creation of policy and program documents is something that flows from the top to the bottom. The community should have been given the opportunity to criticize them. It should have gone from the bottom to the top also. This is because it is the community that plays a bigger game. It is good if people participate. We could have shown a big change now (II-5:5).

It emerged from the responses that the notion of community participation has been constructed as attending meetings, taking part in cleanup campaigns, and giving solid waste to waste collectors. This was common across the research participants. This understanding of community participation created some problems (for example, lack of interest, faith in health education) as it limits the role played by the community. This is because the community is exposed to only one side of participation. That could be one major factor for the insignificant participation of the community at a higher level (e.g. participation in designing policy and program documents). The survey interview result shows that only 8(3.2%) of the respondents, which is insignificant, took part in the formulation of policy, regulations, and rules.

To probe further about the extent of participation by the community in environmental sanitation on its own initiative, the key informants were also asked a question. One informant explained

**ሰዎች በራሳቸው ተነሳሽነት አይሳተፉም። ከበላይ አካል ጫና ይፈልጋሉ። ሌለው ቀርቶ በማህበረሰብ ውይይት ላይ አይሳተፉም። ነገር ግን ስለራሳቸው ጤንነት እንዲወያዩ ይደረጋሉ። ስለዚህ የማህበረሰቡ ተሰትፎ በአካባቢ ፅዳት ላይ ብዙ ጊዜ አናሳ ነው።**

People do not participate on their own initiatives. They want imposition from above. They do not participate even in community conversation. But they are made to talk about their own health. So the participation of the community in environmental sanitation most of the time is a problem (KI-5).

With regard to the participation of the community in environmental sanitation activities, another key informant explained,

እውነቱን ለመናገር ማህበረሰቡ በራሱ ተነሽነት በአካባቢ ፅዳት ላይ ያለው ተሳትፎ ዜሮ ነው። ማህበረሰቡ የኔነት (የባለቤትነት) ስሜት የለውም። መንግሥት ከላይ በመሆን አካባቢውን እንዲከባከብ ተፈቅዶለታል። ነገር ግን ማህበረሰቡ ተባባሪ አይደለም።

Frankly speaking, the interest of the community to participate in environmental sanitation activities on its own initiatives is zero. The community does not have the spirit of ownership. It has been allowed to safeguard its own environment the government being on the top to control. However, the community does not cooperate (KI-6).

The strong criticisms of the key informants through the use of the phrases ‘ከበላይ አካል ጫና ይፈልጋሉ’ [kebelay akal chana yifeligalu] ‘they want imposition from above’, ‘እንዲከባከብ ተፈቅዶለታል’ [endikebakeb tefekdoletal] ‘it has been allowed’, and ‘መንግሥት ከላይ በመሆን’ [mengist kelay bemehon] ‘the government being on the top’ demonstrate the asymmetrical power relations that health extension workers exercise at the community level. They illuminate how power functions at the community level. This form of control and power relation (expressed through the phrases mentioned earlier) might have restricted the responsibility of the community to fully engage in environmental sanitation endeavors.

#### **4.3.2.4. Participants’ Attitude toward ‘የአካባቢ ጤና ትምህርት’ [yakababi tena timihirit]- Environmental Health Education**

Another question put forward to the participants was related to health education. Health education is a key tool, which enables community members develop knowledge and

capability for actively participating in environmental sanitation activities. It is an important instrument to develop positive attitude towards participating in environmental sanitation endeavors.

The participants gave conflicting or contradictory views about the delivery of environmental health education. For example, one individual interview participant bitterly commented

**የማህበረሰቡን ግንዛቤ ከፍተኛ የሚያደርግ ማንም የለም። የሚያስተምር ሰው የለም። አሁን የጤና ኤክስቴንሽን የሚባሉ አሉ። አንዳንድ ጊዜ ይመጡና ቃለ-መጠይቅ ያደርገሉ። ከዚህ ውጭ ሰዎችን ሰብስበው የሚያስተምሩበት መንገድ የለም። ማህበረሰቡን ሰብስበው የማስተማር ልምድ ቢኖራቸው ጥሩ ነው እላለሁ። ይህ ከሆነ ማህበረሰቡ ትንሽ ሊለወጥ ይችላል።**

There is no one to raise the community’s awareness. There is no one who teaches. Now there are the so-called health extension workers. Sometimes they come and make an interview. Other than this, they don’t have a way to gather people and give education. I think it is good if they have the culture of gathering people and talk to them. If this is there, the community may change a little (II-02:13).

Another participant, this time a focus group interview participant, underscored that ‘ማህበረሰቡ በቂ የሆነ የአካባቢ ጤና ትምህርት አልተሰጠውም። ግንዛቤ አልወሰደም።’ ‘the community has not been given sufficient environmental health education. It hasn’t taken awareness’ (FGI4-1:17).

A participant also complained about the situation health education was offered. One of the interviewees argued that ‘የጤና ኤክስቴንሽን ሠራተኞች አስተምረው በዚያው ይጠፋሉ። ትምህርታቸው ቀጣይነት የለውም። ችላ የሚሉ ይመስላል። ቀጣይነት ያለውና ብልጭ ድርግም የሚል ትምህርት አንድ አይደለም።’ ‘The health extension workers start teaching and go. Their teaching is not continuous. It seems that they are

reluctant. The education that is continuous and the education that is on and off are not the same’ (FGI--3:17). In support to this idea, another participant commented,

**እንደሚመስለኝ ከሆነ የጤና ኤክስቴንሽን ሠራተኞች ኃላፊነታቸውን ባግባቡ እየተወጡ አይደለም አልፎ አልፎ የሚታዩ ከሆነ። የመንግስት ተቀጣሪ የሆነ የጤና ኤክስቴንሽን ሠራተኞች አንድ ቤት ብቻ መሄድ የለበትም። ይህ የሚያመለክተው የአካባቢ ፅዳት የተወሰኑ ግለሰቦችን ብቻ የሚመለከት መሆኑን ነው። ምን ዓይነት የጤና ችግር እንዳለ የማወቅና አስቀድሞ ማህበረሰቡን የማስገንዘብ ግዴታ አለባቸው። ይህ ለአንድ ቀን ብቻ መሆን የለበትም። ተከታታይነት ያለው መሆን አለበት።**

I think the health extension workers are not discharging their responsibilities expected of them if they show up rarely. A government employed health extension worker should not visit one house. This indicates as if environmental health education is the concern of limited individuals. They are obliged to know what kind of health problems there are and raise the awareness of the community ahead of time. This should not happen only for one day but it should be continuous (II-4:15).

With regard to access to environmental sanitation messages through print and electronic media, participants shared their views. One participant noted that ‘**ለምሳሌ በራሪ ፅሁፎች፣ ብሮሽሮችን አላነብም። የት ላገኛቸው እችላለሁ**’ [lemisale berari tsehufochin, brosherochin alanebim. Yet lagegnachew ichilalehu? ‘I don’t read, for example, leaflets, pamphlets and brochures. Where can I get them?’ (II-3:14). Commenting on the problem of access to print materials, another participant further complained that ‘**ማንም በራሪ ወረቀቶች ወይም ብሮሽሮችን የሚሰጠኝ የለም**’[manim berari wereketoch weyim brosherochin yemisetegn yelem] ‘there is no one who gives me brochures, pamphlets or leaflets (II-02:14). Similarly, participants commented on their access to media. Speaking about the community’s practice, one focus group interview participant pointed out that **ማህበረሰቡ ስለ አካባቢ ፅዳት ጉዳይ በራዲዮም ሆነ በቴሌቭዥን አይከታተልም። በራሪ ወረቀቶችንም አያነብም። ሰልጣኑ ታልፎ። እንግዲህ ጀመራቸው ይላሉ። ማህበረሰቡ**

**ማስታወቂያዎችን ይቀዳል እንጂ ማንበብ አይፈልግም።** The community doesn't listen to radio or television about such things environmental sanitation. It doesn't also read brochures, and pamphlets. It is bored. They say, 'They have started' kind of thing. The community tears notices otherwise it doesn't want to read (FGI1-3:16)

The comments and complaints about health education suggest that the health communication efforts have not been enacted as intended. This in turn might have influenced the infusion of the 'knew knowledge', i.e. community participation.

The health extension professionals, who were key informants, on their part shared their own opposing views. One informant reported that **‘በፅዳት ዘመቻ፣ በስብሰባ እንዲሳተፉ እናስተምራቸዋለን። በአካባቢ ጤና ትምህርት ላይ እንዲሳተፉ እናስተምራቸዋለን’**[betsidat zemecha, besiseba indisatefu enastemirachewalen. Bakababi tena timhert endisatefu enastemirachewalen] ‘we teach them that they should participate in sanitation campaigns and also meetings. We teach them that they should participate in environmental health education’ (KI-2: 19). Another informant reported that **አካባቢውን በራሱ የሚጠብቅ ማህበረሰብ ለመፍጠር ጥረት እያደረግን ነው። አንዳንድ ጊዜ ቤታቸው ድረስ ሄደን እናስተምራቸዋለን። አካባቢአቸውን ራሳቸው እንዲከባከቡ እናደርጋቸዋለን።** We are trying to create a community that can safeguard environment on its own. Sometimes we go to where they live and teach them. We make them keep their environment by themselves (KI-1:20).

Supporting this idea, another key informant pointed out,

የአካባቢ ጤና ትምህርት በግልም ሆነ በጋራ በእያንዳንዱ ንዑስ ቀበሌ በሞላ ወረዳ ይሰጣል። የምናደርገው ምንድነው 60 አባወራዎችን (አንድ ሰው ከእያንዳንዱ ቤት) መርጠን እናስተምራቸዋለን።እምነታችን አንድ ሰው ከአንድ ቤት ከተማረ መላው ቤተሰብ ሊማር ይችላል። ስለዚህ ለአራት ወራት ያህል የአካባቢ ፅዳት ትምህርት ለ 60 አባወራዎች እንሰጣለን።

Environmental health education is given in every sub-kebele across our woreda individually and in groups. What we do is we select 60 households (one person from each house) and teach them. We believe that if one person is educated from one house, the whole family members may learn. So, we give environmental health education for four months for 60 households (KI-4: 21).

The view of the key participants about environmental health education was further explained,

በቅድሚያ በጤና ላይ ትኩረት በማድረግ እያንዳንዱን አባወራ እናስተምራለን። በደንብ እናስተምራለን። በቲዎሪ እናስተምራቸዋለን። በመቀጠል የተማሩትን በተግባር የማዋል ግዴታ እንዳለባቸው እንነግራቸዋለን። ለምሳሌ በአካባቢ ፅዳት ዘመቻ ላይ መሳተፍ እንዳለባቸው እንነግራቸዋለን። አካባቢአቸውንና ሽንት ቤታቸውን በንፅህና የመጠበቅ ግዴታ እንዳለባቸው እናስተምራቸዋለን። 16ቱንም ፓኬጆች እናስተምራለን። ከ16ቱ ፓኬጆች 4ቱ ከአካባቢ ጤና ጋር የተያያዙ ናቸው። ስለዚህ የአካባቢ ጤና ፓኬጅ አራት ወራቶች ገደማ ይወስዳል። የአካባቢ ጤና ፓኬጅን ለማስተማር የበለጠ ጊዜ እንሰጣለን።

First, we teach each household emphasizing on health. We teach properly. We teach them theoretically. Then we tell them how *they should put* the theory into practice. For example, we tell them to participate in environmental sanitation campaigns. We teach them how they *must* keep their toilets and their environment clean. We teach 16 packages. Out of the 16 packages, 4 of them have to do with environmental health. So, the environmental health package may take around one month. We give more time to the teaching of environmental health package (KI-5:21).

Despite the complaints from individual and focus group interview participants, the key informants argued that they were trying to reach the community and teach them about environmental health. They reported that they were using different communicative strategies to convey health messages to the people. One informant explained

ቆሻሻቸውን እንዴት ማስወገድ እንዳለባቸው እንነግራቸዋለን። ቆሻሻቸውን ሰብስበው ማቃጠል እንዳለባቸው እንነግራቸዋለን። ከቤት ቤት በመሄድም ማህበረሰቡን እናስተምራለን። አንድ ለአምስት በማቀናጀት እናስምራቸዋለን። ይህ ማለት ምንድነው አንድ የኮሚኒኬሽን ሠራዊት ከሥሩ/ሯ አምስት ሰዎች ይኖሩታል/ይኖሯታል። ለእነዚህ አምስት ሰዎች መልዕክት ያስተላልፋል/ታስተላልፋለች። እነዚህ አምስት ሰዎች ደግሞ በተራቸው ለሌሎች አምስት ሰዎች ያስተላልፋሉ። እነዚያ እያለ ይቀጥላል። በራሪ ወረቀቶችንም ብሮሽሮችንም ወዘተ እንጠቀማለን። እነዚህ መደበኛ (ፎርማል) የኮሚኒኬሽን ዘዴ ነው። ከዚህ በተረፈ ኢ-መደበኛ (ኢንፎርማል) የኮሚኒኬሽን ዘዴ በቃል የማስተላለፍ ዘዴ እንጠቀማለን። ለምሳሌ ቡና ጠጡ ዓይነት።

*We tell them* how they should dispose waste. We tell them that they should collect waste and burn. We also go from house to house and teach the community. *We teach them* through one to five strategies. It means one communication army has five people under him/her. S/he communicates a message to these five persons. These five persons in turn have another five persons under each one of them. They also pass the message to persons under them. It goes on like that. We also use brochures, pamphlets, leaflets, banners etc to communicate environmental health messages to the general public. These are formal communication systems. Other than these we use informal communication method, i.e. oral. It is given in the form of *buna tetu*<sup>12</sup>(KI-1:19).

As indicated in the above excerpts, it became clear that there was no common agreement between both sides about the environmental health education delivery. This implies that the delivery of environmental health education is under question.

The key informants made clear that they were using strategies ‘ከቤት ለቤት’ [kebet lebet] like ‘house-to-house’, ‘አንድ ለአምስት’ [and le amidst] ‘one-to-five’, and ‘ቡና ጠጡ’ [buna tetu] ‘*buna tetu*’. These communicative strategies were evident during my observation of the teaching of health lessons in research sites where health extension professionals were teaching. There was a *buna tetu* ceremony whereby the participant

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<sup>12</sup> *Buna tetu* is an Amharic version which means ‘drink coffee’. Traditionally neighbors drink coffee together as a sign of socialization.

learners contributed coffee grain and ‘የቡና ቁርስ’ [yebuna kuris] ‘yebuna kurs’<sup>13</sup>. I observed that the teaching was conducted while drinking coffee.

However, the participants revealed that they did not like the strategies that the health extension professionals were using to deliver health education. For example, one participant critiqued that ‘አንድ ለአምስት ዘዴ’[and le amidst] ‘one- to- five’ strategy is ‘tefnig’<sup>14</sup> (II-5:5) as it did not allow her to go to a church or work or otherwise freely.

One participant (FGI4-1: 11) thought that the health extension workers are ‘የመንግሥት ወኪሎች’ [yemengist wekiloch] ‘agents of the government’ going from house – to – house ‘ለመሰለል’ [lemeselel] ‘to spy’ but not really to teach about health. Another participant also felt that, የጤና ባለሙያ ሠራተኞች የሚፈልጉትን ቤት ይመርጣሉ። በእርግጥ ለምን እነዚያን ቤቶች እንደሚመርጡ አይታወቅም። ሌሎች ተመሳሳይ ቤቶች አሉ። ነገር ግን እነዚህ ቤቶች ሲመረጡ አናይም። እኔ ምን ዐይነት ትምህርት ለህዝቡ እንደሚሰጡ አላውቅም። The health extension workers choose those houses which they want. In fact it is not known why they chose those houses. There are also other similar houses. But these houses were not chosen. I don’t know what kind of education they give to the people (II-02:14).

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<sup>13</sup> *Yebuna kurs* is anything that those coffee drinkers eat.

<sup>14</sup> *Tefnig* means very tight something that is not flexible. It refers to a situation which does not allow free generation of ideas.

Resulting from these methods of teaching, there appears to be that the research participants did not acknowledge the way health extension professionals were teaching them.

Parallel with the identification of the strategies that health extension professionals were using to teach, it was necessary to explore the discourses of the topics of the health lessons (see page 124 about the topics of health lessons). It, therefore, came out from the key informants' responses that the discourses: **‘እናስተምራቸዋለን’**[enastemerachewalen] ‘we teach them’, **‘እንነግራቸዋል’** [enegrachewalen] ‘we tell them’, **‘እነዲሳተፉ እናደርጋቸዋለን’** [endisatefu endergachewalen] ‘we make the people participate’, **‘የጤና ትምህርት እስጣለን’** [yetena timiheret ensetalen] ‘we give health education’,(see the quotes above) demonstrate knowledge relationship. They indicate that the health education providers are the only sources of knowledge. They also show that the community is simply a passive recipient.

The topics of teaching which both informants mentioned above came out clearly during my lesson observation in the research sites. In their teaching, the health extension professionals were emphasizing on issues of disposing and managing household wastes be it solid or liquid. The lesson activities I observed were mainly the discussion of bio-medical information.

Similarly, the public messages that I collected aim at teaching the community about how to control indiscriminate waste disposal. For example, **‘ከተግኝንን ውብና ፅዱ እናደርጋት’** [Ketemachinin wubina tsidu enadergat - PM-2] which means ‘Let’s make

our City beautiful and clean; ‘አካባቢን መጠበቅና መንከባከብ የሁሉም ሀላፊነት ነው’ [Akababin matabqena menkedakeb yehulum halafinet new- PM- 22]- which means ‘It is the responsibility of all to protect and safeguard the environment’ ; and ‘ለአካባቢ ፅዳት መጠበቅ የህብረተሰቡ ተሳትፎ ወሳኝ ነው’ [Lakababiachen metebeq yehebretesebu tesatefo wesagn naw- PM 25] which means ‘For environmental sanitation, the participation of the people is decisive’.

It emerged from this research that the environmental sanitation discourses that focus on communicating bio-medical information and that are waste disposal and management oriented did not promote community participation though inculcating attitudes of responsibility and participation in community health development is placed high in the strategies of Health Policy of Ethiopia (TGoE, 1993).

#### **4.3.2.5. Participants’ Attitude of ‘ተሳትፎ’ [tesatifo]-Participation**

This section presents the feelings or beliefs of the individual and focus group interview participants towards their own participation in environmental sanitation activities. The feelings or beliefs of the key informants towards the participation of the community towards environmental sanitation activities are also discussed.

The individual and focus group participants shared their personal views towards environmental sanitation. Although this was personal, their views towards environmental sanitation were not conflicting. Interestingly, all the participants had an ‘externalizing’ attitude towards who should be responsible for the sanitation environment. They felt that

'the government' or 'the community' is responsible for the sanitation of environment.

One of the participants underscored that,

ሰዎች በጣም ግዴለኛ ናቸው። ቆሻሻ ሲጣል እያዩ ምን ቸገረኝ ይላሉ። አይመለከተኝም ይላሉ። እንደፈለገው ይሁን ይላሉ። እና ዝም ይላሉ። ማህበረሰባችን አንተ እያፀዳህ እያያ አውቆ የሚያቆሽሽ ማህበረሰብ ነው። ስለ አካባቢያቸው ፅዳት ጉዳያቸው አይደለም። ኃላፊነት የጎደላቸው ናቸው። ኃላፊነታቸውን ወደ መንግሥት ወይም ቀበሌ ወይም የጤና ኤክስፔንሽን ባለሙያ ያስታክካሉ። መንግሥት ወይም ቀበሌ ወይም የጤና ኤክስፔንሽን ባለሙያዎች እንዲያፀዱላቸው ይፈልጋሉ።

People are so careless. When they see waste being thrown they say who cares. They say 'it is not my concern. Let it be as it wishes'. And they keep silent. Our community is a kind of community that pollutes knowingly when you clean. They don't care about the sanitation of their environment. They are irresponsible. They externalize responsibility to the government or kebele or health extension workers. They want the government or kebele or the health extension professionals to clean for them (II-02:10).

Another focus group interview participant noted,

ማህበረሰቡ እንዲወጣና በፅዳት ዘመቻ እንዲሳተፍ ስታሰገድደው በቃ ያስመስላሉ። ቀሪ ላለመሆን ይመጣሉ እንጂ ለሥራ አይደለም። ምንም ነገር ሳይሰሩ ከነመጥረጊያቸውና አካፋቸው ይመለሳሉ። ማህበረሰቡ አንድ የሚቀሰቅሰው ሰው ይፈልጋል። የወረዳው ምክር ቤት ትዕዛዝ ሲያስተላልፍ ማህበረሰቡ ይገኛል። ማህበረሰቡ ግዳጅ ይፈልጋል።

When you force the community to come out and participate in the sanitation campaign, they simply pretend. They come for attendance but not to work. They get back with their brooms and spades without doing anything. The community expects someone to sensitize them. When the Woreda Council passes instructions, the community shows up. The community wants to be forced (FGI1-3: 10-11).

A total number of 160 (64%) of the survey interview respondents, reported that government institutions, for example, woreda health office, the Addis Ababa health bureau, the Addis Ababa Environmental Protection Authority are responsible for keeping the environment clean and green.

Sharing more or less a similar view, one of the key informants described the view of the community about participation as,

**ማህበረሰቡ መንግሥት የፅዳቱን ሥራ እንዲሰራላቸው ይፈልጋሉ። መንግሥት መንከባከብ አለበት ብለው ያስባሉ። ማህበረሰቡ መንግሥት አንዳንድ ነገሮችን አናፀዳም በማለት ቅድመ ሁኔታዎችን ያስቀምጣሉ። ነገር ግን ጉዳቱ ለራሱ ለማህበረሰቡ ነው። መንግሥት አይደለም የሚታመመው። በተለይ የፅዳት ሥራ ስንሰራ የሚያጋጥመን ችግር ይህ ነው። ሰዎች ግዴታ ስላላቸው። በተጨማሪም ሰዎች የምናስተምረውን ትምህርት ከፖለቲካ ጋር ያያይዙታል። እኔ እንደሚመስለኝ ከሆነ የሚጎዳቸውንና የማይጎዳቸውን ለይተው ማወቅ ይገባቸዋል። ይህ ነው ትልቁ ችግር።**

The community wants the government to do the cleaning for them. They think that it is the government who should care. So they are reluctant. The community gives preconditions that unless the government fulfills so and so for them they don't clean. But the disadvantage is for the community. It is not the government that gets ill. Especially when we do campaign work, this is the problem we face. People are reluctant. Also, people connect our teaching with politics. I think they have to make a distinction between what harms them and what not. This is the biggest problem (KI-7:22).

The above excerpt implies that the interest of the community is not given due attention to.

The discourse ‘**መንግሥት አይደለም የሚታመመው**’[mengist aydelem yemitamemew] ‘it is not the government that gets ill’ and ‘**ጉዳቱ ለራሱ ለማህበረሰቡ ነው**’[gudatu lerasu lemahiberesebu new] ‘the disadvantage is for the community’ imply the hegemony of the status quo. Similarly, the discourse ‘**የሚጎዳቸውንና የማይጎዳቸውን ለይተው ማወቅ ይገባቸዋል**’[yemigodachewinena yemaygodachewin leyitew mawek yigebachewal] ‘They have to make a distinction between what harms them and what not’ implies as if the community is ignorant of environmental sanitation.

Describing the view of the community, another key informant noted, **የህዝቡ አመለካከት ገና አልተለወጠም። ችግር ነው። ትምህርቱን የተማሩት እንኳን ምንም ለውጥ አላሳዩም። ብዙ**

ሰዎች አሉ የጤና ትምህርት ከተማሩ በኋላ እንኳን የማይንቀሳቀሱ። አይናገሩም። ሌሎች ሰዎች የራሳቸውን ሰፈር ሲያቆሽሹ እያዩ ዝም ይላሉ። The attitude of the people has not changed yet. It is a problem. Even those who took the lesson have not shown any change. There are many people who do not want to act even after they took the health education. They don't speak. They keep silent even when they see other people polluting their own areas (KI-5:12).

The individual and focus group interview participants also reported about their beliefs towards their own participation. One participant said ‘አንድ ሰው በተከለከለ ሥፍራ ሲፀዳዳ ወይም ሽንቱን ሲሸና ባይ እኔ አልናገርም’ [and sew betekelkele sifra sitsedada weyim shintun sishena bay ene alinagerim] ‘I don't speak when I see someone defecating or urinating even on prohibited places’. ‘ሌሎች ለማይጨነቁበት ነገር እኔ ምን ቸገረኝ?’ [leloch lemaychenekubet neger ene min chegeregn?] ‘Why should I care when others don't care?’ ‘እኔን አስካል ኅዳኝ ድረስ ምን ቸገረኝ?’ [enen eskalgodagn dires min chegeregn?] ‘I don't care about others as long as I am not hurt’ (FGI1-3: 10). The participant elaborated this point reflecting on an ‘*individualizing*’ approach (using እኔ[ene] ‘I’) rather than just externalizing (using ‘እነርሱ’[they] ‘they’ or ‘ሕዝቡ’[hizibu] ‘the people’ or ‘መንገሥት’[mengist] ‘the government’) as it is the case with the key informants. Sharing a more or less similar view, another participant revealed that ‘አንድ ሰው አካባቢን ሲበክል ባይ ለቀበሌ አላመለክትም’[and sew akababin sibekil bay le kebele alamelekitim] ‘I don't report to the kebele if I see one person polluting the environment.

‘ምክንያቱም ልሰደብ እችላለሁ’ [mikinyatum lesedeb ichilalehu] ‘This is because I may be insulted’ (FGI1-1:11).

Another expressed that,

በጤና ጉዳይ አካባቢ ሥልጠና አለ ሲባል የተወሰኑ ሰዎች ሁል ጊዜ ዕድሉ ሲሰጣቸው አያለሁ። አንድ ነገር ለማግኘት ነው። ሌሎች ሰዎችን የማሳተፍ ነገር የለም። ዛሬ የተወሰኑ ሰዎች ነገም እነዚያው ሰዎች ናቸው። ነገር ግን እነዚህ ሰዎች ደግሞ ከሥልጠናው በኋላ ሌሎች ሰዎችን ሲያስተምሩ አላይም። ለራሳቸው ተማሩ በቃ። እራሳቸው እዚያው ይቀመጣሉ። ስለዚህ ማህበረሰቡ እንዲሳተፍ ዕድል አይሰጡም።

I see only limited persons given a chance to participate when there is training in the area of health. I see particular individuals participating. It is to get something. There is no such thing as allowing other persons to participate in different things. Today, the same persons, tomorrow the same persons participate. I don’t see these particular persons in turn teaching the community what they studied or what they learnt. They study for themselves. They themselves sit there. Therefore, they don’t allow the community to participate (II-02:5).

It is indicated in the analysis of key documents that inculcating the attitudes of responsibility and participation is a key strategy to achieve the imagined cleaner and safer environment. This is demonstrated in some public messages, for example, ‘አካባቢን መጠበቅና መንከባከብ የሁሉም ሀላፊነት ነው’ [Akababin matabqena menkedakeb yehulum halafinet new-PM 22] which means ‘It is the responsibility of all to protect and safeguard the environment’. However, as one key informant pointed out, ‘የማህበረሰቡ ተሳትፎ በአካባቢ ፅዳት እንቅስቃሴ ውስጥ ዜሮ ነው’ [yemahiberesebu tesatifo bakababi tsedat wisit zero new] ‘The participation of the community in environmental sanitation activities is zero. There is no sense of ownership’ (KI-6:9). It emerged from the research

that inculcating attitudes of responsibility and participation in the community has not been materialized yet.

The participants shared their views about health extension workers. One participant indicated that the health extension workers are government agents who go from house to house to spy but not really to teach (FGI4-1:10).

Sharing more or less similar view, one key informant underscored that, **እንደ ችግር የምናየው ነገር ምንድነው ህዝቡ በጤና ፓኬጅ ላይ እምነት የለውም። በመሆኑም የምንሰጠውን የጤና ትምህርት አያምንም። ለፖለቲካ ጠቀሜታ የምናውለው ይመስላቸዋል።** What we see as a problem is that the people do not have faith in the health package. They do not have trust in the health education we give. They think that we use them for political purposes (KI-1:11).

This view though refers to the attitude of community members, inferentially implies the community as an object in environmental health discourse and subjectifies the health extension program (packages) as an agent of change of attitude. The community's role is excluded. The text is based on a linear casual logic that assumes that the health extension package would lead to attitudinal change or change of behavioral practices. However, it does not take into account unexpected factors that may emanate from economic or personal/social attitudes and experiences that may constrain the achievement of the objectives of the health extension package.

This kind of view manifests that the participation of the community in the idea of launching health extension program and also the preparation of health extension packages was marginalized.

#### **4.3.2.6. Community’s Behavioral Practices in Environmental Sanitation Activities**

The purpose of asking a question about behavioral practices in environmental sanitation activities was to establish if the community has brought change of behavior in their waste disposal practices. The residents of the city are expected to dispose their wastes properly. This is indicated in the Solid Waste Management Proclamation, No. 513/2007; and Addis Ababa City Government Waste Management, Collection and Disposal Regulation (see 4.1.1.4 and 4.1.1.5). Also, through public messages attempts have been made to aware the community to manage its wastes as for example, *‘በመንገድ ላይም ሆነ በህዝብ መዝናኛ አካባቢ ሲንቀሳቀሱ ደረቅ ቆሻሻዎችን በቆሻሻ ቅርጫት ውስጥ ብቻ ይጣሉ’* [Bemengedem lay hone mezinagna akababi sinqesaqesu dereq qoshashwoten beqoshasha qirichat wist bicha yitalu- *PM-17*] which means ‘While you move on roads and public places, throw your dry waste into only the dust bins’.

I asked the individual and focus group interview participants about their sanitary practices. As explained by one of the participants: *‘ሰዎች ቆሻሻቸውን ወደ ዲች ውስጥ ይጥላሉ’* [sewoch koshashan wede dich wisit yitalalu] ‘People throw their wastes to ditches’. *‘በየቦታው ሲፀዳዱ፣ ቆሻሻ በህዝብ መዝናኛ ቦታዎች፣ መንገዶች ላይ ሲጥሉ ይታያሉ’* [beyebotaw sitsedadu koshasha behizib meznagna botawoch mengedoch lay sitilu yitayalu] ‘They are seen defecating everywhere, throwing wastes in public places,

on roadsides, and recreational places’ (II-02:29). This was supported by another participant who explained that **‘በእርገጥ የአካባቢ ጤና ችግር አለ’** [bergit yakababi tena chigger ale] ‘There is definitely an environmental health problem’. **‘የራሳቸውን የቤት ቆሻሻ እንኳን ባግባቡ በቆሻሻ ገንዳ ውስጥ አይጥሉም’** [yerasachewin yebet koshasha enkuan bagibabu bekoshasha genda wisit ayetilum] ‘They don’t even dispose their own domestic waste properly into waste containers’. **‘ሁለተኛ በተከለከሉ ቦታዎች ላይ ቆሻሻ ይጥላሉ፤ ይፀዳዳሉ’**[huleteгна betekelekelu botawoch lay koshasha yitelalu yitsedadalu] ‘Secondly, they throw wastes or defecate on prohibited places’ (FG3-2:30). Another participant explained that, **‘የተማሩና የተሸለ ደረጃ ላይ ያሉ ሰዎችን እናያለን። ለምሳሌ፤ እነዚህ ዘመናዊ መኪና የሚያሸከረክሩ። መንገድ ሲያቆሽሹ አናያቸዋለን። ሌሎች የከተማ አውቶቡስ የሚጠቀሙ ሰዎች የቆሻሻ መጣያ ቅርጫት እያለላቸው ተኬታቸውን የትም ሲጥሉ እናያለን። እነዚህን የመጠቀም ልምድ የለም። አንዳንድ ታክሲ ነጂዎች የሙዝ ልጣጭ የትም ሲጥሉ እናያለን።’** We see people who are even much educated, people who are in a better position. For example, those people who drive modern cars. We see them littering. Other people who use city buses throw their bus tickets but there are waste bins made available. There is no practice of using them. Some taxi drivers throw banana skins (II-02:29).

The key informants were asked about the behavioral practices of the community. One informant explained that **‘በዙ ሰዎች ቆሻሻ በቆሻሻ ገንዳ ውስጥ እንደመጣል መንገድ ላይ ይጥላሉ’** [bezu sewoch koshasha bekoshasha genda wisit endemetal menged lay yitalalu] ‘Many people throw waste on roads instead of throwing it into a waste container’ (KI-3:31). Supporting this idea another informant pointed out **‘ሰዎች በየመንገዱ ላይ**

ይፀዳዳሉ፤ ይሸናሉ፤ ቆሻሻ ይጥላሉ’ [sewoch beyemengedu lay yitsedadalu, yishenalu, koshasha yitilalu] ‘People defecate, urinate, and throw waste on roadsides’. ‘በየመንገዱ ላይ ለተተከሉት አበቦች አነስተኛ ግምት ይሰጣሉ’ [beyemengedu lay letetekelut abeboch anestegna gimit yisetalu] ‘They give little attention to flowers by the roadsides’. ‘ያጠፏቸዋል’[yatefuachewal] ‘They destroy them’. ‘ይቆርጧቸዋል’ [yikortuachewal] ‘They cut them’. ‘ምን የማያደርጉት ነገር አለ?’ [min yemayaderegut neger ale?] ‘What not?’ (KI-6:31).

The sanitary practices of the community was further explained by another key informant as,

ብዙ የቆሻሻ ቅርጫቶች በተለያዩ ቦታዎች ላይ ሰዎች እንዲጠቀሙበት ተቀምጠዋል። ነገር ግን ሁሉም ተጎሳቁለዋል። አንዳንዶቹ ተሰርቀዋል። ሌሎቹ ተሰብረዋል ጠፍተዋልም። ይህ የሚያሳየው ምንድነው የቆሻሻ ቅርጫቶችን የመጠቀም ባህል በሃገራችን ገና አለመዳበሩን ነው። እንዲሁም ብዙ ሰዎች አሉ ቆሻሻ አንዳው አጠገብ የሚጥሉ። በዚህ ጊዜ ምክር እንሰጣለን። አንዳንድ ጊዜ እስከ መቅጣትም እነሄዳለን። ግን ከተቀጡም በኋላ ያንን ነገር ሲያደርጉ እናያቸዋለን። ራስ ምታት የሆነብን ይህ ነው በኛ ወረዳ። ምክንያቱ ምን እንደሆነ ሊገባን አልቻለም። ማህበረሰቡ አልሰለጠነም። ይህንን ነው መደምደም የምንችለው። በየአመቱ ብዙ ተክሎች በየመንገዱ ላይ ይተከላሉ። ግን ማህበረሰቡ ራሱ ነው እንደገና አጥሮችን ነቅሎ የሚወስደው። ማህበረሰቡ ራሱ ነው የተተከለውን ማንኛውንም ነገር ነቅሎ የሚወስደው።

Many dust bins have been made available in different places. They were made available so that people could use them. But they have been all abused. Some were stolen. Others are broken or destroyed. This shows that the tradition of using dust bins has not been developed in our country yet. Also, there are many people who throw waste near waste containers. This time we give advice. Sometimes we go to the extent of penalizing them. Even after being penalized we see them doing the same thing. This is what has become a headache to us in our woreda. We couldn’t really understand the reason. The community is not civilized yet. That is what we can conclude. Every year a lot of flowers and trees are planted by roadsides. But it is the community again that takes away the fences. It is the community that takes away whatever has been planted (KI-7:32).

The interview responses revealed a discourse of poor sanitary and waste management practices. The notion of community participation has been constructed in terms of only its recognition with activities such as keeping one's compounds, or neighborhood areas clean. This is also evident in the public messages collected '**ሁሉም ግቢውንና አካባቢውን ካፀዳ የቆሻሻ ክምችት አይኖርም**' [*Hulum gibiwenena akababiwen katseda yeqoshasha kimechet aynorem*]- *If all clean their compounds and their environment, there won't be any piles of waste.* However, these environmental health activities are mainly waste management oriented. They have nothing to do with the promotion of community participation to maintain sustainable environmental sanitation.

By way of suggesting what is to be done in the future, the informant also revealed that,

**ለወደፊቱ የማህበረሰቡን ፍለጎት ያማከለ ዘላቂነት ያለው የግንዛቤ ማሳደግ ጥረት መደረግ አለበት። ማህበረሰቡን በሚያረካ መልኩ የአካባቢ ጤና መልዕክቶች የመናስተላልፍባቸውን ዘዴዎች ለማሻሻል እያሰብን ነው። እንደሚመስለኝ ከሆነ ዘዴዎቻችን መከለስ አለባቸው። ነገር ግን አሁን ባለው ሁኔታ የባህርይ ለውጥ ይኖራል ብዬ አለምንም።**

For the future there has to be sustainable awareness raising efforts that consider the interests of the community. We are thinking of improving our methods of communicating environmental health messages in ways that can touch the community. I think the methods should be revisited. But as it stands now, I don't think there is any change of behavior (KI-7:32).

This situation implies the community did not take part in the launching of the health extension program. It also shows that the health communication methods that have been in use so far are not working. As a whole, it emerged from the informants' response that top-down approach has been exercised.

### **4.3.3. Emerging Discourses**

A review of policy and program documents has revealed that the promotion of community participation in order to maintain sustainable environmental health is a priority. In the Health Policy of Ethiopia, it is articulated that in particular, the Government of the Federal Republic of Ethiopia fully appreciates the decisive role of popular participation and therefore determined to create the prerequisite social and political conditions conducive to its realization. To this effect, inculcating attitudes of participation in community health development is indicated as one strategy. Inculcating attitudes of responsibility for self-care in health and assurance of safe environment is identified as another strategy. The Policy has made clear that the community is represented at all levels to participate in identifying major health problems, budgeting, planning, implementation, monitoring and evaluating health activities (TGoE,1993).

Similarly, the Environmental Policy of Ethiopia encourages participation by the people of Ethiopia in the development of federal and regional policies, laws and plans for the sustainable management of environmental health. It initiates and supports the involvement of local community in programs (FDRE, 1997). Also, in the City Health Extension Program Manual (MoH, 2008) community participation has been defined as the involvement of the people in terms of contributing their local knowledge, material, money and the likes starting from planning up to implementation. In this Manual enhancing community participation so as to realize people's ownership of their own health has been articulated time and again.

The National Health Communication Strategy is another document that has been reviewed in the current research. In the document, the tasks, roles, and responsibilities of the various levels are indicated (e.g. tasks and roles at zonal/woreda level, at city level, at community level). At the community level, it is mentioned that community will be able to discuss on health messages, methods, and teaching aid materials (MoH, 2004a). As indicated in the Health Service Extension Implementation Guideline (MoH, 2005b), health service extension program strategy can be seen as part of the wider movement or reform from the more traditional forms of top-down development practices to the participatory development direction. Therefore, the following principles are opted to be pursued in the health extension:

- Communities identification and prioritization of their own health needs;
- The recognition of the supremacy of people's involvement. In other words, respect and accommodation of people's interest, needs and wishes in all aspects;
- The contribution of people's knowledge and skills as a potential contribution to health development; and
- Promotion of ownership of the programs by communities.

Furthermore, community participation has been taken as something that enables people to make decisions to mobilize resources. It is believed that CP promotes responsibility and ownership for health actions. As indicated in the Guideline, community participation can be in different forms which include gaining individuals or community members' greater responsibility for their health, decision making on health issues, identifying priorities, and

mobilization, allocation, contributions, management and control of resources. Winning community trust is identified as a top condition that helps/facilitates community participation (MoH, 2005b). Active and full participation of people (not limited to program heads and administrative officials) in the health education starting from planning, implementation, monitoring and evaluation stages is indicated in the Health Education and Communication Manual for Health Extension Package as one of its major principles (MoH, 2004c).

However, a critical analysis of environmental sanitation discourses has revealed the emergence of some discourses in the discursive practices. These are discourses of *exclusions*,<sup>15</sup> *silence*, *mistrust*, and *power relations*.

#### **4.3.3.1. Discourses of Exclusion**

As implied in the discourses of the Government's intentions and assumptions in section 4.1.2, scientific or expert knowledge is taken as correct knowledge without which it is unthinkable to promote community participation (MoH, 2004a). However, privileging of only scientific knowledge has the powerful effect of silencing indigenous knowledge which is a potentially valuable form of knowledge.

Evidences from this research shows that indigenous knowledge was excluded. One individual interview participant explained that 'እርግጥ ነው ምንም ግንዛቤ የለኝም'[irgit new minim ginizabe yelegnem] Well *I don't have any understanding* as to how this

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<sup>15</sup> *Exclusion* in this context is taken positively as something referring to the fact that indigenous knowledge (local knowledge) has been 'left aside' or not incorporated in the policy and program documents

health policy and other documents related to environmental health were designed' (II-4:5). Another participant commented that 'የተወሰኑ ሰዎች ብቻ እዲሳተፉ ሲደረግ አያለሁ'[yetewesenu sewoch binch indisatefu sidereg ayalehu] *I see only limited persons made to participate.* 'ወረቀት ላይ የሚፅፉትና በተግባር የሚታየው ይለያያሉ' [wereket lay yemitsifutinal betegbar yemitayew yileyayalu] :: 'ስለዚህ ከላይ የሚፈሰውን የመቀበሉ ሁኔታ ዝቅተኛ ነው:: ነገር ግን ማህበረሰቡ በእንደዚህ አይነት ጉዳዮች ላይ ቢሳተፍ ጥሩ ነው' [silezih kelay yemifeseewn yemekebelu huneta ziketegna new] - *What they write on papers and what they practice are different. So, accepting what flows from above is low but it is good if the community is given a chance to participate in such matters* (II-02:5).

The response from another individual interview participant about his participation in ES activities was as follows: እስካሁን ድረስ በማህበረሰብ ውይይት ላይ አለተሳተፍኩም:: ማንም የጠራኝ ሰው የለም:: በአካባቢ ፅዳት ጉዳይ ላይ እስከዚህም የመሳተፍ አጋጣሚ የለም ቆሻሻ ለሰብሳቢዎች ከመስጠት በስተቀር:: በፍፁም ጠርተውኝ ስለማያውቁ በፖሊሲም ሆነ ሌሎች ጤና ጉዳዮች ላይ ተሳትፌ አላውቅም:: [iskahun dires bemahibereseb wiyiyit lay altesatefkum. Manim yeteragn sew yelem. Bakababi tsedat guday lay eskezihim yemesatef agatami yelem koshasha lesebsabiwoch kemestet besteker. Befistum tertewegn silemayawku bepolisim hone leloch tena nek gudayoch lay tesatife alawekem] -*Until now I haven't participated in community discussions. Nobody called me. There is no opportunity as such to participate in environmental sanitation matters other than giving*

solid waste to waste collectors. Since they have never called me I have never participated on such matters like discussing on policy or regulation and other issue (II-3:5).

An interview with another individual participant revealed that,

**በእርግጥ የፖሊሲና የፕሮግራም ዶኪመንቶች ቀረፃ ከላይ ወደታች የሚወርድ ነገር ነው። ማህበረሰቡ እንዲተችበት ዕድሉ ሊሰጠው ይገባ ነበር። ከታች ወደላይ መሄድ ነበረበት። ምክንያቱም ከፍተኛውን ሚና ሊጫወት የሚችለው ማህበረሰቡ ስለሆነ።**

[bergit yepolisina yeprogram dokumentoch keresa kelay wedetach yemiword neger new. Mahiberesebu inditechibet idilu lisetew yigeba neber. Ketach wede lay mehed neberebet. Mikiniyatun kefitegnawin mina lichawet yemichilew mahiberesebu silehone]-

In fact, the creation of policy and program documents is something that flows from the top to the bottom. The community should have been given the opportunity to criticize them. It should have gone from the bottom to the top. This is because it is the community that plays a bigger game II-5:7).

Another participant (II-4: 10) extended others’ view of participation by adding that,

**በመሠረቱ የጤና መልዕክቶች በመንግሥት በራሱ የተዘጋጁ ናቸው። ቢሆንም ማህበረሰቡም የራሱ የሚለው ነገር ሊኖር እንደሚችል መረሳት የለበትም።**

[bemeseretu yetena meliktoch bemengist berasu yetezgaju nachew. Bihonim mahiberesebum yerasu yemilew neger linor indemichil meresat yelebetem].

Basically though the *health messages are prepared by the government* to convey information that the government thinks should reach the community to raise its awareness, it shouldn’t be forgotten that the *community may have also its own say*’.

An interview with another participant about participation revealed that ‘**በአካባቢ ፖሊሲ ቀረፃና አተገባበር ላይ የመሳተፍ ልምድ የለኝም**’ [bakababi polisina ategababer lay yemesatef limidu yelegnem] *I don’t have the practice of commenting on such things like environmental policy designing, or its implementation regulation (FGI1-1: 8).* Another

participant pointed out that ‘ፍለጎቴን ለማካፈል በፍፁም ተጠይቄ አላውቅም’ [filagoten lemakafel befitsum teteyike alawkim] *I have never been asked to share my interests or feelings* on such things like policy formulation or even its implementation (FGI1-2: 23).

It has become clear from the above excerpts that the following discourses manifest the exclusion of indigenous knowledge.

- ‘በፍፁም ተጠይቄ አላውቅም’ [befitsum teteyike alawkim ] I’ve never been asked.
- ‘ምንም ግንዛቤ የለኝም’ [minim ginzabe yelegnim] I don’t have any understanding.
- ‘ወረቀት ላይ የሚፅፉትና በተግባር የሚታየው ይለያያሉ’ [wereket lay yemitsafutina betegbar yemitayew yileyayalu] What they write on papers and what they practice are different.
- ‘በፍፁም ጠርተውኝ ስለማያውቁ’ [befitsum tertewegn ayawkum] They have never called me.
- ‘በአካባቢ ፅዳት ጉዳይ ላይ እስከዚህም የመሳተፍ አጋጣሚ የለም’ [bakababi tsedat guday lay eskezihim yemesatef agatamit yelem] There is no opportunity as such to participate in environmental sanitation affairs.
- ‘የፖሊሲና የፕሮግራም ዶኪመንቶች ቀረፃ ከላይ ወደታች የሚወርድ ነገር ነው’ [yepolisina program dokimntoch keretsa kelay wedetach yemiword neger new] The creation of policy and program documents is something that flows from the top to the bottom.

- ‘ማህበረሰቡ እንዲተችበት ዕድሉ ሊሰጠው ይገባ ነበር’ [mahiberesebu inditechibet idilu lisetew yigeba neber] The community should have been given the opportunity to criticize them.
- ‘ከታች ወደላይ መሄድ ነበረበት’ [ketach wede lay mehed neberebet] It should have gone from the bottom to the top.
- ‘የጤና መልዕክቶች በመንግሥት በራሱ የተዘጋጁ ናቸው’ [yetena meliktochu bemengist berasu yetezegaju nachew] Health messages are prepared by the government.
- ‘ማህበረሰቡም የራሱ የሚለው ነገር ሊኖር እንደሚችል መረሳት የለበትም’ [mahiberesebum yerasu yemilew neger linor indemichil meresat yebebetim] It should not be forgotten that the community may have also its own say.
- ‘በአካባቢ ዕዳት ፖሊሲ ቀረጻና አተገባበር ላይ የመሳተፍ ልምዱ የለኝም’ [bakababi tsedat polisi keretsana ategababer lay yemesatef limdu yelegnem] I don’t have the practice of commenting on such things like environmental policy designing, or its implementation regulation.
- ‘ፍላጎቴንና ስሜቴን በፍፁም ተጠይቄ አላውቅም’ [filagotenina simeten befitsum teteyike alawkim] I have never been asked to share my interests or feelings’ have emerged.

The emerging discourses demonstrate that the approach to promote community participation is top-down. The emerging discourses imply that it is not only indigenous knowledge that is excluded but also the direct participation of the community. It is indicated in the policy that some attempts at facilitating participation in policy designing,

planning, budgeting, implementation, resource mobilization, through representatives of the community at all levels. One key task or role of the National Health Strategy to be implemented at community level is to involve communities in the process designing health communication messages, methods, and teaching materials (see 4.3.1. above). However, from the interviews it emerged that the process is essentially top-down approach where only expert knowledge has been favored and indigenous knowledge is kept aside.

The community's participation was rather limited to activities such as attending sanitation meetings, participating in cleanup campaigns organized by kebele or health extension workers, giving their waste to waste collectors on time, paying money for the sanitation services they got, and participating in community conversations whereby they could speak about the sanitation situations in their areas.

The analysis of environmental health discourses has further demonstrated that the teaching of inculcating attitudes of community participation have been excluded as the environmental health discourses aim at the promotion of bio-medical information and are predominantly waste management oriented.

The analysis of health education materials has indicated that the materials are predominantly dominated by bio-medical information and waste disposal and management discourses. In all the documents, other than advocating the need for community participation in activities such as cleanup campaigns, meetings, no attention has been given to the teaching of the role of community participation (see section 4.1.3.

above). In all the environmental health education lessons I observed no mention was made about the role of community participation. The lessons were predominantly waste disposal and management oriented (see 4.1.3. above).

A further exclusion of the inculcation of the attitude of community participation was reflected in the strategies the health extension workers deployed during their teaching.

One key informant explained that ‘መጀመሪያ ጤና ላይ ትኩረት በማድረግ እያንዳንዱን አባወራ እስተምራቸዋለን’ [mejemeria tena lay tikuret bemadirge inastemirachewalen]

First we teach each household *emphasizing on health*. ‘በአካባቢ ጤና ዘመቻ ላይ እንዲሳተፉ እንነግራቸዋለን’ [bakababi tena zemech lay indisatefu eninegrachewalen]

We tell them to *participate in environmental sanitation campaigns*. ‘እንዴት ሽንት ቤታቸውንና አካባቢያቸውን በንፅህና መጠበቅ እንዳለባቸው እናስተምራቸዋለን’ [indet shint betachewinina akababiachewn benitsehina metebek indalebachew inastemirachewalen]

We teach them *how they should keep their toilets and their environment clean* (KI-5:23). Another key informant added by saying ‘ፓኬጅ አለ’ [pakej ale]

There is a package. ‘ፓኬጅን እናስተምራቸዋለን’ [pakejun inastemirachewalen] We teach them *the package*. ‘የተማሩትን በተግባር እንዲያውሉ እንነግራቸዋለን’ [yetemarutin betegbar indiyawilu ininegrachewalen]

We tell them to put what they have learnt into practice (KI-3:20). Another informant pointed out ‘እንዴት ቀሻሻቸውን ማስወገድ እንዳለባቸው እንነግራቸዋለን’ [indet koshashachewin maswege indalebachew ininegrachewalen]

We tell them how they should dispose waste. ‘ቆሻሻ ሰብስበው ማቃጠል እንዳለባቸው እንነግራቸዋለን’ [koshasha sebsibew makatel indalebachew

ininegrachewalen] We tell them that they should *collect waste and burn* (KI-6:22). Another indicated that **‘ማንኛውንም አጋጣሚ በመጠቀም ቆሻሻ ለጤና አደገኛ መሆኑንን እነስተምራቸዋለን’** [manignawenim agatami bemetekem koshasha letena adegegna mehonun inastemirachewalen] Using every opportunity we teach the community *how wastes are dangerous to health and how they should dispose them*. **‘እንዲሁም ማህበረሰቡ ቆሻሻውን እንዴት መቆጣጠር እንዳለበት እነስተምራለን’** [indihum mahiberesebu koshashawin indet mekotater indalebet inastemiralen] We also teach the community about *how they should manage their waste* (KI-7:32).

It emerged from the above excerpts that the discourses identified below all indicate that the health education discourses dominantly focus on bio-medical information and are also waste disposal and management oriented.

- **‘ጤና ላይ በማተኮር’** [tena lay bematekor] Emphasizing on health;
- **‘በአካባቢ ዕዳት ዘመቻ ላይ’** [bakababi tsedat zemecha lay] Participate in environmental sanitation campaigns;
- **‘እንዴት ሽንት ቤታቸውንና አካባቢአቸውን በንፅህና መጠበቅ እንዳለባቸው’** [indet shint betachwenina akababiachewen benitsihina metebek indalebachew] How they should keep their toilets and their environment clean;
- **‘ፓኬጅን እናስተምራቸዋለን’**[pakejun inastemirachewalen] Teach them the package;
- **‘ቆሻሻ ሰብስበው ማቃጠል እንዳለባቸው እንነግራቸዋለን’** [koshasha sebsibew makatel indalebachew ininegrachewalen] Collect waste and burn;

- ‘ቆሻሻ ለጤና አደገኛ መሆኑንና እንዴት ማስወገድ እንዳለባቸው’ [koshasha letena adegeгна mehonunina indet masweged indalebachew] How wastes are dangerous to health and how they should dispose them; and
- ‘ቆሻሻውን እንዴት መቆጣጠር እንዳለበት’ [koshashawen indet mekotater indalebet] How they should manage their waste

The implication of this is that the inculcation of the notion of community participation along with other health issues has been excluded.

#### 4.3.3.2. Discourses of Silence

As discussed in sections 4.1.3 and 4.1.4 in this chapter, the inculcation of attitudes of responsibility towards maintaining sustainable environmental health is central. However, it became clear from this research that communities have not been discharging their responsibilities as intended. This is evident in the interview responses the participants made. One of the participants explained that ‘አንድ ሰው አካባቢን ሲበክል ባይ አልናገርም’ [and sew akababin sibekil bay alinagerim] *I keep silent* if I see one person polluting the environment. ‘ምክንያቱም ያ ሰው ሊሰድበኝ ይችላል’ [mikinyatum ya sew lisedibegn yichilal] This is because the person may insult me (FGI1-1: 12). Another participant added ‘አንድ ሰው በተከለከለ ሥፍራ እንኳን ሲፀዳዳና ሽንቱን ሲሸና ባይ አልናገርም’ [and sew betekelekele sifera innkwan sitsedadana shintun sishena bay alinaberim] *I don’t speak* when I see someone defecating or urinating even on prohibited places. ‘ሌሎች ያልተጨነቁበትን እኔ ምን ቸገረኝ’ [leloch yaltechenekubetin ine min chegeregn] *Why should I care* when others don’t care? (II-02: 10). Sharing the

experience of the community a focus group participant noted ‘ቆሻሻ ሲጣል እያዩ ምን አገባኝ ይላሉ’ [koshasha sital iyayou min agebagn yilalu] When **they** see waste being thrown they say *who cares*. ‘አይመለከተኝም’[ayimeleketegnim] *It is not my concern*. ‘እንደፈለገው ይሁን’ [indefelegew yihun] *Let it be as it wishes*. ‘ዝም ይላሉ’[zim yilalu] They keep silent. People are careless’ (FGI1-3: 10). Another focus group interview participant explained that ‘ሰዎች እንደራስ ንብረት አያዩትም’[sewoch inderas nibret ayayoutim] People don’t react as owners. ‘ይሄ የኔ ጉዳይ አይደለም ይላሉ’ [yihe yene guday aydelem yilau] They say that it is none of my business. ‘ተቆርቋሪነታቸውን አያሳዩም’[tekorquarinetachewn ayasayoum] They *don’t show any concern* (FG1-1: 11).

I asked the health extension professionals a question about the responsibility of the community members in keeping their environment clean and green. One key informant explained the situation as if the community is sleeping and does not listen ማህበረሰቡ ቅስቀሳ ይፈልጋል። አንድሰው እንዲገፋፋቸው ይፈልጋሉ። ለሁሉም ነገር ቅስቀሳ ይፈልጋሉ። ማህበረሰቡ ከቅስቀሳ ወጥቶ አያውቅም። አሁን ማህበረሰቡ ተኝቷል። ደንዝዟል። ስለዚህ ሄዶ መቀስቀሱ ቀላል አይደለም። [mahiberesebu kiskesa yifeligal. And sew indigefafachew yifeligalu. Lehulum neger kiskesa yifeligalu. Mahiberesebu kekiskesa wetito ayawkem. Ahun maheberesebu tegnetual. Silezih hedo mekeskes kelal aydelem]. The community *needs sensitizing*. *They want somebody to push* them. *They want agitation* for everything. The community has not come out of waiting for agitation. The *community is sleeping now*. It has become *calous*. So it is not simple to go and *awaken* it (KI-6: 4).

The key informants were also asked a similar question about the community's participation in environmental sanitation activities. One of the informants stated that 'ማህበረሰቡ በጣም አስቸጋሪ ነው'[maheberesebu betam aschegari new] The community is very problematic. 'በራሱ ተነሳሽነት የማይሳተፍ ማህበረሰብ ነው' [berasu tenesashinet yemayisatef mahibereseb new] It is a kind of community that does not participate on its own initiative. 'አንድ የሚቀሰቅሰው ሰው ይፈልጋል' [and yemikesekisew sew yifeligal] It needs somebody to push it. 'የሚቀሰቅሰው ሰው ሲኖር ይሳተፋል' [yemikesekisew sew sinor yisatefal] Whenever there is a sensitizer they participate (KI-4:7).

Another informant explained,

አብዛኛው ያስተማርነው ህዝብ የተማረውን በተግባር አያውልም። በተግባር ዜሮ ናቸው። ለእኛ እንቅስቃሴ የሆነው ይህ ነው። ስንስተምራቸው ፖዘቲቭ ናቸው። የነገርናቸውን ሁሉ ይቀበላሉ። ይህንን ያንን አደርጋለሁ ብለው ቃል ይገባሉ። ነገር ግን በተግባር አያውሉትም። በራሳቸው ተነሳሽነት አይሳተፉም። በጣም አናሳ ነው። አካባቢአቸውን ለማዕዳት ከበላይ ጫና ይጠብቃሉ። [abzagnaw yastemarnew hizb yetemarewin betegbar ayawelim. Betegbar zero nachew. Legna inkoklish yehonew yihe new. Sinastemirachew positive nachew. Yenegnachewin hulu yikebelalu. Yihinin yanin adergalehu bilew kal yigebalu. Neger gin betegbar yawilutim. Berasachew tenesashinet ayisatefum. Betam anasa new. Akababiachewin lematsedat kebelay chana yifeligalu.

The majority of the people whom we taught *do not put what they learnt into practice*. In practice *they are just zero*. *This is mysterious* for us. When we teach them they are positive. They take whatever we tell them. They promise that they would do this or that. But in practice they don't. They don't participate on their initiatives, it is very insignificant. It is insignificant. *They want imposition from above* to clean their areas (KI-5:8).

One informant commented that 'ሰዎች የባለቤትነት መንፈስ የላቸውም' [sewoch yebalebetnet menfes yelachewim] People do not have a spirit of ownership (KI-6:9).

Instead as pointed out by one focus group participant (FGI2-1:17) ‘የመንግሥት ኃላፊነት ነው ብለው ያስባሉ’ [yemengist halafinet new bilew yasibalu]. They think that it is the responsibility of the government. Another key informant explained ‘የጤና ትምህርት ከወሰዱ በኋላ እንኳን የማይንቀሳቀሱ ብዙ ሰዎች አሉ። አይናገሩም። የራሳቸው አካባቢ እንኳን በሌሎች ሰዎች ሲበክል ዝም ይላሉ።’ [yetenal timihrite kewesedu behual inkuwan yemayinkesakesu bizu sewoch alu] There are many people who do not want to act even after they took the health education. They don’t speak. They keep silent even when they see other people polluting their own areas (K 5:13). This idea was further reinforced by one key informant as ‘ማህበረሰቡ እኛን ለማስደሰት ብቻ ያስመስላል’ [mahiberesebu ignan lemasdeset bicha yasmesilal] The community simply pretends to please us. Volunteerism is not a common practice in our community (KI-6: 15).

The result of survey interview indicated that 185 (74%) respondents reported that ‘ዝም ይላሉ’ [zim yilalu] *They keep silent* or ‘ማስመሰልን ይመርጣሉ’ [masmeselin yimertallu] They prefer to pretend as if they didn’t see when they other people polluting environment.

It became clear from the excerpts above that the discourses,

- ‘ዝምታ’ [zimita] ‘keep silent’;
- ‘አለመናገር’ [alemenager] Don’t speak;
- ‘ምን ቸገረኝ’ [minchegeregn] Why should I care;

- ‘ጉዳዩ አይደለም’ [gudaye aydelem] Who cares;
- ‘አይመለከተኝም’ [ayimeleketegnim] It is not my concern;
- ‘እንደራሰባው ይሁን’ [indefelegew yihun] Let it be as it wishes;
- ‘ሰዎች ዝም ይላሉ’[sewoch zim yilalu] People don’t react;
- ‘አይቆረቆሩም’[ayikorekorum] Don’t show any concern;
- ‘ቅስቀሳ ይፈልጋሉ’[kiskesa yifeligalu] Need sensitizing;
- ‘አንድ የሚገፋፋዎት ሰው ይፈልጋሉ’[and yemigefafachew sew yifeligalu]  
They want somebody to push;
- ‘አሁን ማህበረሰቡ ተኝቷል’[ ahun mahiberesebu tegnital] The community is  
sleeping now;
- ‘ቀዝቃዛ’[kezkaza] Dormant;
- ‘መቀስቀስ’[mekeskes] Awaken;
- ‘በጣም አስቸጋሪ’ [betam aschegari] Very problematic;
- ‘በራስ ተነሳሽነት አለመሳተፍ’ [beras tenesashinet alemesatef] Does not  
participate on its own initiative;
- ‘የተማሩትን በተግባር ላይ አያውሉትም’ [yetemarutin betegbar lay ayawilutim]  
Do not put what they learnt into practice;
- ‘ዜሮ ናቸው’[zero nachew] They are just zero;
- ‘እንቅፃልሽ ነው’ [inkokilish] This is puzzling;
- ‘ ከላይ ጫና ይፈልጋሉ’[kelay chana yifeligalu] They want imposition from  
above;

- ‘ የባለቤትነት ስሜት የላቸውም’[yebalebetnet simet yelachewim] They do not have a spirit of ownership;
- ‘ የመንግሥት ኃላፊነት ነው ብለው ያስባሉ’[yemengist halfinet new bilew yasibalu] They think that it is the responsibility of the government;
- ‘ማህበረሰቡ ያስመስላል’[mahiberesebu yasmesilal] The community is pretentious; are emerging discourses that illuminate silence of the community from actively participating in environmental sanitation activities.

I would think that the exclusion of the community’s knowledge, its community participation at higher level, the exclusion of the teaching of the notion of community participation at a grass root level might have made the community powerless and become silent in discharging its responsibility to keep its own environment clean but rather externalize it to the government.

#### **4.3.3.3. Discourses of Mistrust**

As indicated in the Health Service Extension Implementation Guideline (MoH, 2004a), for example, winning community’s trust is noted as one major strategy to facilitate community participation in environmental sanitation activities. However, there were those who understood the efforts of health extension workers differently. For example, one participant said ‘የጤና ኤክስቴንሽን ሠራተኞች የመንግሥት ቃፊሮች ናቸው’[yetenal eksitenshin serategnoch yemengist kafiroch nachew] The health extension workers are *government agents* who go from house to house to spy but not really to teach (FGI4-1:12).

As explained by another participant,

ሰዎች ብሮሽሮችን ይወስዱና ካዩት በኋላ ቀደው ይጥሉታል። ቢያነቡትም ቅሉ መልዕክቱን አይወስዱትም። በቃ ዝም ብለው ያዩአቸዋል። ማህበረሰቡ በሬዲዮም ሆነ ቴሌቪዥን ስለአካባቢ ዕዳት አይከታተሉም። በራሪ ዕሉፎችንም አያነቡም። እንግዲህ ጀመራቸው ይላሉ። ማህበረሰቡ ማስታወቂያዎችን ይቀዳል። ማስታወቂያዎችን ማንበብ አይፈልግም።

[sewoch brosherochin yiwesduna kayout behuala kedew yitelutal. Biyanebutim kilu melikitun aywesdutim. Beka zim bilew yayouachewal. Mahiberesebu beredion hone television silakababi tsedat ayiketatelum. Berari tsihufochinm ayanebum. Engidih jemerachew yilalu. Mahiberesebu mastawekiyawochin yikedal. Mastawekiyawochin manibeb ayfeligim]

People take brochures and they look at them and tear and throw them away. Even if they read it they don't take the messages in. They look at them. Finished. The community doesn't listen to radio or television about such things environmental sanitation. It doesn't also read pamphlets. It is bored. They say, 'They have started' kind of thing. The community tears notices otherwise it doesn't want to read (FGI1-3: 16).

The situation was further explained by another participant as 'ችግሩ ሰዎች የተማሩትን በተግባር ላይ አያውሉትም'[chigiru sewoch yetemartin tegbar lay yawilutim] The problem is people don't put what they learn into action. They say, 'የጤና ኤክስቴንሽን ሠራተኞች ሁልጊዜ አያልቅባቸውም'[yetena eksitenshin serategnoch ayalkibachewim]

The health extension workers have always a talk to talk (FGI1-5: 16).

It was revealed during the interview that 'ሰዎች በጤና ፓኬጅ ላይ እምነት የላቸውም'[sewoch betena pakeju lay eminent yelachewim] People do not have faith in the health package. 'በጤና ትምህርቱም ላይ እምነት የላቸውም'[betena timihiritum lay eminent yelachewim] Also, they do not have trust in the health education given' ለፖለቲካ ጠቀሜታ የምናውለው ይመስላቸዋል 'They think that we use them for political purposes.

‘በምንስጣቸው ትምህርት አያምኑም’[beminisetachew timihirite ayaminum] They do not believe in the education we give them (KI-1:18).

A more or less similar view was shared by another informant. He indicated that ‘ልነግርህ የምችለው ነገር ቢኖር በብዙ ቦታዎች እነዚህን የጤና ኤክስቴንሽን ሠራተኞች ማህበረሰቡ ይጠራጠራቸዋል’[linegrim yemichilew neger binor bebizu botawoch inezih yetena eksitenshin serategnoch mahiberesebu yiterterachewal] What I can tell you is that in many places the community suspects these health extension workers. ‘ማህበረሰቡ የጤና ኤክስቴንሽን ሠራተኞች ብቃት የላቸውም ብሎ ያስባል’ [mahiberesebu yetena eksitenshin serategnoch biqat yelachewim bilo yasibal]. The community thinks that the health extension workers are ineffective (KI-6:20). I would think that this might have forced the community to perceive the health extension workers as agents of the government.

Another informant felt that ‘ሰዎች የምናስተምረውን ትምህርት ከፖለቲካ ጋር ያያይዙታል’ [sewoch yeminastemirewin timihirit kepoletika gar yayayizutal] People connect our teaching with politics. ‘እንደሚመስለኝ ከሆነ የሚጎዳቸውንና የሚጠቅማቸውን ለይተው ማወቅ አለባቸው’ [indemimesilegn kehone yemigodachewinina yemitekmachewin leyitew maweq alebachew] I think they have to make a distinction between what harms them and what not. ‘ይህ ነው ትልቁ ችግር’ [yihe new tiliqu chigir] This a big problem (KI-7:22).

The individual in-depth interview and focus group discussion participants also expressed their feelings of suspicion about the methods the health extension workers were using.

For example, one participant commented that ‘የጤና ኤክስቴንሽን ሠራተኞች የፈለጉትን ቤት ይርጣሉ’[yetena ekistenshin serategnoch yefelegutin bet yimertalu] The health extension workers choose those houses which they want. ‘በእርግጥ ለምን እነዚህን ቤቶች እንደሚመርጡ አይታወቅም’[bergit lemin inezihin betoch indemimertu aytaweqim] In fact it is not known why they chose those houses. ‘ሌሎች ተመሳሳይ ቤቶች አሉ’[leloch temesasay betoch alu] There are also other similar houses. ‘ነገር ግን እነዚህ ቤቶች ሲመረጡ አላይም’[neger gin inezih betoch simeretu alayim] But these houses were not chosen. ‘ምን ዓይነት ትምህርት ለህዝቡ እንደሚሰጡ አላውቅም’[min aynet timihirite lehizbu indemisetu alawqim] I don’t know what kind of education they give to the people (II-02: 14). Another participant argued that ‘ይሄ አንድ ለአምስት የሚባለው የማስተማር ዘዴአቸው ጠፍንግ ነው’[yihe and lamist yemibales yemastemar zedeachew tefnig new] The so called one -to -five strategy of teaching is ‘tefnig’ ” (II-3:14).

It is clear from the expressions that,

- ‘የመንግሥት ቃፊር’[yemengist kafir] government agents;
- ‘ አይተው ቀደው ይጥሏቸዋል’[ayitew qedew yitiluachewal] They look at them and tear and throw them away;
- ‘መልዕክቱን ወደ ውስጥ አይወስዱትም’[melikitun wede wisit aywesdutim] They don’t take the messages in;
- ‘እንገዲህ ጀመራቸው’[ingidih jemerachew] They have started;
- ‘ማስታወቂያዎችን ይቀዳሉ’[mastawekiyawochin yikedalu] They tear notices;
- ‘አያልቅባቸውም’ [ayalkibachewin] They have always a talk to talk;

- ‘እምነት የላቸውም’ [iminet yelachewim] They do not have a trust;
- ‘አያምኑም’ [ayaminum] They do not believe;
- ‘ይጠራጠሯቸዋል’ [yitereteruachewal] They suspect ...;
- ‘ብቃት የላቸውም ብለው ያስባሉ’ [biqat yelachewim bilew yasibalu]  
They think that the health extension workers are ineffective;
- ‘ሰዎች የምናስተምረውን ትምህርት ከፖለቲካ ጋር ያያይዙታል’  
[sewoch yeminastemirewin timihirite kepoletika gar yayayizutal]  
People connect our teaching with politics;
- ‘የፈለጉትን ቤት ይመርጣሉ’ [yefelegutin bet yimertalu]  
They choose whichever houses they want;
- ‘ምን ዓይነት ትምህርት እንደሚያስተምሩ አይገባኝም’  
[min aynet timihirit indemiyastemiru aygebagnim]  
I don’t know what kind of education they give to the people;
- ‘ተብዬዎች’ [tebiyewoch] The so called; and
- ‘ጠፍንግ’[tefnig] in the excerpts above demonstrate emerging discourses of mistrust that might have emerged from absence of transparency on the part of the health providers.

### 5.3.4. Discourses of Power Relations

In this section, I provide power relations in environmental health discourses to promote community participation. The section particularly reflects on power relations emerging from the interview responses of the participants. The interview data reveals that the health

extension workers exercise their power through the process of teaching environmental sanitation lessons. For instance, one informant explained that

በዕዳት ዘመቻ ላይ፤ በስብሰባ ላይ፤ መሳተፍ እንዳለባቸው እናስተምራቸዋለን። በአካባቢ ጤና ትምህርት ላይ እንዲሳተፉ እናስተምራቸዋለን። ከቤት ቤት በመዞር የጤና ትምህርት እንሰጣቸዋለን። ቆሻሻ ምን ያህል ለእነሱም ሆነ ለልጆቻቸው ጎጂ እንደሆነ እናስተምራቸዋለን። የራሱን አካባቢ ሊንከባከብ የሚችል ማህበረሰብ ለመፍጠር እየሞከርን ነው። [betsedat zemecha lay, besibseba lay, mesatef endalebachew inastemirachewalen. Bakababi tena timihirt lay indisatefu inastemirachewalen. Kebet bet bemezor yetena timihitite inseteachewalen. Qoshasha min yahil lenesum hone lelijochachew goji indehone inastemirachewalen. Yerasun akababi linkebakabeb yemichil mahiberesebe lemefiter iyemokerin new]

We teach them that they should participate in sanitation campaigns and also meetings. We teach them that they should participate in environmental health education. We give health education 'by going from house to house. We teach them how wastes are harmful for them, and for their children. We are trying to create a community that can safeguard on its own environment (KI-2: 19).

Another informant indicated ቲዎሪን በተግባር እንዴት መተርጎም እንዳለባቸው እንነግራቸዋለን። ለምሳሌ፤ በአካባቢ ዕዳት ዘመቻ ላይ እንዲሳተፉ እንነግራቸዋለን። እንዲሁም እንዴት የሽንት ቤታቸውንና አካባቢያቸውን ንዕህና መጠበቅ እንዳለባቸው እናስተምራቸዋለን። [tiworin betegbar endet metergom endalebachew eninegrachewalen.

Lemisale, bakababi tsedat zemecha lay endisatefu eninegrachewalen. Endihum endet yeshint betachewinina akababiachewin netsihina metebeq endalebachew enastemirachewalen]- We tell them how they must put the theory into practice. For example, we tell them to participate in environmental sanitation campaigns. We also teach them 'how they should keep their toilets and their environment clean' (KI-5: 21).

The exercise of power relation is further indicated by what another informant underscored, ቆሻሻቸውን እንዴት ማስወገድ እንዳለባቸው እንነግራቸዋለን። ቆሻሻ ሰብስበው ማቃጠል እንዳለባቸው እንነግራቸዋለን። እንዲሁም ከቤት ለቤት በመሄድ ማህበረሰቡን እናስተምራለን። አንድ ለአምስት ዘዴን በመጠቀም እስተምራቸዋለን። [qoshashan endet masweged endalebachew eninegrachewalen. Qoshasha sebsibew makatel endalebachew eninegrachewalen. Endihum kebet bet bemehed mahiberesebun enastemiralen. And le amidst zeden bemetekem enastemirachewalen]- We tell them how they must dispose waste. We tell them that they should collect waste and burn. We also go from house to house and teach the community. We teach them'through one- to -five strategy (KI-6:22).

One informant also stated that, ማንኛውንም አጋጣሚ በመጠቀም ቆሻሻ ለጤና አደገኛ መሆኑንና እንዴት መወገድ እንዳለበት ማህበረሰቡን እናስተምራለን። ህዝቡ በአካባቢ ዕዳት ላይ እንዲሳተፍ እንቀሰቅሳለን፤ እናነቃለን፤ እናበረታታለን። [manegnawinim agatami bemetekem qoshasha letena adegegna mehonuna endet meweged endalebet mahiberesebun inastemiralen. Hizibu bakababi tsedat lay endisate eniqesqisalen, enanekalen, enaberetatalen]

Using every opportunity we teach the community how wastes are dangerous to health and how they should dispose them. We sensitize and awaken and motivate the people so that they should participate in keeping their environment clean (KI-7: 24).

It then emerged from the excerpts that the discourses,

- ‘እናስተምራቸዋለን’[enastemirachewalen] We teach them;
- ‘እንሰጣቸዋለን’ [ensetachewalen] We give them ‘
- ‘ለመፍጠር’ [lemefter] to create;
- ‘እንነግራቸዋለን’ [eninegrachewalen] Tell them;
- ‘እንቀሰቅሳቸዋለን’[enkesekisachewalen] We sensitize them;
- ‘እናነቃቸዋለን’[enanekachewalen] We awaken them;
- ‘እናበረታታለን’[enaberetatalen] We motivate them, demonstrate essentially a top-down power relation.

This form of control of knowledge as a power not only assumes the authority of ‘the truth’ but also has the power to make itself true (Wetherell, M. et al, 2001). This implies that the health extension workers position themselves as knowers about environmental sanitation. It shows the dominance of scientific (expert) knowledge which appears to be ratified or legitimized by the health providers. They further show as the community are ignorant about sanitation and has to be filled with. As can be seen from the discourses above, the first person plural ‘እኛ’ [engna] which is to mean ‘we’ is repeatedly reflected. The frequent use of the pronoun ‘እኛ’ [engna] (we) manifests totalization as one technique of power that is identified by collectives. It seems that this totalization technique is used in environmental sanitation discourses for controlling the target audience. The term ‘እኛ’ [engna] *i.e.* ‘we’ as indicated above refers to the health extension workers themselves and others who are authoritatives. The use of ‘እኛ’ [engna] ‘we’

externalizes the community and signifies the power of those who are above the community (e.g. the elites).

The verbs ‘እናስተምራለን’[enastemiralen] (teach), and እንነግራለን (tell) are reworded in the views of the key informants. The use of the verbs plays a critical role in the content of messages. The verbs decide various actions and demonstrate what the producers of the message want to communicate to viewers (Halliday, 1994; Fairclough, 2001). Examination of the data in the above excerpts reveals the use of the verbs ‘እናስተምራቸዋለን’ (teach), ‘እንነግራለን’ [eninegralen] (tell) ‘እንሰጣለን’ [ensetalen] (give), እንቀሰቅሳለን’[enkesekisalen] (sensitize) and ‘እናነቃለን’ [enanekalen] (awaken) show the powerful position that the health extension workers and the unsaid others occupy.

Similarly, the use of modal verbs in the key informants’ responses implies the degree of imposition as if what they teach is an indisputable truth. It does this by sounding instructive and obligatory in an imperative mood inviting resistance from the community. In the key informants’ responses, for example, ‘ቆሻሻቸውን መቆጣጠር አለባቸው’ [koshashachewin mekotater alebachew] They *should* manage their waste; ‘ቆሻሻቸውን ማስወገድ አለባቸው’[koshashachewin maswedged alebachew] They *should* dispose their waste; ‘ቆሻሻ ሰብስበው ማቃጠል አለባቸው’ [koshashachewin sesibew makatel alebachew] They *must* collect their waste and burn, the word ‘አለባቸው’ [alebachew] which is commonly and frequently used deployed in the example discourses expresses close affinity to the proposition and reflects the power relations. It limits the community’s

creative indigenous knowledge of deciding what is right or appropriate and 'implies some form of power imbalance' (Fairclough, 1992:159). It is authoritative manifestation of an asymmetrical exercise of power within the discourses. Such type of assumptions may breed resistance within environmental sanitation discourses as the community may perceive it with its pre-conceived assumptions and may impose its own contextual meanings which could be contradictory to what the policy makers intend or assume to do.

## **CHAPTER FIVE**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.0. Introduction**

In the preceding chapter, attempts were made to describe, interpret and explain the underpinning meanings of key environmental sanitation discourses in promoting the principles of CP in Ethiopia. This chapter draws conclusions and provides recommendations to address the communication gap towards promoting community participation in environmental sanitation interventions. In so doing, I have reflected on the research method, the research questions and the major findings.

#### **5.1. Critical Discourse analysis as a Research Method**

The use of critical discourse analysis as an innovative method to explain the role of community participation in environmental health has been found useful. It enabled me to gain answers to the research questions that guided the investigations. I was able to explore the power relations of environmental sanitation discourses and how they impacted community participation. It provided tools for exploring the intents and assumptions of the elites about environmental sanitation and uncovering the ‘lived’ ideology of the target community towards their participation. A critical discourse analysis enabled the researcher to have a better perspective of how environmental sanitation discourses are constructed in key policy and health related documents. It also helps to understand the roles of health programmers, health extension workers and the community

in an effort to create knowledge and skills that are necessary to enhance sustainable environmental health. The use of critical discourse analysis also assisted to the understanding of what discourse strategies are used in environmental health communication during community participation.

## **5.2. Observations and Concluding Statements**

On the bases of the findings discussed in chapter five, the researcher generally concludes by saying that the environmental health communications are mostly transmissions of messages as determined by higher experts in health. In effect, although the policy documents emphasize community participation, the community is excluded from agenda setting, deliberating on strategies and ways of operationalizing health communication at ICC/BCC level. They are mostly waste disposal and management oriented discourses and messages.

Community participation is the key policy discourse in the environmental health policy and program documents. It is consistently articulated as a strategic goal of environmental health interventions, as well as a means to achieve sustainable environmental health. Environmental health promotion is also increasingly advocated as a way forward to develop the community's awareness and attitudes toward positive sanitary practices. It is well recognized that the community can develop self-responsibility of environmental sanitation that can enhance participation when they are empowered with the right information.

A deconstruction of environmental health discourses using critical discourse analysis show that the target communities have no say on environmental health discourses. Although health extension workers are expected to work with the communities, they rather focus on passing prefabricated information on the bases of their understandings and assumptions of environmental health without considering community beliefs and values. Health extension workers understanding of community participation is attending meetings, get involved in cleanup campaigns, paying sanitation service bills on time. This makes community members to believe that environmental sanitation is the business of the health workers. They don't believe that they have accountability and responsibility in keeping their environment clean. The observations I made also show that environmental health is not adequately resourced for educating the people., apart from passing information

When it comes to the operationalization of community participation discourse, it is not enacted. There is no participatory communication. Messages are passed through different mediums. These messages are externalized by communities because they are not dialectically connected and synthesized through the use of participatory communication.

The environmental sanitation discourses promoted in the communication materials focused on transmitting bio-medical information. The social aspects, i.e. the roles and responsibilities of the community, and how the community should be involved in environmental sanitation interventions were not given attention. Rather, discourses of obligations were greatly capitalized. As a result, people remained unaware of their

responsibilities of environmental sanitation, except attending meetings and cleanup campaigns.

Communities did not have a part in environmental health communication. Though it was pronounced that community should participate from the planning through the implementation, and the monitoring and evaluation of environmental health policies, programs and interventions, this was not made practical on the ground. The ‘truth’ about community participation was constructed as participating in meetings, cleanup campaigns, paying sanitation service fees. This has hampered communities from developing sense of ownership in environmental health and behaviorally acted in making the environment polluted and dirty.

The communication in practice has not helped communities to question their assumptions of environment, sanitation and why they should take responsibility in keeping their environment clean. Due to existing communication gaps among the policy makers, program designers and implementers and the community, people have not developed sense of belongingness or ownership. They did not show any concern for others’ ill sanitary practices; rather they tended to keep quiet or taking it as if it is the Government’s responsibility. In Addis Ababa, one can say every person is a polluter and a contributor to the existing environmental sanitation deterioration, although Addis Ababa is the capital of Africa and seat of many embassies and international organizations.

The discourses of mistrust that the participants demonstrated show that over politicization of health has a negative consequence. Participants believed that the health extension

workers were recruited and employed on the basis of their political affiliation not on qualifications and skills. They think that the health extension workers are political agents of the government, and the house to house visit *they make* and the one-to-five '*tefnig*' strategies are all for spying. This kind of perception makes the community reluctant and resistant to participate in the activities.

To summarize, the policy and program discourses of the elites on environmental health and sanitation were not found to be congruent with the social constructions of community participation. Such a mismatch was created because the intentions and assumptions articulated in the key documents could not be enacted as articulated. As a result, community participation has rather been limited to the daily routine sanitation activities. The environmental health communication approach is essentially top-down in practice. The failure to involve communities by considering community social capital, wisdom, indigenous knowledge and real life experiences alienated communities from assuming ownership and accountability in environmental health and sanitation.

### **5.3. Recommendations**

Taking into account the constraints identified that hinders the promotion of community participation in environmental sanitation activities, I have provided the following recommendations:

- If community participation is to be ensured, communities should participate in the setting of communication agenda, operationalizing and strategizing such an agreed agenda, and monitoring and evaluating the effect of such activities.

- Training health extension and other health workers in the management and facilitation of community participation in health communication
- Political commitment, effective leadership and support to enhancing and realizing of grassroots level community participation. This requires giving more time and space to communities, setting clear guideline as to how they can participate, and involving them stage by stage. The focus on message transmission would not bring desirable behavioral changes for ensuring environmental health and sanitation through knowledge transfer and ownership of communities as outlined in the health extension program.
- There should be more research on community discourses on health in order to explore community assumptions, beliefs, and conceptual frames underpinning their practices.

## REFERENCES

- Addis Ababa City Administration. (1998). *Improving urban Environmental Conditions in Addis Ababa*. Addis Ababa City Sanitation and Beautification and Park Development Agency.
- \_\_\_\_\_. (2010). *A Document prepared for discussion to support the Addis Ababa city sanitation, beautification, health and environmental protection activities through community mobilization*. Addis Ababa. (Amharic version).
- Addis Ababa City Government (ACG) (2006). *Environmental Impact Assessment Regulations*: Negari Gazeta, 4<sup>th</sup> year No. 48.
- \_\_\_\_\_(2009). *Solid Waste Management, Collection and Disposal Regulation*. Addis Ababa Ethiopia
- AAEPA (2006). *Improving Urban Environmental Conditions in Addis Ababa*. Addis Ababa
- Abera Kume and Ahmed Ali (2005). *An Overview of Environmental Health Status in Ethiopia with Emphasis to its Organization, Drinking Water and Sanitation*. Ethiopian Journal of Development. 19(2); 89-103.
- American Public Health Association (2006) *What is Health Communication?* Health Communication Working Group. <http://www.hebd.clemson.edu/publichealth/PHE/HP/Healthcomm/define.htm>.

- Askehave, I. (2007). *The impact of marketization on higher education genres – the international student prospectus as a case in point*. **Discourse Studies**, 9(6), 723-742.
- Babayemi, J.O. and David, K.T. (2009). *Evaluation of Solid Waste Generation, Categories and Disposal Options in Developing Countries: A Case Study of Nigeria*. *J. Appl. Sci. Environ. Manage.* Vol. 13(3) 83 - 88
- Backer, T.E., Rogers, E. M. & Sopory, P. (1992). **Designing environmental communication messages: What works?** Newbury Park, CA: Sage Publications.
- Benti G.(2007). **Addis Ababa: Migration and the Making of Multiethnic Metropolis**. Tenton, NJ: Red Sea Press.
- Berg, B.I. (2004). **Qualitative research methods for the social sciences**. (4<sup>th</sup> ed.) Boston:Allyn & Bacon.
- Berhardt, J.M. (2004). *Communication at the Core of Effective Public Health*. *American Journal of Public Health*, 94(12), 2051-2053.
- Blommaert, J. (2005). **Discourse: Key Topics in Socio Linguistics**. Cambridge University Press.
- Bracht, N. & Tsouros, A. (1990). *Principles and strategies of effective community participation*. **Health Promotion International**, 5: 199-208.

- Camilla, Louise (2005). *The Cycle of Plastic Waste: An analysis on the informal plastic recovery system in Addis Ababa*. Ethiopia (MA Thesis).
- CIA World Fact book (2012). *Ethiopia Urbanization*.
- Cohen, L., Manion, L., & Morrison, K. (2000). **Research methods in education**. (5th ed.) London: Routledge Falmer.
- Communication Affairs Bureau (2010). *The how and why of health extension*. A pamphlet prepared in Amharic. Addis Ababa City Administration, Addis Abab Ethiopia. Addis Ababa. [www.addisabebacity.gov.et](http://www.addisabebacity.gov.et)
- Cox, R. (2006). **Environmental Communication and the Public Sphere**. Thousands Oaks: Sage Publications.
- Creswell, J. W. (2005). **Research Design: Qualitative, Quantitative, and Mixed Approaches** (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Central Statistics Agency (CSA) (2008). *Summary and Statistical Report of the 2007 Population and Housing Census*. Addis Ababa, Ethiopia.
- Degnet A. (2008). *Determinants of Solid Waste Disposal Practices in Urban Areas of Ethiopia: A Household-Level Analysis*. Eastern Africa Social Science Research Review, Volume 24, Number 1, pp. 1-14 (Article)
- De Vos et al (1998). *Community – beyond community action: communication arrangement and policy network in Poland*.

Dornyei, Z.(2007). **Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies.** Oxford University Press.

Downmore, M., Shepherd, Y.M., Andrew, M., Barbara, N., and Daniel, J., (2011). *Municipality Solid Waste Management Challenges of Chinhoyi Town in Zimbabwe: Opportunities of Waste Reduction and Recycling.* Journal of Sustainable Development in Africa- vol. 13, No 2, ISSN, California University.

Enda Ethiopia (1999) *The Cycle of Waste in Addis Ababa.*

\_\_\_\_\_ (2005). *Living Healthily in a Clean and Green City.*

Environmental Protection Authority (2006). *Urban Waste.* Addis Ababa, Ethiopia.

\_\_\_\_\_ (2008). *Akababiachen Magazine.* Vol.3. P. 12.

Exchange (2006). *International Communication.*

<http://www.healthcomms.org/comms/integ/ict-integ.html>.

Fairclough, N. (1992). **Discourse and Social Change.** Cambridge: Polity.

\_\_\_\_\_ (1993). *Critical discourse analysis and the marketisation of public discourse: The universities.* Discourse and Society, 4(2), 133-168.

\_\_\_\_\_ (1995). **Critical Discourse Analysis.** London: Longman.

\_\_\_\_\_ (2001). **Language and Power.** (2<sup>nd</sup> ed.)New York, NY: Longman.

\_\_\_\_\_ (2003). **Analysing Discourse-Textual Analysis for Social Research.**  
**Routledge:London**

Federal Democratic Government of Ethiopia. (1997). *Environmental Policy of Ethiopia*.  
Addis Ababa Ethiopia

Finger, M. (1994). *NGOs and transformation: Beyond social movement theory*.  
*Environmental NGOs in world politics: Linking the local and the global*. London,  
Routledge: 48-66.

Fitsum G. (2007). *Addis Residents Eye Millennium with Huge Challenges*. Cyberzena.  
Com.

Freire, P. (1992). **Pedagogy of the oppressed**. London, Penguin.

Freinmuth, V.; Cole, G.; and Kirby, S. (2000). *Issues in Evaluating Mass Mediated  
Health Communication Campaigns*. Copenhagen: WHO Regional Office for  
Europe.

Girma Kebede (2004). **Living with Urban Environmental Health Risks: Case Study  
in Ethiopia**. Ashgate Publishing Company, USA.

Gough, A. (2003). *Working with history: engaging in curriculum policy research* (A  
paper presented at Rhodes University Research Design Course. Grahamstown.

Hall, S. (1992). *The west and the rest*. In S.Hall and B. Geldon (eds.) *Formations of  
Modernity*. Cambridge, Polity Press/The Open University.

Halliday, M. A. K. (1985). **An introduction to functional grammar**. London, UK:  
Arnold

- Hand in Hand. (2008). *A Proposal for Solid Waste Management – Environmental Protection that Benefits the Poor*. India
- Hanks, W. (1996). **Language and Communicative Practice**. Boulder: Westview.
- Health Education Center. (2004) **National Health Communication Strategy**. Ministry of Health, Federal Democratic Republic of Ethiopia.
- Health Education and Extension Center (2007). **Health Extension Program in Ethiopia. Profile**. Ministry of Health , Federal Democratic Republic of Ethiopia.
- Holtgrave, D.R., Tinsley, B. J., & Kay, L.S. (1995). *Encouraging risk reduction: A decision-making approach to message design*. In E. Maibach & R. Parrot (Eds.). *Designing Health Messages: Approaches from Communication Theory and Public Health Practice*. Thousand Oaks, CA: Sage.
- Hutton, G., Haller, L., & Bartram, J. (2007). *Economic and health effects of increasing coverage of low cost household drinking water supply and sanitation interventions to countries off-track to meet MDG target 10*. Geneva, Switzerland.
- Jackson, L. D. & Duffy, B. K. (Eds.) (2000). **Health Communication Research**. Westport, CT: Greenwood.
- Javan, J. (1998). *Empowerment for Community Development. A Multivariate Framework for Assessing Empowerment at the Community Level*. Department of Psychology. North Carolina state University.

- Jorgensen, H. & Phillips, L. (2002). **Discourse Analysis as Theory and Method**. SAGE Publications: London.
- Kahssay, H. & Oakley, P. (1999) (eds.). **Community involvement in health developments: a review of the concept and practice**.
- Kaundal, R. and Sharma Avinash (2007). *Problems of Household Waste Disposal*. Department of Family Resource Management, College of Home Science, CSK HPKV, Palampur 176 062, Himachal Pradesh, India.
- Koteyko, N. (2006). *Corpus Linguistics and the Study of Meaning in Discourse*. Linguistics Journal, Vol. 2
- Kress, G.L. (1988). *The pervasive role of information in health care: Implication for health communication policy*. In J. Anderson (ed.), *Communication Yearbook 11*, (238-276)
- Kumar, R. (1999). **Research methodology: A step-by-step guide for beginners**. London: Sage.
- La Bonte R. (2005). *Community, community development and the forming of authentic partnerships: some critical reflections*. In **Community Organizing and Community Building for Health**, ed. M Minkler, p. 84. New Brunswick, NJ: Rutgers Univ. Press. 2nd ed. 44
- Laverack, G. & Wallerstein N. (2001). *Measuring community empowerment: a fresh look at organizational domains*. *Health Promotion International*, 16: 179-185

- MacCulloch, A.J. (2011). *Mapping of the Interior: A Critical Discourse Analysis of Emotional Competence*. A PhD thesis, AUT University.
- Maibach, E. & Flora, J. (1993). *Symbolic modeling and cognitive rehearsal*. *Communication Research*, 20, 517-545.
- Mark, G.R. and William A. Toscano (eds) (2007). **Risk Assessment for Environmental Health**. John Wiley & Sons Inc.
- Mattessich PW, Monsey BR. 1992. *Collaboration: What Makes It Work, A Review of Research Literature on Factors Influencing Successful Collaboration*. St. Paul, MN: Wilder Found
- McGregor, S.L.T. (2003). *Critical Discourse Analysis---A Primer*. Kapa Omicron Nu FORUM. Vol. 15, No. 1.
- McGuire, W.J. (2001). *Health Communication Message Review Criteria*. University of Toronto.
- Meheret Ayenew (2006). *The City of Addis Ababa: Policy Options for the Governance and Management of a City with Multiple Identities*. Forum for Social Studies, Addis Ababa.
- Ministry of Works and Urban Development (2007). *Improving Access to Urban Land: Paper Presented at the Conference on Private Sector Led Growth in Ethiopia; improving the investment climate from Strategy to Action June 27-28, Addis – Ababa*. National Urban Planning Institute (NUPI). Ministry of Federal

- \_\_\_\_\_ (2008) *RSDP Performance: Eleven Years Later*. Ethiopian Roads Authority  
Ministry of Health . (1996). *Health Sector Development I*. Federal Democratic Republic  
of Ethiopia.
- \_\_\_\_\_ (2002). *Health Sector Development II: 2002/03-2004/05*. Addis Ababa, Federal  
Democratic Republic of Ethiopia.
- \_\_\_\_\_ (2004a). **Solid and Liquid Waste Health Extension Package**. Addis Ababa,  
Federal Democratic Republic of Ethiopia.
- \_\_\_\_\_ (2004b). *National Sanitation Strategy for Ethiopia*. Final Draft. Addis Ababa,  
Federal Democratic Republic of Ethiopia.
- \_\_\_\_\_ (2004c). **Health Education and Communication Manual for Health Extension  
Package**. Federal Democratic Republic of Ethiopia, Addis Ababa.
- \_\_\_\_\_. (2004e). **Personal Hygien Extension Package**. Federal Democratic Republic of  
Ethiopia, Addis Ababa.
- \_\_\_\_\_ (2005a). **National Hygiene and Sanitation Strategies** Federal Democratic  
Republic of Ethiopia, Addis Ababa,
- \_\_\_\_\_ (2005b). **Health Service Extension Implementation Guideline**. Addis Ababa,  
Federal Democratic Republic of Ethiopia.
- \_\_\_\_\_ (2005c). *Health Sector Development III*, Addis Ababa, Federal Democratic  
Republic of Ethiopia.

\_\_\_\_\_.(2008). **City Solid and Liquid Waste Management and Disposal Extension Package**. Addis Ababa, Federal Democratic Republic of Ethiopia.

\_\_\_\_\_ (2009). **City Health Extension Manual**. Federal Democratic Republic of Ethiopia, Addis Ababa, Ethiopia.

Mohamed N. and Elsa Z. ( 2003). *Waste Management Programme*. UNIDO View Document, No. 3765. Tokyo, Japan

Moningka, L. (2000). *Community Participation in Solid Waste Management: Factors Favoring the Sustainability of Community Participation*. UNEP, Occasional Paper.

Muturi, N. (2005). '*Communication for HIV/AIDS Prevention in Kenya: Socio-cultural considerations*'. Journal of Health Communication 10(77-98).

New South Wales, Australia (2006). *Health Promotion Glossary*. <http://www.health.nsw.gov.au/public-health/healthpromotion/abouthp/glossary/html>

Newman, W.L. (2000). **Social research methods: Qualitative and quantitative approaches**. Boston: Allyn & Bacon.

Nikkhah, H.A. and Redjuan, H. (2009). *Participation as a Medium of Empowerment in Community Development*. Ethiopian Journal of Social Sciences- vol. II, No. 1(2009).

Office of Disease Prevention and Health Promotion. (2000) *Healthy People 2010*. 2<sup>nd</sup> ed Department of Health and Human Services, US.

\_\_\_\_\_.(2003) *CANCER AND THE ENVIRONMENT: What You Need to Know; What You Can Do*. Department of Health and Humana Services NIH, NCI & NIEHS. NIH, US Publication No. 03-2039

\_\_\_\_\_. (2004). *Health Communication*. Healthy People 2010 (vol.1). US URL: [http://healthy.people.gov/Document/HTML/volume 1/ 11 HealthCom.htm#-edn4](http://healthy.people.gov/Document/HTML/volume%201/11HealthCom.htm#-edn4). Accessed on 8/30/2011.

\_\_\_\_\_. (2005). *Healthy People 2010*. Volumes 1 and 2 Department of Health and Humana Services, US [http://www.healthy.people.gov/document/HTML/Volume 1 / 11/HealthCom. htm](http://www.healthy.people.gov/document/HTML/Volume%201/11/HealthCom.htm).

Philips. L. & Jørgensen, M. (2006) **Discourse Analysis as Theory and Method**, London: Sage.

Population Rreference Bureau (2009). *2009 World Population Data Sheet*. USA.

\_\_\_\_\_(2010). *2010 World Population Data Sheet*. USA.

Post Conflict and Disaster Management Branch (2007). *Assessment of Solid Waste Management in Liberia*. United Nations Environment Programme (UNEP)

Potter. J. (1997). *Discourse analysis as a way of analyzing naturally occurring talk*. In D. Silverman (ed.) **Qualitative Research Theory, Method and Practice**. London, Sage.

Rappaport, J. (1987). *The power of empowerment language*. Social Policy. 15: 15-21.

- Ray, E.B. and Donohew, L., eds. (2005). **Communication and Health: Systems and Applications**. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Regassa, N.; Sundaraa, R.; and Bogale, B.(2011). *Challenges and Opportunities in Municipal Solid Waste of Addis Ababa City, Central Ethiopia*.
- Rifkin, S.B & Pridmore, P. (2001). **Partners in Planning: information, participation and empowerment**. London and Oxford: Macmillan.
- Roe, B.(2008). *Urban Challenges in Addis Ababa*. Department of Urban Design and Planning, Faculty of Architecture and Fine Art, NTNU, Trondheim- PhD and Masters Theses
- Rosenberg, M. (1995). **Society and the Adolescent Self-Image**. Princeton, N.J. Princeton University Press
- Saichaie, K. (2011). *Representation on college and university websites: an approach using critical discourse analysis*. A PhD dissertation: University of Iowa.
- Schiavo, R. (2007). **Health Communication: From Theory to Practice**. John Wiley & Sons. Inc.
- Schmidt, E. and Melkamu K. (2009). Urbanization and Spatial Connectivity in Ethiopia: Urban Growth Analysis Using GIS. Development Strategy and Governance Division, International Food Policy Research Institute- Ethiopia Strategy Support Program 2, Ethiopia. Discussion Paper No. ESSP2 003.

- Schulz, A.J.; Israel, B.A.; Zimmerman, M.A.; and Checkoway, B.N. (1994). *Empowerment as a multilevel construct: Perceived control at the individual, organizational and community levels.*
- Selamawit Alemu (2007). *New Partners for Local Government in Service Delivery, Solid Waste Management in Addis Ababa-* MA Thesis.
- Shewaye Tesfaye (1999). *Urban Development and Management in Ethiopia: The Present Context* (Urban Development Support Office)
- SIDA (2005). *Sanitation and Cleanliness for a Healthy Environment: The Hesperian Foundation in Collaboration with the United Nations Development Program*
- Smiths, W A and Honik, R. (1999). **Marketing, communication, and advocacy for large scale STD/HIV prevention and control.** New York: McGraw-Hill.
- Smithies, J. & Webster, G. (1998). **Community involvement in health: from passive recipients to active participants.** Aldershot, Ashgate.
- Smithies, J. & Adam, L. (1990). **Community Participation in Health Promotion.** London
- Solomon A. (2006). *Solid Waste Management: A Case Study of Household Solid Waste Management in Arada Sub-city, Addis Ababa.* Unpublished MA Thesis.
- Subash, A. (2001). *Community Participation in Solid Waste Management.* TNUDP-III.

- Symthe, S. (2006). *The Good Mother: A Critical Discourse Analysis of Literacy Advice to Mothers in the 20<sup>th</sup> Century*. A PhD thesis, University of British Columbia.
- Tadesse Kuma (2004). *Waste Management in Addis Ababa*. Unpublished MA Thesis
- Tekle Woldegerima (2008). *Policy and Legislative Measures for Environmental Management*.
- Temesgen, M. and W. Legesse. 2005. *Analysis of the type and amount of solid waste generated and adopted disposal methods by the residents of Bonga town*. *Ethiopian Journal of Health Sciences*, 15, pp. 157-166
- Transitional Government of Ethiopia (1993). **Health Policy**. Addis Ababa, Ethiopia.
- Thomas, R. K. (2006). **Health Communication**. USA
- UN-HABITAT (2007). *Situation Analysis of Informal Settlements in Addis Ababa*. United Nations Human Settlement Program, Nairobi.
- \_\_\_\_\_ (2008). *Ethiopia: Addis Ababa, Urban Profile* - United Nations Human Settlements Programme
- UNDP (2004). *Urban Agriculture: Food, Jobs and Sustainable Cities*. New York: UNDP Urban Harvest Working Paper Series, Paper No. 1.
- UNICEF – Ethiopia (2001), *Water, Environment and Sanitation*. <http://www.unicef.org/ethiopia/wes.html>

- Environmental Health Policy Committee. (1998). *An Ensemble of Definitions of Environmental Health*. Department of Health and Human Services, Risk Communication and Education Subcommittee. U.S.. Retrieved June 29, 2009, from <http://www.health.gov/environment/DefinitionsofEnvHealth/ehdef2.htm>
- Van, Rovijen, & Taddesse G. (2009). *Urban sanitation and wastewater treatment in Addis Ababa in the Awash Basin, Ethiopia*. 34<sup>th</sup> WEDC International Conference, Addis Ababa, Ethiopia.
- Walter, C. (1998). **Community building practice: a conceptual framework**. Rutgers University Press.
- Water-Aid (2003). *KABP Study on Sanitation Preference*. UNICEF-KABP Study
- Wetherell, M., Taylor, S., & Yates, J.S. (2001). **Discourse Theory and Practice**. SAGE Publication Ltd.
- Wood, A.L. and Kroger, O.R. (2000). **Doing Discourse Analysis: Methods for Studying Action in Talk and Text**. Sage Publications, Inc.
- World Bank (2009) *The World Development Report: Reshaping Economic Geography*.  
World Bank, Washington, DC.
- World Health Organization (1978). *Alma-Ata 1978. Primary health care report of the International Conference on Primary Health Care*. Alma-Ata, USSR, 6-12 Sept. 1978. Geneva.

- \_\_\_\_\_(1981). *Global Strategy for Health for All by the Year 2000*. Geneva: WHO
- \_\_\_\_\_(1985). *Community involvement for health development: A Report of the Interregional Meeting in Brioni, Yugoslavia, 9-14 June 1985*, SHS/85.8, WHO, Geneva, 1985.
- \_\_\_\_\_(1986). *The Ottawa Charter for Health Promotion*. First International Conference on Health Promotion.
- \_\_\_\_\_. (1988). *The Adelaide Recommendations on Healthy Public Policy*. Geneva
- \_\_\_\_\_(1991) *The Health and Environment Initiative*. Geneva
- \_\_\_\_\_(1997). *Jakarta Declaration on Health Promotion into the 21<sup>st</sup> Century*. Geneva.
- \_\_\_\_\_. (1998). *Health for all in the 21<sup>st</sup> Century*. Geneva (Document WHA 51/5)
- \_\_\_\_\_.(2002). *Participation in local Health and Sustainable Development Approaches and Technologies*. Regional Office for Europe Community Copenhagen: Center for Urban Health.
- \_\_\_\_\_(2005). *Country cooperation strategy: Ethiopia*. Regional Office for Africa. Brazzaville.
- \_\_\_\_\_(2008). *A Guide to Developing Knowledge, Attitude, and Practice Surveys*. Geneva 27: Switzerland.
- \_\_\_\_\_(2009). *The Health and Environment Linkages Initiative*.

- Yergalem, M. (2005). *Landfill Management, its Impacts on the local Environment and Urban Sustainability: The Case of Repi Landfill Site*. Addis Ababa, Ethiopia
- Zerayakob Belete (2002). *Analysis and Development of Solid Waste Management System of Addis Ababa*. Unpublished MA Thesis.
- Zimmerman, M.A. and Rappaport, J. (1988). *Citizen participation, perceived control, and psychological empowerment*. *Am J Community Psychol* 16: 725-750.

## APPENDICES

### **Appendix A: Actual Environmental Health Education Lessons Observation**

(Note from One Site)

**Name of the site:** Site 2 (Woreda 3)

**Date:** 2 June 2012

**Time:** 2:00 P.M. – 4:00 P.M.

#### **Introduction:**

The health extension worker greeted the participant learners. She then introduced me to the participants that I am from Addis Ababa University and doing a research in the area of environmental sanitation. The health extension worker asked the participants what they learnt the previous day. None of them recalled. The health extension worker reminded them and updated them. After that, she introduced the day's lesson topics.

#### **Lesson Topics:**

What is solid waste?

What is liquid waste?

Disposing solid and liquid waste.

Health problems created as a result of not disposing solid and liquid wastes

#### **Learning Environment:-**

There was no classroom.

Participant learners were seated outside in open air facing one another

They were sitting on their own tools. Some were sitting on stone. Others brought their own wooden chairs.

## **Approaches**

Lecturing

Health extension worker doing most of the talking

Health extension worker was asking questions in the middle of her teaching

Participants were passive

Health extension worker calling the name of young participant repeatedly to answer questions

The health extension was trying to relate the lesson with the participants real life

Participants were sometimes speaking about their own problems, for example, that they don't have toilets.

## **Combination of participants:**

The lesson class I observed was a combination of all ages. The participant learners' age ranges from approximately from 16 to 60. Some older participants were spinning as they were listening. Some had little kids and their noises were disturbing. The average number of participants in all the sites I observed did not exceed 7.

In all the sites I observed, only females were attending. I asked the health extension worker about it. They explained that they never find men at home. Even if they find them and ask them, they were not volunteering. They say that they are busy.

**Resources:**

In all the sites I observed, the health extension workers depended on Solid and Liquid Extension Package and their own hand written notes.

## Appendix B: Demographic Characteristics of Survey Interview Participants

### 1. Sex

Sex	Frequency	Percent
Male	119	47.6
Female	131	52.4
Total	250	100.0

### 2. Age

No	Age Interval	Frequency	Percent
1	18-30	69	27.6
2	31-40	35	14.0
3	41-50	78	31.2
4	51-60	46	18.4
5	61-70	18	7.2
6	Above 70	4	1.6
7	Total	250	100.0

### 3. Education

Educational Level	Frequency	Percent
Illiterate	46	18.4
Read and write	44	17.6
Primary	52	20.8
Secondary	73	29.2
Higher	28	11.2
Religious	7	2.8
Total	250	100.0

### 4. Residence

Residence	Frequency	Percent
Woreda 3	55	22.0
Woreda 5	63	25.2
Woreda 6	38	15.2
Woreda 7	43	17.2
Woreda 9	51	20.4
Total	250	100.0

## Appendix C: Public Messages

Key: PM= Public Message

Code	Message	Phonemic transcription	Translation	Developer	Source
PM-1	አካባቢአችን ቢበከል ጤናችን ይበከላል	<i>Akababiachin bibakal tenachin yibekelal</i>	<i>If our environment is polluted, our health will be also polluted</i>	Addis Ababa City Sanitation Management Agency	Slogan
PM -2	ከተማችንን ውብና ዕዱ እናድርጋት	<i>Ketemachinin wubina tsidu enadergat</i>	<i>Let's make our City beautiful and clean</i>	Addis Ababa City Sanitation Management Agency	Slogan
PM -3	ዕዱነት የሰለጠነ ህዝብ መለያ ባህሪ ነው	<i>Tsedunet yeseletene hezib meleya bahiri new</i>	<i>Sanitation is a sign of civilized people</i>	Addis Ababa City Sanitation Management Agency	Slogan

PM -4	<b>ወንዞቻችንን ከብክለት እንታደጋቸው</b>	<i>Wenzochachinin kebeklet entadegachew</i>	<i>Let's safeguard our rivers from pollution</i>	Woreda 6 Sanitation Management Bureau	Pamphlet
PM 5	<b>ዕዳትን ባህላችን እናድርግ</b>	<i>Tsedaten bahelachin enaderg</i>	<i>Let's make sanitation our culture</i>	Office of Woreda 3 Administration	poster
PM 6	<b>አካባቢአችን ሲፀዳ እኛም እንፀዳለን</b>	<i>Akababiachin sitseda egnam entsedalen</i>	<b><i>When our environment becomes clean, we also become clean</i></b>	Addis Ababa City Sanitation Management Agency	Slogan
PM 7	<b>ለጤናችን ውጤታማነት በጋራ እንረባረብ</b>	<i>Ltenachin wetetamanet begara enrebareb</i>	<b><i>Let's cooperate for the wellbeing of our health</i></b>	Woreda 5 Sanitation Management Bureau	Leaflet
PM 8	<b>ሁሉም አካባቢውን ቢያፀዳ ጤናችን በአስተማማኝ ይጠበቃል</b>	<i>Hulum akababiwen biyatseda tenachin bastemamgn yitebekal</i>	<b><i>If all clean their environment, our health becomes sustainable</i></b>	Office of Woreda 9 Administration	Pamphlet

PM 9	በአዲሱ አመት የአካባቢችንን ፅዳት ባህላችን እናድርግ	<i>Badisu amet yakababiachinin tsedat bahelachin enadereg</i>	<i>For the new year, let's make environmental sanitation our culture</i>	Office of Woreda 3 Administration	Brochure
PM 10	አካባቢአችንን ማፅዳትና መንከባከብን ባህላችን እናድርግ	<i>Akababiachinin matsedatena menkebakeb bahelachin enadreg</i>	<i>Let's make cleaning and safeguarding our environment a culture</i>	Woreda 7 Sanitation Management Bureau	Leaflet
PM 11	ፅዳትን የፅለት ተፅለት ተግባራችን ይሁን	<i>Tsedatin yelet elet tegarachin yihun</i>	<i>Let sanitation be our daily activity</i>	Addis Ababa City Sanitation Management Agency	Slogan
PM 12	ሁሉም ግቢውንና አካባቢውን ካፀዳ የቆሻሻ ክምችት አይኖርም	<i>Hulum gibiwenena akababiwen katseda yeqoshasha kimechet aynozem</i>	<i>If all clean their compounds and their environment, there won't be any piles of waste</i>	Woreda 9 Sanitation Management Bureau	Pamphlet

PM 13	በየቀኑ ጥቂት ጥቂት ቆሻሻ በናነሳ አካባቢአችን ነፁህ ይሆናል	Beyeqenu tiqit tiqit qoshasa benanesa akababiachin netsuh yihonal	If we show at least little efforts to pick small wastes every day, our environment will become clean	Woreda 6 Sanitation Management Bureau	Pamphlet
PM 14	በጋራ ጥረታችን አካባቢያችንን ነፁህና ውብ እናድርጋት	Clean, beautify And cooperate	Let's make our environment clean and beautiful through our cooperative efforts	Office of Woreda 3 Administration	Brochure
PM 15	ዕዱነት የሠለጠነ ህዝብ መለያ ባህርይ ነው	Keep clean	Sanitation is a sign of the behavior of civilized people	Addis Ababa City Sanitation Management Agency	Slogan
PM 16	በየስፍራው ቆሻሻ የሚጥሉትን ሰዎች እንቆጣጠራቸው	Control	Let's control those who dispose waste everywhere	Office of Woreda 5 Administration	Leaflet

PM 17	<b>በመንገድ ላይም ሆነ በህዝብ መዝናኛ አካባቢ ሲንቀሳቀሱ ደረቅ ቆሻሻዎችን በቆሻሻ ቅርጫት ውስጥ ብቻ ይጣሉ</b>	<i>Throw wastes into waste bins</i>	<i>While you move on roads and public places, throw your dry waste into only the dust bins</i>	Woreda 9 Sanitation Management Bureau	Leaflet
PM 18	<b>ዕዳታችን ህልውናችን</b>	<i>Keep sanitized</i>	<i>Our sanitation is our survival</i>	Addis Ababa City Sanitation Management Agency	Slogan
PM 19	<b>የዕዳት ጉዳይ የጤናና የልማት ጉዳይ ነው</b>	<i>Keep sanitized</i>	<i>The issue of sanitation is the issue of health and development</i>	Office of Woreda 3 Administration	Brochure
PM 20	<b>ወረቀትን ባግባቡ እንጠምባት</b>	<i>Do not throw papers everywhere</i>	<i>Let's make use of our papers properly</i>	Office of Woreda 6 Administration	Pamphlet

PM 21	<p><b>ዐይናችን ጥሩ እንዲያይ</b>  <b>አፍንጫችን ጥሩ እንዲያሸት</b>  <b>አዕምሮአችን እንዲዝናና</b>  <b>ዕዳት ነው ዋስትና!</b></p>	Keep sanitized	<p><i>Sanitation is a guarantee  if we want our eyes to see  good things, our noses to  smell good things, and  for the refreshment of our  minds</i></p>	Woreda 7 Sanitation Management Bureau	Brochure
PM 22	<p><b>አካባቢን መጠበቅና መንከባከብ</b>  <b>የሁሉም ሀላፊነት ነው</b></p>	Protect and safeguard environment	<p><b><i>It is the responsibility of  all to protect and  safeguard the  environment</i></b></p>	Woreda 3 Sanitation Management Bureau	Brochure
PM 23	<p><b>አካባቢን መንከባከብ ራስን</b>  <b>መንከባከብ ነው</b></p>	Protect environment	<p><i>Protecting the  environment is like  protecting ourselves</i></p>	Addis Ababa City Sanitation Management Agency	Slogan

PM 24	<b>ወንዞቻችንን የከተማችንን የውበት ፈርጥ እናድርጋቸው</b>	<i>Keep sanitized</i>	<i>Let's make our rivers the source of the beauty of our City</i>	Addis Ababa City Sanitation Management Agency	Slogan
PM 25	<b>ለአካባቢ ፅዳት መጠበቅ የህብረተሰቡ ተሳትፎ ወሳኝ ነው</b>	<i>Participation</i>	<i>For environmental sanitation, the participation of the people is decisive</i>	Woreda 5 Sanitation Management Bureau	Brochure

## **Appendix D: Sample Translated Interview Transcript (key informant)**

**R:** First of all, tell me about yourself.

**KI-7:** I'm 23 years old. I've a first degree in Management. I'm head of the Office of Sanitation Management. It has been almost two years since I assumed this position in this woreda.

**R:** Does your office give education about environmental health?

**KI-7:** Yes. We give environmental health education through different methods. First, we go from house to house and teach. Second, we use brochures, leaflets, and other different media. Third, we make use of different forums like meetings and teach the community about environmental health. There about 12 different works about sanitation regulations and awareness raising. So, using every opportunity we teach the community how wastes are dangerous to health and how they should dispose them. In addition, we've organized the youths into associations so that they go from house to house and collect waste. These youths they don't only collect waste. They also teach the community about how they should manage their waste.

**R:** Good. Earlier you talked about brochures. To what extent these brochures reach the community?

**KI-7:** Through our environmental security and awareness raisers brochures are dispatched to the community. But we don't believe that they reach one hundred percent to the target population. This is because when we go from house to house (usually during working time) we don't find a husband or wife at home. We give the brochures to anyone whom we find at home. In any case we select houses and give them every month. In fact, there is a problem of copies. So we may not give brochures to everyone. But we are sure that ninety nine percent of the people have access to brochures.

**R:** Still with regard to the issue of brochure, there are people who are literate as well as illiterate in our community. How can especially those who are illiterate use them?

**KI-7:** Good. We have said that we give awareness using different methods. The brochures are meant for those who can read and write. Parallel with this we give awareness raising education face to face. Our main aim is to reach each and every individual in the community and teach.

**R:** To what extent the brochures or other methods of disseminating environmental health messages consider the age, educational level or interest of the target audience?

**KI-7:** Currently we have been thinking of changing the current system of brochure preparation. There are situations whereby some people throw away these brochures thinking that they know the messages. Some people are may be bored of reading brochures. So for the future we are thinking of making the brochures attractive, for example, putting pictures on the brochures so that people can see

them and understand the messages easily. This is because despite all these communication efforts, we see illegal disposal of wastes. We are not saying that the intended change of behavior has come.

**R:** To what extent the community members are motivated to participate in these environmental health education?

**KI-7:** We've now regular monthly campaigns. We motivate the community members so that they participate in environmental health campaigns during holidays. But anything done through campaigns will not be sustainable. This is because it is the community itself that pollutes environment. It is also the community that has to clean. But it is impossible to say that sustainable environmental health possible by cleaning environment once in a month. If environment is clean, it is the community that is benefited. But most of the time it is the community who creates problem of sanitation. We've tried to investigate why people do that. Whenever there is a strict imposition, we see people taking the instruction and cleaning their environment. When the imposition is mild, they want someone to push them. Especially our community, for everything they need an agitator. Surely, people have awareness about dry waste disposal. But there is a huge gap to put the knowledge they have into practice. People know that waste can cause disease. But people are reluctant. Though it is important for them, we see them being reluctant. So, in the future by agitating and awakening the people we will give education and motivate them so that they participate in keeping their environment clean.

**R:** Ok you've said that the community is reluctant. Why is the community reluctant?  
After all it is about its own health. Where does the gap come from?

**KI-7:** Good. Sometimes, our communities, for example, know what it wants to achieve. But they want the government to do it for them. They think that it is the government who should care. So they are reluctant. The community gives precondition that unless so and so are fulfilled for them they don't participate. But the disadvantage is for the community. It is not the government that gets ill. They connect with such things and become reluctant. Especially when we do campaign work, this is the problem we face. People are reluctant. Also, people connect our teaching with politics. I think they have to make a distinction between what harms them and what not. This is the biggest problem. I'm not saying that all community members are the same. There are some people who care for their environment. There are also careless people who pull the community. There is also a spirit of competition. This is evident especially on sanitation campaigns.

**R:** As you said earlier, your office offers house to house environmental health education to community members. To what extent this education has brought change of behavior?

**KI-7:** The community cannot show any change of behavior. We go house to house and teach them. We also distribute brochures and other methods to communicate messages. There have been promotional works on media, e.g. radio, and television. But on the ground we don't see any change of behavior. Our job,

sanitation work, is a day to day work. We are very close to the community because of the nature of our work. We don't see any change of behavior. The community expects everything from the government to do for them. Sometimes the community wants our sanitation workers to clean their compounds and gates. As a principle, we believe that if everyone cleans his/her residence at least up to 20 meters, the government will take care of other areas. When we see all these things, we can't say the community has adequate knowledge.

**R:** How does the community understand the concept of environment?

**KI-7:** Like I said earlier, due to this reconstruction business, the community doesn't have the aim to live in that area. There is anxiety. The community is not sure to live in one place. Because of such things, people do not have the interest to work especially in those works that require community participation such as sanitation campaigns. That is why they are reluctant.

**R:** How do people use facilities such as waste containers, waste bins, and even the available toilets?

**KI-7:** In this regard, a lot of work has been done. Many dust bins have been made available in different places. They were made available so that people can use them. But they have been all abused. Some were stolen. Others are broken or destroyed. This shows that the tradition of using dust bins has not been developed in our country yet. People know that if they throw wastes in the field they will cause disease. The problem is not lack of awareness. But the practice of owning

sanitation has not developed yet. There are many people who throw waste near waste containers and dust bins. This time we give advice. Sometimes we go to the extent of penalizing them. Even after being penalized we see them doing the same thing. This is what has become a headache to us in our woreda. We couldn't really understand the reason. Like it has been said earlier the consciousness of the community is low. The community hasn't civilized yet. That is what we can conclude.

**R:** How about in terms of protecting parks and trees and flowers?

**KI-7:** Yes. Every year a lot of flowers and trees are planted by roadsides. But it is the community again that takes away the fences. It is the community that takes away whatever has been planted. They cut trees. It is difficult to know to what they associate. We don't believe that the community doesn't know the benefits of these flowers and trees. This is because it is the community that plants the trees and plants through campaign. But it is also the community that destroys them. Therefore, for the future there has to be sustainable awareness raising efforts that consider the interests of the community. We are thinking of improving our methods of communicating environmental health messages in ways that can touch the community. I think the methods should be revisited. But as it stands now, I don't think there is any change of behavior.

**R:** In this regard, what is your office doing?

**KI-7:** As a woreda, we've been doing a lot of works, for example, in the area of beautification and park development, in the area of waste management. We teach the community on every forum that we get. We try to address the community through different media that it should cooperate with the government. We give education about environmental health for ten to fifteen minutes whenever we get a chance in meetings. We also work with other sectors collaboratively to bring about the desired change. However, there is still a gap despite all these efforts. The desired change of behavior hasn't come yet. So we are thinking of revising our systems, methods, and strategies of approaching the community. But from what we've done so far, we can't say there is a change.

**R:** Which section of the community do the movements target to bring behavior change?

**KI-7:** Mainly all community members. This is because environmental health touches all sections of the community without exception. Every household is our target audience.

**R:** Which section of the community is usually seen polluting the environment?

**KI-7:** We don't have concrete evidence. But it is possible to say that all community members are equally responsible. It could be the youths or women, or men.

**R:** Finally, what do you think should be done to enhance the participation of the community in environmental health activities?

**KI-7:** The big thing is that the intended change of behavior can be achieved if governmental and non-governmental organizations provide the necessary support. Another thing is the community must be willing to enhance its consciousness. The government has hired workers who do the sanitation work. Even then, the environment is not clean. It is the community itself that pollutes the environment. But in order to bring sustainable change of behavior some kind of study should be carried out on the methods of communication in use so far and make the necessary changes. We have to think of new ways, new methods and approaches of reaching the community. Like I said earlier, teaching house to house, dispatching brochures or leaflets etc have not brought the intended change of behavior. If the community cannot bring sustainable change of behavior it will not be possible to own sustainable environmental health. There has to be change of attitude. The solution is still with the community. The government has been trying to do its level best.

**R:** From what you have just said, it seems that the methods of communication have their own weaknesses. What can you say in this regard?

**KI-7:** Yes. Like I said earlier, we give awareness raising education through different methods. However, there hasn't been change as desired. So we have to revisit the methods we have been using. We need to revise those that have weaknesses. We have to look forward if there are better methods of communication.

**R:** What do you think is expected from the community?

**KI-7:** A lot is expected from the community. It is the community that should play the biggest role. It is the community which is responsible for environmental health problems. The community is accountable for the destruction of trees, plants, flowers etc. The community is the main environmental health problem creator. What is important is then the community must bring change of behavior since the solution is also with it.

**R:** Thank you.

**Appendix E: Sample Translated Interview Transcript (individual in-depth interview)**

**R:** To start with, would you tell me about yourself? Like for example, how old you are, your educational level, occupation.

**II-3:** I am 47. I am a housewife. I am in grade 10.

**R:** What does environmental sanitation look like in your area?

**II-3:** Rarely, there are sanitation teachers. They teach us. They come though they come once in a year. Once in a year they come and see our houses. They check if we made water available in our toilets properly or not.

**R:** How do you dispose waste from your house?

**II-3:** We keep it in containers and give it to waste collectors whenever they come. I keep it in front of my house outside.

**R:** How do other people dispose their waste, for example, your neighborhood?

**II-3:** Waste collectors come around and knock at doors. They give their waste to them.

**R:** Let's now talk about the community's waste disposal practices.

**II-3:** Yes there are people in my area for whom toilets were built. They use the toilets in groups. But others have their own private toilets. There are people who defecate outside, urinated outside. These so called health extension workers they do not teach us much. They simply read from the book to us. I don't know who prepared the book. May be the government.

**R:** Now, let's turn to the discussion of what problems poor environmental sanitation can cause.

**II-3:** Yes every time a flue catches us. For example, there is a big tube at our back yard. Its bad smell comes up to our house. Every time they send liquid waste to us.

**R:** Another thing is about your participation in environmental sanitation activities. What are some of the activities that you're engaged in?

**II-3:** They come and ask us to go out of our houses. We clean our own respective compounds. This is at a very limited time. We clean. We collect what we have to collect. When sanitation workers come they collect it. Other than this, there are the so called committees in the kebele. But we don't see them with our eyes.

**R:** Do you participate in community discussions?

**II-3:** What does community discussion mean? I don't understand.

**R:** There are discussions held at local level about environmental health. Do you take part in such kinds of discussions?

**II-3:** Until now I haven't participated in community discussions. Nobody called me.

**R:** What is may be the reason/

**II-3:** Most of the time they don't call me. They don't gather us.

**R:** What do you do when you see other people disposing their waste at inappropriate places?

**II-3:** We shout. They come and throw their waste at our gates. There are also people who throw their wastes in to ditches. We cry but there hasn't been any solution so far. There is no measure that the kebele takes.

**R:** In brief, in what environmental sanitation activities do you participate?

**II-3:** There is no opportunity as such to participate in environmental sanitation activities other than giving solid waste to waste collectors.

**R:** For example, discussing on matters such as the implementation of policy objectives, regulations, and so on at kebele level.

**II-3:** Since they have never called me I have never participated on such matters.

**R:** How about participating around environmental health matters?

**II-3:** Like I said earlier most of the time I keep my own house clean. Other than this I don't participate in such matters most of the time. Most of the time the kebele call us for things such as development matters. Other than this, they haven't called us for environmental health matters.

**R:** Ok. Let's now talk about environmental health education. Is environmental health education given in your area?

**II-3:** I said once in a year. There is one female who comes once in a year. She says that she comes from health office. She comes to my house and visits me. She sees such things like the availability of water in the toilet and then teaches us for few minutes and then she goes back.

**R:** So, is it possible to say that you are participating in environmental health education?

**II-3:** Whenever they come to my house and teach me I participate. I know that health education is important. This is because they teach on a radio and television. There are things that I sometimes hear. I know that sanitation is necessary.

**R:** The health extension workers also teach five people at a time. Do you participate in this kind of sessions?

**II-3:** No I have never participated in this kind of 'tefnig' sessions.

**R:** Now let's talk about environmental health messages. Earlier we raised television for example. There are also leaflets, pamphlets, brochures and so on. Do you make use of them?

**II-3:** I don't read, for example, leaflets, pamphlets and brochures.

**R:** What is may be the reason?

**II-3:** The reason? Because I have never seen them. Who will give us?

**R:** Do you follow television program about environmental health?

**II-3:** I follow the program through television and radio.

**R:** How about reading such things as slogans, and notices?

**II-3:** Notices I read notices displayed on roads.

**R:** Finally, what do you think should be done about environmental health activities as a member of the community?

**II-3:** It is good if they come to our houses teach us and awaken us. If they do this, environmental sanitation can be achieved. Because they don't do this we don't have much awareness about environmental health. Most of the time they don't teach us. They don't awaken us.

**R:** Thank you.