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OFFICE OF POPULATION AND HOUSING CENSUS COMMISSION
CENTRAL STATISTICAL AGENCY

THE 2007 POPULATION AND HOUSING CENSUS OF ETHIOPIA
RESULTS AT COUNTRY LEVEL

ANALYTICAL REPORT
ON
HOUSING CHARACTERISTICS AND CONDITIONS

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ADDIS ABABA

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LIST OF ABBREVIATIONS

ARI	Acute Respiratory Infection
CSA	Central Statistical Agency
CSIS	Center for Strategic and International Studies
DFID	Department for International Development
MDG	Millennium Development Goals
SEA	Special Enumeration Area
UN	United Nations
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UN HABITAT	United Nations Agency for Human Settlement
UNICEF	United Nations Children's Fund
WHO	World Health Organization

FOREWORD

Accurate and timely statistical data that reflect the socio-economic and demographic conditions of the residents of a country are useful for designing and preparation of development plans as well as for monitoring and evaluation of the impact of the implementation of the development plans. These statistical data include population size, age, sex, socio-cultural characteristics (ethnicity and language), educational characteristics, economic activity status, marital status, housing stocks and conditions...etc. In order to fill the gap for these socio-economic and demographic data needs, Ethiopia conducted its third National Population and Housing Census in the months of May and November 2007. The census count in the seven regional states and two city administrations was carried out in the month of May while in the two regional states (Affar and Somali) it took place in the month of November.

The 2007 Population and Housing Census of Ethiopia was conducted under the auspices of the Population Census Commission that was established by Proclamation No. 449/1997. The Commission was chaired by the Deputy Prime Minister and the members of the commission were drawn from various relevant Ministries, Regional State Representatives, House of Federation, National Electoral Board and the Central Statistical Agency, serving as the Office of the Census Commission (Secretariat). According to this proclamation the processing, evaluation and analyses of the data collected of this census as well as its dissemination are the major responsibilities of this office (Central Statistical Agency). Therefore, based on the 2007 census data, the Central Statistical Agency has published the census results in different reports at different times and with varying degrees of details. These include the Preliminary report (at National level), Statistical and Summary Reports (at National and Regional Levels), and the Census Atlas. In addition to these reports, the Agency has produced Thematic Analytical Reports in the following seven topics:-

1. Population Size and Characteristics;
2. Disability and Orphanhood Statuses;
3. Educational Characteristics;
4. Economic Activity Status;
5. Housing Characteristics and Conditions;

6. Population Dynamics (Fertility, Mortality and Migration) and Projections; and
7. The Situation of Women in Ethiopia.

These thematic analytical reports provide more detailed descriptions and subject-oriented analyses of the census data at country level on major variables that could be utilized by policy makers and other data users. Thus, the Office of the Population Census Commission is pleased to present the census thematic analytical report entitled **“The 2007 Population and Housing Census of Ethiopia: Analytical Report on Housing Characteristics and Conditions”** for the users.

This analytical report contains information on structural type and quality of housing units as well as housing facilities and amenities and is intended to supplement the statistical reports prepared at national and regional level. The report also attempts to present characteristics and conditions of the housing units as observed in the 2007 Population and Housing Census.

Before the conduct of a census enumeration, numbers of preparatory activities were also carried-out. Among the major census preparatory activities, the conduct of the Population and Housing Census Cartographic Work was one of the important tasks that had been undertaken. During this census cartographic work urban and rural kebeles of the country were sub-divided into enumeration areas, each having 150-200 housing units and households, respectively. About 4-6 contiguous enumeration areas were made to form one supervision area. In this exercise for each enumeration and supervision area maps have been prepared.

During the census enumeration, each enumerator was given the map of an enumeration area along with other census documents and he/she was responsible to record all persons and households in that enumeration area without omission and duplication. One supervisor was also assigned to a supervision area and was responsible for ensuring the quality of the information collected in the area of his/her jurisdiction. Unlike the previous censuses, in this census enumerators were primary school teachers while supervisors were secondary school teachers as in the previous two census rounds.

It is to be noted that the Population and Housing Census is a huge nationwide operation which could not be undertaken by a single organization. Thus, full cooperation and assistance of government and non-government organizations, donor agencies and the general public have been obtained for the 2007 Population and Housing Census.

The office of the Population Census Commission is therefore, very grateful to the Government of Ethiopia for its huge financial and administrative support. The office is also grateful to the development partners particularly; the United Nations Population Fund (UNFPA) and the Department for International Development (DFID) for their generous financial, logistics and technical supports. Thanks are also due to the United Nation Development Program (UNDP), the Embassy of Japan, Italian Cooperation, United Nations International Children's Emergency Fund (UNICEF), as well as the Dutch and Irish Governments for their substantial financial support.

Finally, the office of population and housing census commission would like to express its deepest compliments to all those who participated in the execution of the 2007 Population and Housing Census as well as the staff members of the Central Statistical Agency for their untiring efforts in processing the data and producing the Thematic Analytical Reports.

The office hopes that the data contained in the Thematic Analytical Reports will be utilized by all data users for various development planning.

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CHAPTER I

HOUSING CHARACTERISTICS AND CONDITIONS

1. Introduction

1.1 Background

The provision of standard housing suitable to great majority of the residents plays an important role in development. Hence special attention should be given to housing in any development activity. The analysis of housing characteristics from census data can inform policies and programs to improve housing conditions.

1.2 Literature Review

More than "one billion human beings still lack adequate shelter and are living in unacceptable conditions of poverty" (Habitat Agenda, 2003: p.53). The vast majority of these live in developing countries and -- as a result of the urbanization of poverty -- an increasing number live in urban areas. Indeed, the sprawling informal settlements and slums of developing countries are fast becoming the most visual manifestations of poverty itself. According to UN-HABITAT (2003), some 924 million people were living in slums and informal settlements by 2001. This is a major reason why the improvement of living conditions of slum dwellers was identified as a major target area in the Millennium Declaration, adopted by world leaders in 2000.

Paragraph 65 of the Habitat Agenda notes that shelter policies in general, and housing policies in particular, play an important role in addressing this situation. In fact, it affirms that the "formulation and periodic evaluation and revision... of enabling shelter policies... are the cornerstone for the provision of adequate shelter for all" (Habitat Agenda, 2003: p.53)

More specifically, it states that the objective of shelter policies should be to create frameworks for efficient and effective shelter delivery systems, while emphasizing "the increased use and maintenance of existing stock through ownership, rental and other tenure options, responding to the diversity of needs."

In particular, it notes the role of the private sector in the provision of housing: "policies should also encourage and support the people who, in many countries, particularly developing countries, individually or collectively act as important producers of housing."

Finally, and very importantly, it stresses that policies "should respond to the diverse needs of those belonging to disadvantaged and vulnerable groups."

Relationship between Housing and Health

Housing is the combination of the dwelling, the home, the immediate environment and the community. "Healthy housing" covers the provision of functional and adequate physical, social and mental conditions for health, safety, hygiene, comfort and privacy. A healthy home therefore is not a specially designed house; it is more a residential setting for a household that includes all standards and "best practice" knowledge that have been gained over centuries of dwelling construction and immediate environmental design.

The relationship between housing and health is obviously a complex mix. It is also an area where national authorities, local authorities, and individuals can work intensively to achieve health gains through improving housing condition, be it the physical housing or the social environment of the house.

Healthy housing must be a comprehensive concept taking into consideration a variety of factors contributing to the quality of housing and housing environments. Housing should respond to the physical, psychological and basic health needs of people. The lack of healthy conditions in housing, negatively affects the human health.

Studies have shown that housing conditions affect health status. There are a number of factors, acting at different levels, directly and indirectly, through which housing affects health. In public health terms, housing affects health in a myriad of relatively minor ways, in total forming one of the key social determinants of health. Housing condition affects health in a lot of ways. For instance,

- **Poor housing** has been linked to increased levels of limiting long term illness, respiratory and infectious diseases, accidents, psychological problems and perceived poor general health; and even increased mortality (Zhao et al 1993; Tatara et al 1993; Takayama et al 1993).
- **Poor ventilation** has been associated with increased relative humidity, increased levels of house dust mite, poor lung function and increased respiratory symptoms (Harving et al 1994; Korsgaard et al 1994; Dahi et al 1994).
- **Dampness** in houses leads to an increased level of house dust mites and fungal spores, and this increases an individual's risk of respiratory or allergic symptoms (Peat and Dickerson 1998).
- **Exposure to certain foods and house dust mites** during early childhood is thought to greatly increase the risk of a child with an atopic family history becoming symptomatic during the first two years of life (Hide et al 1994; Matthews et al 1994; Stevens et al, 1994).
- Nitrogen oxides from **gas appliances** may increase asthmatic symptoms possibly by enhancing atopic responses to allergens (Tunicliffe et al 1994; Burge et al 1994; Ayres et al 1994).

Study indicates that the improvement of housing and neighborhoods have been a core activity of public health and a central component in tackling poverty (Wilkin, 1993). Investment in housing can be more than an investment in bricks and mortar: It can also form a foundation for the future health and well-being of the population. Addressing poor-quality housing and detrimental neighborhoods, in the broadest sense, is thus a task that should be grasped with vigor and determination by all those involved in public health.

The study also has presented a synopsis of the ways in which human health can be affected by the home environment, and explain the relationships of specific health hazards in housing (including: unintentional injuries, lead, asthma allergens, moisture, mold, rodent and insect pests, pesticide residue, and indoor air pollution). They also conclude that the analyzed interventions show strong links between housing conditions and health and that interventions in housing conditions can and do improve health.

Safe Water and Health

Water has a profound influence on human health. At a very basic level, a minimum amount of water is required for consumption on a daily basis for survival and therefore access to some form of water is essential for life. However, water has much broader influences on health and wellbeing and issues such as the quantity and quality of the water supplied are important in determining the health of individuals and whole communities (WHO, 1993).

The first priority must be to provide access for the whole population to some form of improved water supply. However, access may be restricted by low coverage, lack of continuity, insufficient quantity, poor quality and excessive cost relative to the ability and willingness to pay. Thus, in terms of drinking-water, all these issues need be addressed if public health is to improve.

Access to safe water is a key determinant of public health, particularly in low income countries like Ethiopia. The quality of water does have a great influence on public health; in particular the microbiological quality of water is important in preventing ill-health. Poor microbiological quality is likely to lead to outbreaks of infectious water-related diseases and may causes serious epidemics to occur. The microbiological quality of drinking-water has been implicated in the spread of important infectious and parasitic diseases such as cholera, typhoid, dysentery, hepatitis, giardiasis, guinea worm and schistosomiasis (Esrey et al 1985; Feacham et al 1985; and Hughes et al 1985).

Chemical water quality is generally of lower importance as the impact on health tends to be chronic long-term effects and time is available to take remedial action. Acute effects may be encountered where major pollution event has occurred or where levels of certain chemicals are high from natural sources, such as fluoride, or anthropogenic sources, such as nitrate (WHO, 1996).

Many other diseases are associated with water in other ways. Water may act positively in the control of some diseases through its use in hygiene, and may act as a source or vector for others where contact with water is required for disease transmission or where agents of disease or insect vectors require water in which to complete their life cycle (Hofkes, (ed), 1986).

Contamination from industrial, agricultural and primarily human waste continues to threaten both human and ecosystem health in many parts of the world. Further, it is now widely recognized that the primary determinant for addressing the issues of global poverty is the provision of safe water; access to safe water enhances the potential for educational opportunities (particularly for girls) and facilitates participation in local community economic development. In order to address the issue of global poverty with respect to provision of safe drinking water it is necessary to understand the perceived links between water and health among local populations, develop interventions to raise awareness of the links between water and health, and evaluate those interventions so the learning's can be shared with other communities.

Water-related disease places an excessive burden on the population and health services of many countries worldwide and in particular those in developing countries. Basically, water-related diseases associated with contamination are many: diarrhea, cholera, typhoid, shigella, polio, meningitis, and hepatitis A and E. Children and women are most severely and directly impacted by this contamination, due to physical vulnerability and exposure.

Some studies have indicated that in worldwide estimates of the morbidity and mortality rates of some major water-related diseases accounted from communicable diseases and constitute major public health challenges. Forty per cent of mortality in children under five years of age which is related to diarrhoeal disease and it has been estimated that in 1995 more than 1,500,000,000 episodes of diarrhoea occurred in children under five years of age in the developing world (excluding China) and that some 4,000,000 of these resulted in death (www.who.int/water_sanitation_health/dwq/S01.pdf, 1995).

Studies also showed that worldwide, 18% of all deaths in children under five are due to diarrheal diseases, accounting for approximately 1.4 million deaths per year. This makes diarrheal diseases a leading cause of child death globally (Bryce et al 2005; Boschi-Pinto et al 2005; Shibuya et al 2005; Black et al 2005). The most common cause of diarrheal diseases results from gastrointestinal infections, Hardy (1942). The majority of diarrheal deaths in children are due to the loss of large quantities of water and electrolytes (sodium, chloride and potassium) through liquid stool, resulting

in severe dehydration and acidosis (Varavithya et al 1991; Sunthornkachit et al 1991; Eampokalap et al 1991).

Since diarrheal diseases are primarily spread through the faecal-oral route, preventive measures include improving access to safe drinking water and adequate sanitation. Wealthy nations and international bodies first began designating assistance for water and sanitation specifically through the World Bank, 1961. The history of development assistance in the water and sanitation sector, summarized by Grover, Grover (1998) and others, includes investment in service provision and infrastructure, and is marked by numerous international conferences and declarations, multilateral organizational involvement, the International Drinking Water Supply and Sanitation Decade (1990s), and the creation of water working groups, councils, and partnerships Biswas (1995). In 2000, the Millennium Development Goals (MDGs) were developed as a way to draw attention to global health and social justice issues and measure global progress on these goals. Target four under Goal 7 is to "halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation" (United Nations, 2008).

The provision of safe drinking water helps to improve the quality of life in general for the whole community but specifically for children and women. In many cases, these communities are solely dependent on unprotected source of water for drinking. Therefore, understanding the relationship between drinking water and good health is vital to population and public health, as access to safe drinking water is a cornerstone of a healthy population.

Sanitation infrastructure and Public health

Nowhere are global public health challenges more acute than in Sub-Saharan Africa. With just 13 percent of the world's population, this region carries 24 percent of the global burden of disease. The continent's immense disease burden and frail health systems are embedded in a broader context of poverty, underdevelopment, conflict and weak or ill- managed government institutions. These complex, interrelated challenges will ultimately demand sustained, patient and integrated response, (Cook 2009).

The understanding of sanitation infrastructure, public health, and environmental relations is a fundamental assumption for planning sanitation infrastructure in any area.

The environmental quality of an area has effect on the health status of all residents in that area. No one can escape the effects of poor air and water quality, inadequate sanitation, a lack of proper solid waste management, and the improper storage and emission of hazardous substances. Poverty and the desire to promote economic prosperity can lead to the unsustainable exploitation of the environment where community leaders are unable or unwilling to manage the intricate links between economic growth and environmental quality. Sadly, this approach tends to fail in the long-run as the productivity of the local labor pool is degraded and environmental resource stocks are drawn down at an unsustainable rate. While the entire population suffers from poor environmental quality, the poor tend to be the most vulnerable as they are often living in marginalized parts of the city, contiguous with waste sites and well beyond the reach of water, sanitation and other environmental services.

In densely populated urban areas toxic effluents in the soil and water, air pollution, smoke from cooking fires and lack of adequate water, sanitation and solid waste services contribute to poor environmental quality of informal urban settlements and the high morbidity and mortality rates of their residents. The quality of local infrastructure - such as unsafe electrical wiring and streets that are so narrow that emergency vehicles cannot get through - not only increases the likelihood of accidents such as fires, but generates more catastrophic results when accidents occur.

The urban poor bear the health consequences of poor environmental quality more than other urban residents because they do not have sufficient resources to invest in infrastructure improvements. The negative consequences of poor environmental quality impact on every aspect of their lives. Poor environmental quality reduces the ability of children to learn leading to a decreased earning capacity as adults. It also leads to the loss of valuable workdays and increases the need for individual and public health care expenditures, decreasing the net income with which families can buy food and other necessities. A consequent decrease in the nutritional status of families begins a vicious cycle that must be broken if the urban poor are to find a more prosperous future. Therefore, analysis of

environmental and public health issues related to the sector, and a systematization of the various effects that water supply and sanitation have on public health and the environment is necessary.

According to the National Population Policy of Ethiopia (1993) the quality of the housing units in the country is exceedingly low. The majority of dwelling units are below standards, lack adequate living space, have one room only and lack even the most basic sanitary facilities. Also a considerable proportion of dwelling units (particularly in urban areas) are shared by more than one household. Since one of the major goals of development policy is improving the standard of living of the population, improvement of housing conditions is an item of concern with considerable implication for the health and well being of citizens.

1.3 Objectives

1.3.1 General Objective

The broad objective of this study is to analyze housing conditions and provision in Ethiopia.

1.3.2 Specific Objectives

The specific objectives of this study are:

- To assess the quality of residential housing units, with respect to structural quality, status of occupancy and amenities;
- To assess the degree of over-crowding in terms of number of rooms per households, average number of persons living per rooms, average size of households in the housing units, number of persons per housing unit, number of rooms per housing unit ;
- To examine the availability of essential housing facilities such as toilet; kitchen; supply of drinking water ; source of power for lighting; type of fuel for cooking and
- To examine the tenure status of housing units and

CHAPTER II

SOURCE OF DATA AND METHOD OF ANALYSIS

2.1 Source of Data

The housing data used in this analytical report is the 2007 third National Population and Housing Census of Ethiopia. Housing information was collected from occupied residential and partially residential housing units on 20 percent sample bases. During the enumeration, when a housing unit was occupied by more than one household, enumerators were instructed to collect information on housing from one household only.

The census questionnaire included a detailed set of housing questions that were administered both in urban and rural areas. In the census the following information on housing characteristics and conditions were collected: bathing facility; toilet facility; whether a housing unit has traditional or modern type of kitchen; source of drinking water supply; source of power for lighting; type of fuel used for cooking; availability of radio, television and telephone sets; number of rooms; type of waste disposal; whether domestic animals spent the night in the room where member of the household spent the (census) night; whether there was a separate room in the housing unit that was used mainly as kitchen; type of housing unit; type of construction material of walls, roofs, floors, and ceilings and status of tenure of housing units.

2.2 Method of Analysis

The analytical method used in this study is descriptive statistics which include percentages. Graphs were employed to illustrate the results.

Definition of Terms/Concepts

A **housing unit** was defined in the census as a separate and independent place of abode, either intended for habitation or not intended for habitation but occupied as a living quarter by a household at the time of the census. A housing unit may at the time of the census be occupied by one or more households or may be used partly for living and partly for establishment.

Residential Housing Unit is defined as a housing unit used only for habitation at the time of the census.

Partial Residential Housing Unit is defined as a housing unit used for habitation and establishment at the time of the census.

A **room** is defined as a space enclosed by walls reaching from the floor to the ceiling or roof at least to a height of two meters and having an area of at least four square meters (i.e. a size large enough to hold a bed for an adult). Except for bathrooms, toilets and passage ways all other rooms found in the housing unit were considered as rooms.

A **kitchen** is defined as a room primarily used for cooking meals. However, it is worth mentioning that especially in most rural areas of the country, due to lack of adequate rooms or space in the housing unit, some persons or some livestock may also spend the night in the kitchen.

A **modern kitchen** is defined as a kitchen that has piped water and a sink.

A **traditional type of kitchen** is a room used mainly for cooking using firewood, charcoal, cotton seeds, sawdust, leaves or barks as fuel, with simple or no stoves and has no piped water or sink.

CHAPTER III

RESULTS

3.1 Introduction

In this section, an attempt is made to analyze the housing characteristics and housing conditions in Ethiopia.

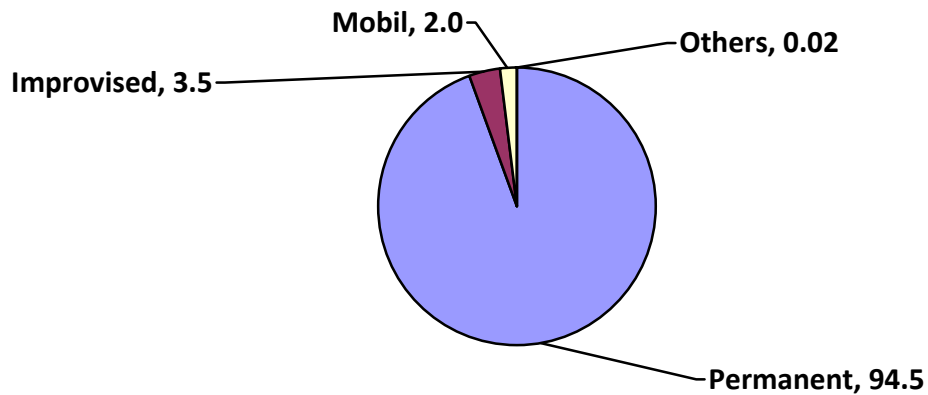
3.2 Structural Type of Housing Units

Table 4.1A (See Appendix 1) presents the national and regional distribution of housing units by type. The information on the type of housing unit was obtained under the following categories; permanent/conventional or improvised or mobile or any other. As can be seen from Table 4.1A (See Appendix 1) and Figure 4.1, at country level, housing units are predominantly conventional /permanent as they constituted about 95 percent of all housing units in 2007. The corresponding figures for urban and rural areas were 97.0 per cent and 94.0 per cent, respectively. Improved, mobile and other type of housing unit constituted only 3.5 per cent, 2.0 per cent and 0.02 per cent, respectively, of all housing units at country level.

The data also depict that the proportions of permanent type of housing units vary by region ranging from 44.5 per cent in Affar region to 98.6 percent in Amhara region. More than 80.0 percent of the housing units observed in urban areas of all regions, except Affar and Somali regions were permanent type. On the other hand, in urban areas of the pastoral regions of Affar and Somali less than fifty percent of the housing units were improvised type.

Also, in these two regions the observed proportions of mobile type of housing units were higher compared to the permanent housing units. The pastoral economy based on a nomadic way of life might be the reason for the higher percent of mobile type of housing units.

Figure 4.1 Percentage Distribution of Housing Units by Type, Country Level : 2007.



It can be observed from Table 4.1B and Figure 4.2 given below that the proportions of permanent housing units in urban areas have changed over time increasing from 95.8 percent in 1994 to 97.0 percent in 2007. On the other hand, the proportions of improvised, mobile and other type of housing unit have declined from 2.9 percent, 0.7 percent and 0.12 percent in 1994 to 2.6 percent, 0.4 percent and 0.02 percent in 2007, respectively.

Table 4.1B Percentage Distribution of Housing Units by Type and Residence, Country Level (1994 and 2007)

Type of Housing Unit	1994			2007		
	Total	Urban	Rural	Total	Urban	Rural
Conventional/Permanent	93.3	95.8	92.8	94.5	97.0	93.9
Improvised	3.7	2.9	3.8	3.5	2.6	3.7
Mobil	2.7	0.8	3.0	2.0	0.4	2.3
Others	0.1	0.1	0.1	-	-	-
Not Stated	0.2	0.4	0.3	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.1B reveals that between 1994 and 2007 nationally, the proportion of permanent housing units increased from 93.3 percent to 94.5 percent in 2007. The table further shows that the proportion of improvised, mobile and other type of housing units declined at country level. Also, a similar situation was observed both in urban and rural areas of the country.

Figure 4.2 Percentage Distribution of Housing Units by Type between 1994 and 2007, Country Level.

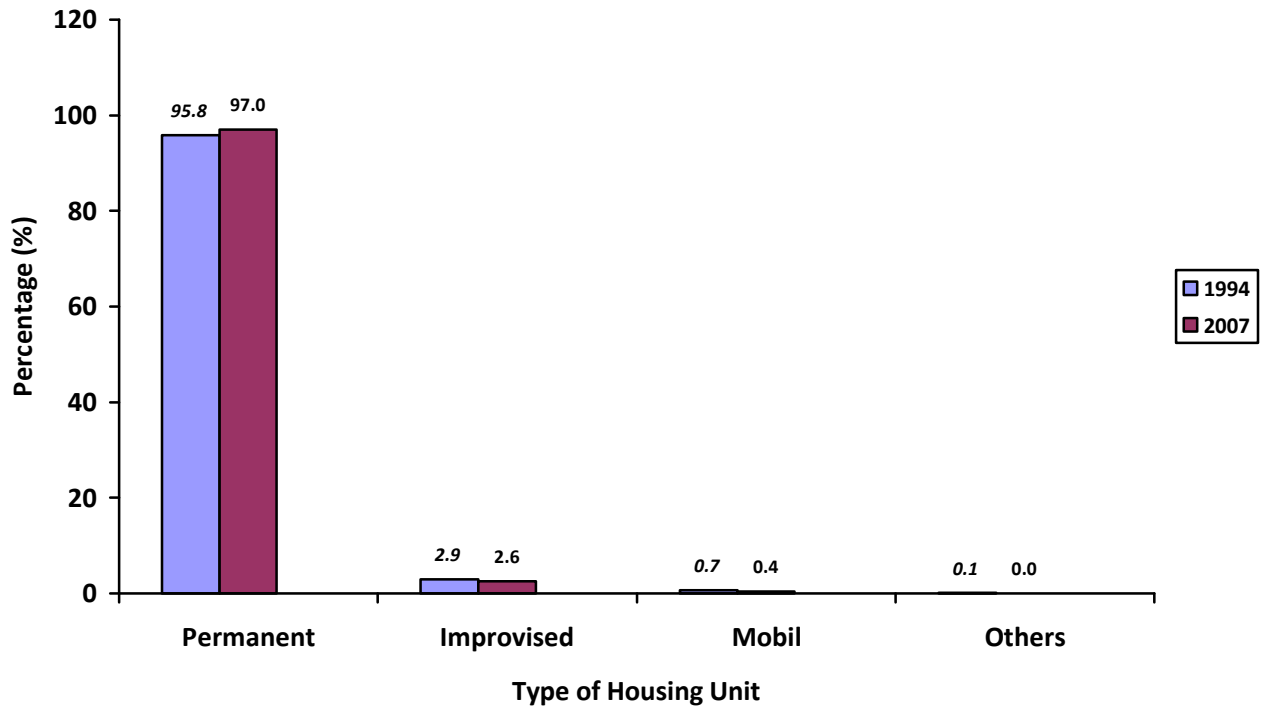


Table 4.2 (See Appendix 2) presents the percentage distribution of urban housing units cross-classified by type of housing unit and literacy status of head of household. As can be observed, at country level, the proportion of conventional/permanent and improvised urban housing units with literate head of household (66.7 percent and 56.9 percent, respectively) were higher compared to housing units with illiterate head of household (33.3 percent and 43.1 percent respectively). On the other hand, the proportion of mobile and other type of urban housing with literate head of household is lower compared to housing units with illiterate head of household.

Among the urban areas of the regions, except Somali region, a higher proportion of conventional / permanent type of housing units with literate head of household was observed. In urban areas of Somali region, the highest proportion of housing units with illiterate head of household was observed in all types of housing unit. The explanation for this may be due to the very low literacy rate in the region.

3.3 Quality of Housing Units

The absolute size of a housing unit provides only a crude measure of the extent of shelter in a community. It tells us nothing about the quality of housing units. Thus, knowledge about the quality of residential housing units is necessary to assess the extent to which the existing housing conditions are regarded as socially desirable in terms of structural quality, rates of occupancy and amenities.

Information on the type of materials used for construction of walls, roofs, and floor of housing units are of vital importance in housing statistics, because they provide an indication of the durability and permanency of construction, demand for construction materials,...etc. Knowledge about the predominant type of material used for the construction of buildings also have important implications for setting up housing standards and the development of appropriate housing construction technology. Here, we will discuss qualitative aspects of the housing units in the following areas: structure, number of rooms and density of occupation.

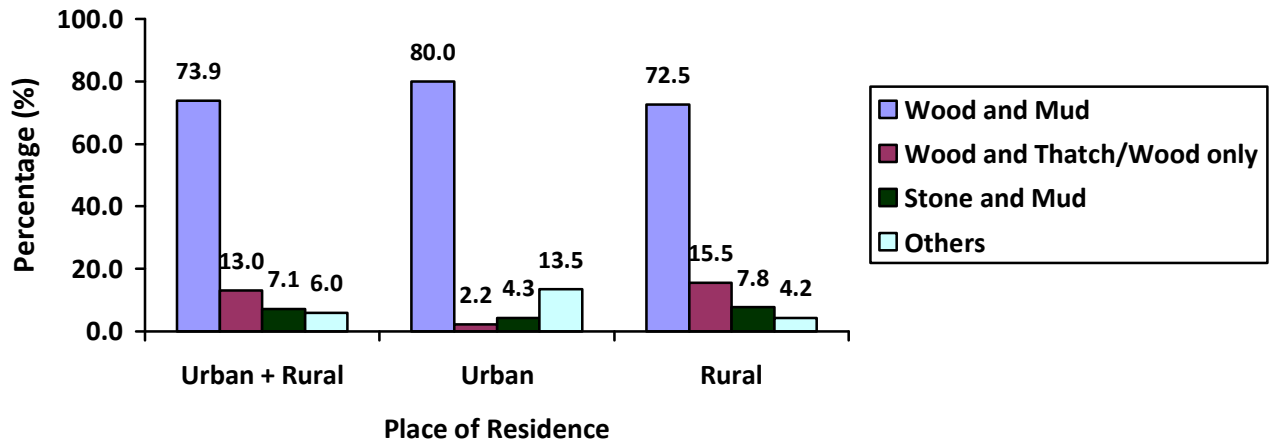
3.3.1 Structure

3.3.1.1 Construction Materials of Wall

The distribution of housing units by type of material used for the construction of wall is shown in Table 4.3A (See Appendix 3). During enumeration, when the walls of a housing unit were constructed from different types of construction materials, enumerators were instructed to collect information for the predominant type of construction material only.

As can be seen from Table 4.3A (See Appendix 3), at country level, 73.9 per cent of the housing units had wood and mud wall and about 13 per cent had wood and thatch/wood only walls. Housing units made up of wood and mud walls accounted for 80 per cent and about 72.5 per cent for urban and rural areas, respectively. The table also depicts that about 7.2 per cent and 2.5 per cent of the housing units had stone and mud and read/bamboo walls, respectively; while housing units with stone and cement, plastered hollow blocks, unplastered hollow blocks, bricks, corrugated iron and mud bricks walls accounted for only about 2.1 percent. 'Other' type of construction materials used for walls constitute about 0.4 percent.

Figure 4.3 Percentage Distribution of Housing Units by Construction Material of Wall, Country Level : 2007.



In all regions; except Tigray, Affar and Somali a higher proportion of walls were built from wood and mud. A large proportion of wood and thatch/wood as construction materials of walls were observed in Affar and Somali regions.

The table also reveals that a higher proportion of housing units in urban areas of all regions; except Harari region and Dire Dawa, were built from wood and mud as compared to housing units found in rural areas. On the other hand, the majority of housing units in Tigray region (about 67 percent) were built from stone and mud walls. The proportion of housing units built from wood and thatch/wood only walls ranged from 0.3 percent in Addis Ababa to 67 percent in Affar region.

Table 4.3B given below depicts that in Ethiopia between 1994 and 2007, the proportion of housing units made of modern construction material of wall (stone and cement, hollow-blocks and bricks) increased from 6.6 percent to 10.5 percent in the urban areas and from 0.2 percent to 0.3 percent in the rural areas registering an overall nationwide increment of 1.2 percent (from 1.2 percent in 1994 to 2.4 percent in 2007). On the other hand, in urban areas of the country the proportion of housing units with traditional material of wall (wood and mud, wood and thatched, reed and bamboo, adobe) shows a decline from 89.3 percent in 1994 to 86.8 percent in 2007; in rural areas the proportion increased from 97.7 percent in 1994 to 98.8 percent in 2007. At country level, the proportion of

housing units made of traditional material of wall stagnated at 96.5 percent in the two census periods.

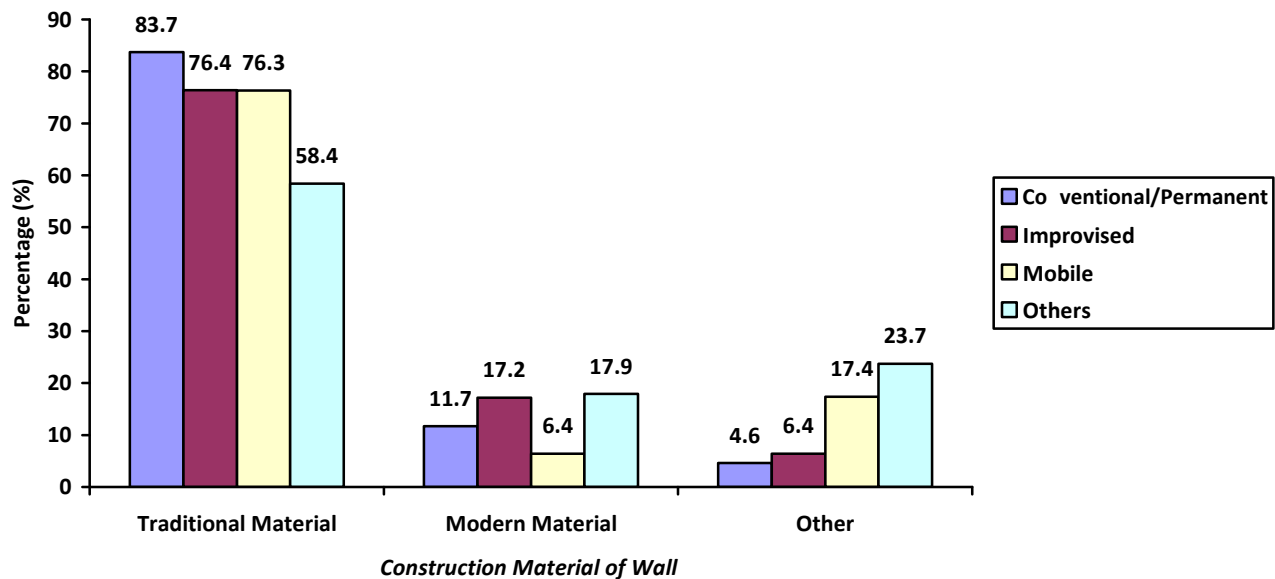
Table 4.3B Percentage Distribution of Housing Units by Construction Material of Wall and Residence, Country Level (1994 and 2007)

<i>Type of Housing Unit</i>	<i>1994</i>			<i>2007</i>		
	<i>Total</i>	<i>Urban</i>	<i>Rural</i>	<i>Total</i>	<i>Urban</i>	<i>Rural</i>
Wood and Mud	67.3	80.3	65.2	73.9	80.0	72.5
Wood and Thatch/Wood only	17.9	3.0	20.3	13.0	2.2	15.5
Reed/Bamboo	3.2	0.4	3.7	2.5	0.3	3.0
Stone and Mud	8.1	5.6	8.5	7.1	4.3	7.8
Stone and Cement	0.5	3.1	0.1	0.9	3.8	0.2
Hollow-blocks	0.5	2.7	0.1	1.4	6.1	0.1
Bricks	0.1	0.8	0.0	0.1	0.6	-
Others	2.1	3.2	1.8	1.1	2.7	0.7
Not Stated	0.4	0.9	0.3	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0

The percentage distribution of urban housing type by construction material of wall is presented in Table 4.4 (See Appendix 4). As we can see from this table, the overwhelming majority of the conventional /permanent and improvised types of housing units in the country were made of traditional material (wood and mud, wood and thatch, reed and bamboo or adobe) wall (83.7 percent and 76.4 percent, respectively). Conventional/ permanent and improvised type of housing units constructed from modern type of construction material (stone and cement, lockets, cement, bricks or corrugated iron sheet) wall constituted 11.7 percent and 17.2 percent, respectively.

It can be also observed from the same table that, the pattern of materials used in the construction of walls observed for the urban areas as a whole also holds true for each of the regions, except Tigray region and Dire Dawa. In Tigray region a higher proportion of conventional/permanent type of urban housing units were made of other types of construction material (like stone and mud) of wall (35.7 percent) followed by traditional material of wall (33.3 percent). In Dire Dawa the majority (51.3 percent) of urban housing units was made of modern material of wall followed by traditional material of wall (35.2 percent). In all regions, except Dire Dawa a higher proportion of improvised type of housing units having traditional material of wall was observed in the 2007 census.

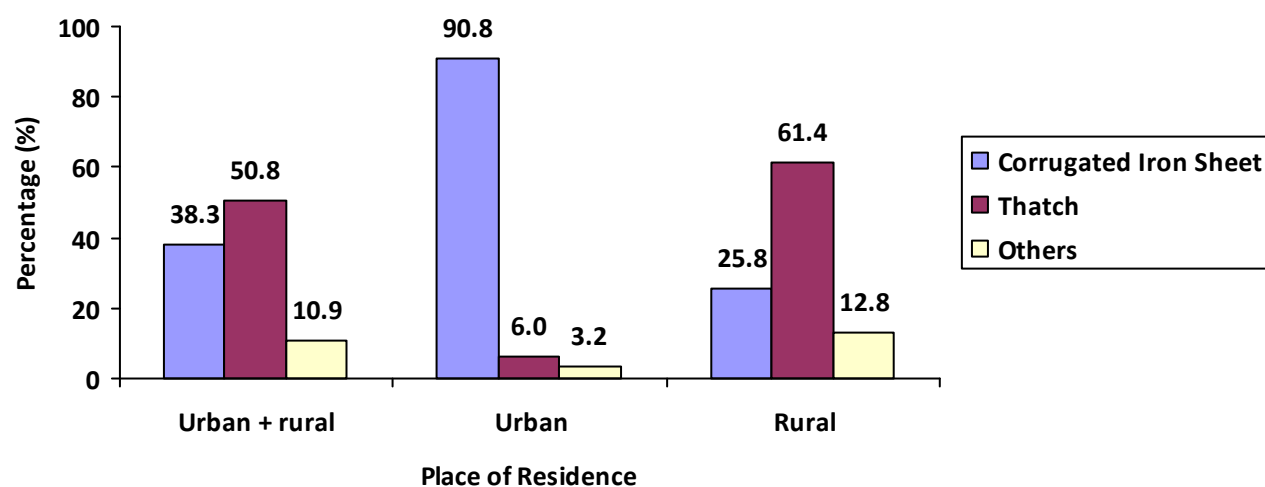
Figure 4.4 Percentage Distribution of Housing Type by Construction Material of Wall, Country Level : 2007.



3.3.1.2 Construction Materials of Roof

Table 4.5A (See Appendix 5) presents the distribution of housing units by construction material of roof. As can be observed, more than half of the housing units in the country (about 50.8 percent) were built from thatch, followed by corrugated iron sheet (38.3 percent). Other type of construction material used for roofs accounted for about 10.9 percent at country level. The construction materials of urban housing unit roofs are of better quality compared to those in the rural areas, about 90.8 percent of housing units in urban areas have corrugated iron roof compared with 25.8 percent of rural housing units. On the other hand, the majority of housing units in rural areas have thatch roof. Housing units made up of wood and mud roofs constituted about 1.4 percent and 5.9 percent in urban and rural areas, respectively.

Figure 4.5 Percentage Distribution of Housing Unit by Construction Material of Roof, Country Level : 2007.



The majority of the housing units in Tigray, Oromiya, Harari, Addis Ababa and Dire Dawa were built from corrugated iron sheet roof; whereas the remaining regions had a higher proportion of housing units built from thatch roof. The housing units made of corrugated iron sheet roof ranged from 11.5 percent Somali region to 98 percent in Addis Ababa; while the proportion of housing units built from thatch roof ranged from 0.3 percent in Addis Ababa to 72.2 percent in Benishangul-Gumuz region.

Table 4.5B shows that with corrugated iron sheet roof increased from 21.6 percent in 1994 to 38.3 percent nationally. Similarly in the urban and rural areas housing units made of corrugated iron sheet show increased from 82.6 percent in 1994 to 90.8 percent in 2007 and from 11.9 percent in 1994 to 25.8 percent in 2007, respectively.

Table 4.5B Percentage Distribution of Housing Units by Construction Material of Roof and Residence, Country Level (1994 and 2007)

Type of Housing Unit	1994			2007		
	Total	Urban	Rural	Total	Urban	Rural
Corrugated Iron Sheet	21.6	82.6	11.9	38.3	90.8	25.8
Thatch	67.0	10.5	76.1	50.8	6.0	61.4
Wood and mud	4.3	2.4	4.6	5.0	1.4	5.8
Reed/Bamboo	3.8	0.4	4.2	3.4	0.3	4.1
Others	2.9	3.2	2.9	2.5	1.5	2.9
Not Stated	0.4	0.9	0.3	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.6A (See Appendix 6) shows the percentage distribution of urban housing units by type construction material of roof. From the table it can be seen that the majority of conventional/permanent and improvised type of housing units in urban areas of the country (91.8 percent and 69.1 percent, respectively) had corrugated iron sheet. On the other hand, 45.8 percent of mobile housing units in urban areas were constructed with thatch roof.

The overall pattern of materials used in the construction of roof observed for the conventional/permanent and improvised type of housing units in urban areas of the country as a whole were the same for housing units in urban areas of Tigray, Amhara, Oromiya, SNNP, Gambella, Addis Ababa and Dire Dawa regions. In urban areas Afar, Somali and Benishangul-Gumuz regions the majority conventional/permanent and improvised type of housing units had corrugated iron and thatch roof, respectively. While in Dire Dawa urban area the majority of conventional/permanent and improvised type of housing units had corrugated iron and plastic roof.

3.3.1.3 Construction Materials of Ceilings

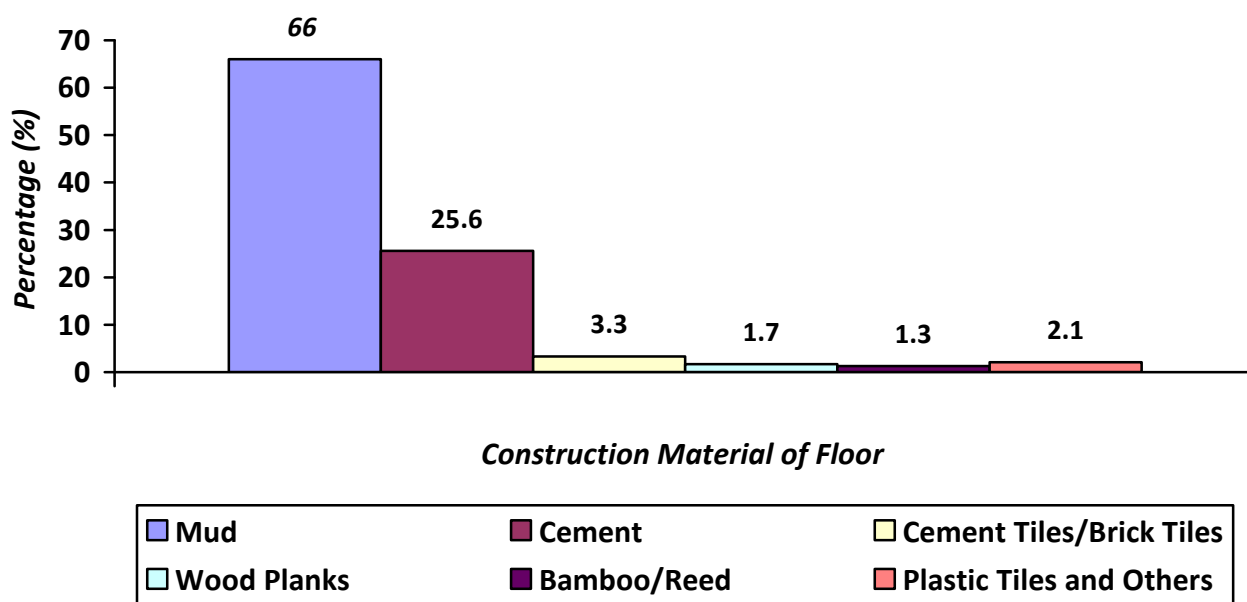
Table 4.7 (See Appendix 7) presents the distribution of housing units by construction material of ceilings. The data reveal that more than half of the housing units in Ethiopia (about 52.4 percent) had no ceilings in 2007. However, about 23.4 percent of the housing units in the country had polythene sheet/"madaberia" ceilings, followed by fabrics ceilings (16.6 percent). Other type of construction material used for ceilings accounted for about 60 percent at country level.

In all regions; except Addis Ababa and Dire Dawa, more than fifty percent of housing units had no ceilings. Among the regions, the use of fabrics for the construction of ceilings is highest in Addis Ababa (about 36 percent) and lowest in Tigray region (about 3.5 percent); while the proportion of housing units built with polythene sheet/ madaberia ceilings ranged from a low of 5.1 percents in Tigray region to a high of 30.4 percent in Oromia region.

3.3.1.4 Construction Materials of Floor

The distribution of housing units in urban areas of the country by construction materials of floor is presented in Table 4.8A (See Appendix 8). From the table and Figure 4.6 it can be seen that the majority of the housing units in urban areas of the country (66 percent) had mud floor. While about 25.6 percent of the urban housing units had cement floors, 3.3 percent cement tiles/brick tiles floors, 1.7 percent had wood planks floors and 1.3 percent had bamboo/reed floors. About 2.1 percent of housing units had plastic tiles and other type of floors.

Figure 4.6 Percentage Distribution of Urban Housing Units by Construction Material of Floor, Country Level: 2007.



The overall pattern of materials used in the construction of floor observed for the urban areas of the country as a whole was also observed in urban areas of the regions. However, among the regions, the use of mud for the construction of floor is highest in Benishangul-Gumuz region (88.5 percent) and lowest in Dire Dawa (39.6 percent); whereas in Addis Ababa and Harari regions the use of mud constituted about 40 percent and 46 percent, respectively, of construction materials of their floor.

The use of cement in the construction of floor is highest in Dire Dawa (54.7 percent) followed by Harari (46.1 percent) and Tigray (30.6 percent) regions. On the other hand, the proportion of housing units using cement tiles/ brick tiles types of floor ranged from a low of 1.3 percent in Benishangul-Gumuz region to a high of 6.9 percent in Harari region.

The percentage distribution of urban housing units by type of construction material of floor is given in Table 4.9A (See Appendix 9). It can be observed from the table that, at country level, a higher proportion of housing units which use modern materials (such as cement, tiles, marble, etc) was observed with conventional/ permanent type of housing units compared to housing units which use traditional materials. The majority of improvised types of housing units use traditional materials mud for the construction of floor followed by plastic tiles and bricks tiles. But there is some variation among the regions. In all regions, except Benishangul-Gumua, SNNP and Gambella regions, there is a consistent increase in the use of modern materials for the construction of floor as we pass from mobile to conventional/permanent type of housing units.

Table 4.9B Percentage Distribution of Urban Housing Units by Construction Material of Floor, Country Level (1994 and 2007)

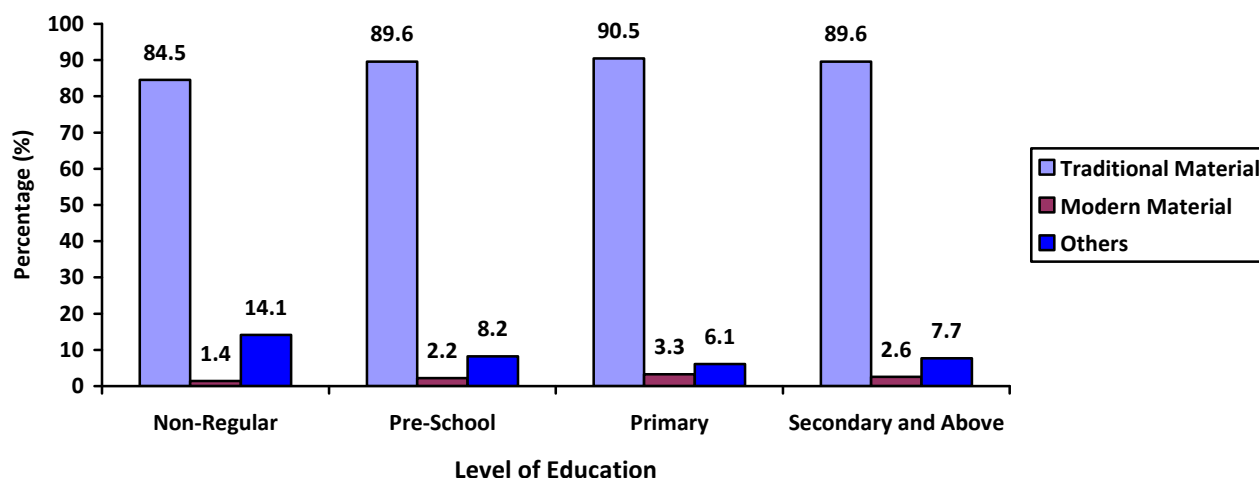
Type of Housing Unit	Urban	
	1994	2007
Mud	83.9	66.0
Cement/Concert	9.8	25.6
Plastic Tiles	0.5	0.8
Cement/Brick Tiles	2.1	3.3
Bamboo/Reed	0.02	1.3
Others	2.1	3.0
Not Stated	1.6	-
Total	100.0	100.0

As can be seen from Table 4.9B given above in urban areas, the proportion of housing units with mud floor declined from 83.9 percent in 1994 to 66 percent in 2007. On the other hand, housing units made of cement/concrete, plastic tiles, cement/brick tiles, bamboo/read and other type of material declined between 1994 to 2007.

Tabulation of construction materials of walls, roofs and floors in housing units by level of education of head of household is given in Table 4.10 (See Appendix 10). The results in the table indicate very high level of education by head of household.

At country level, there is a consistent increase in the use of traditional, modern and other materials as we pass from head of households with non-regular schooling to housing units with head of households with primary schooling; whereas, after primary schooling there was a reduction in the use of these construction materials of wall in the proportion of housing units with secondary and above schooling of head of households (See Figure 4.7).

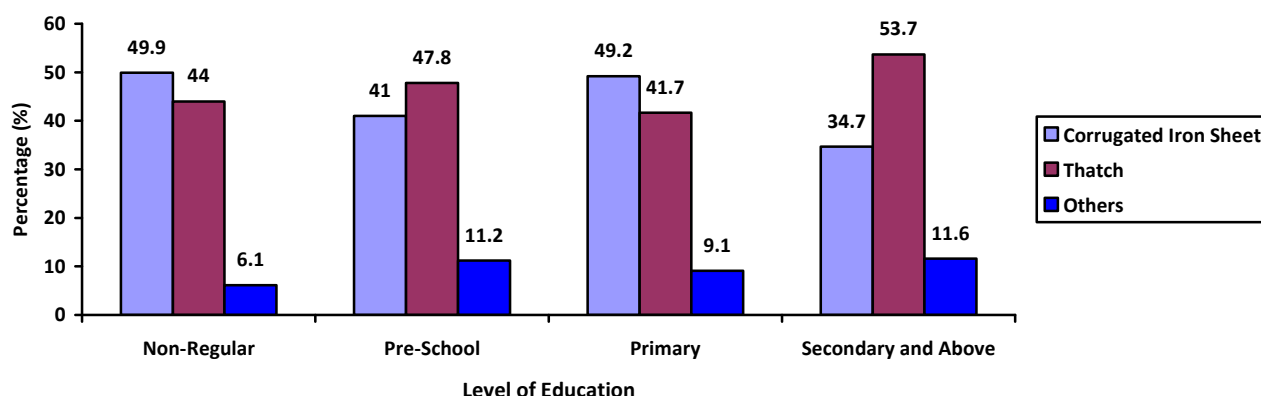
Figure 4.7 Percentage Distribution of Construction Material of Housing Units Wall by Level of Education of Head of Household, Country Level : 2007.



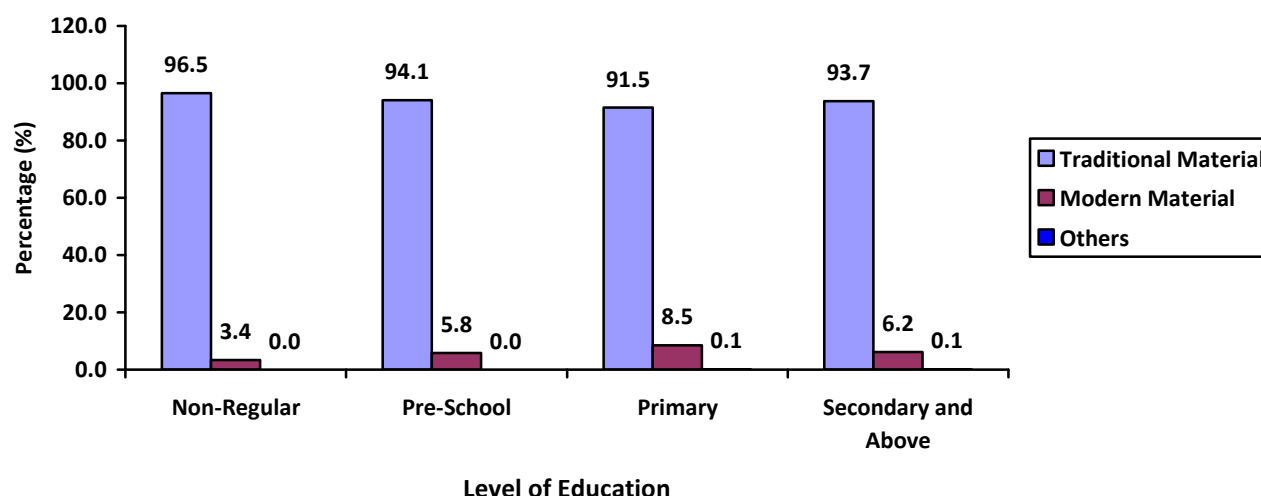
At regional level, except Tigray, Afar, Amhara and Oromiya regions, a higher proportion using traditional materials for the construction of walls was observed among heads of household with non-regular schooling.

A higher proportion of the use of corrugated iron sheet for the construction of roof was observed in housing units with non-regular schooling head of households followed by those housing units whose head of household had primary schooling. On the other hand, a higher proportion of households using traditional materials for the construction of floor were observed among heads of non-regular schooling by head of households (See Figure 4.8 and 4.9).

**Figure 4.8 Percentage Distribution of Construction Material of Housing Units
Roof by Level of Education of Head of Household, Country Level : 2007.**



**Figure 4.9 Percentage Distribution of Construction Material of Housing Units
Floor by Level of Education of Head of Household, Country Level : 2007.**



3.3.2 Number of Rooms

Examining the data on number of rooms per households and number of persons living per room provides indication of crowding in living space. The distribution of housing units by number of rooms and region is given in Table 4.11 (See Appendix 11). From the table it can be observed that about 53.1 percent of the housing units in Ethiopia only had one room. This should be viewed in the context of average number of children of 6-7 per women by the end of her reproductive life. Of the

total housing units in the country housing units with two, three and four rooms constituted about 29.2 per cent, 11.5 per cent and 3.9 percent, respectively. In urban areas of the country the proportion of housing units with one and two rooms are relatively lower compared to the corresponding proportions in rural areas. These proportions were about 72.1 percent and 84.8 per cent in urban and rural areas, respectively. Like at country level the majority of the housing units in each region have one and two rooms. As presented in Table 4.11 (See Appendix 11), the proportion of housing units with one and two rooms varies from about 65.4 per cent in Addis Ababa to 96.7 per cent in Somali region. The proportion of housing units with three rooms varies from about 2.1 per cent in Somali region to about 15.8 per cent in Addis Ababa. The proportion of housing units with four or more rooms were higher in Addis Ababa (about 18.9 percent), and it varies from one region to the other but with relatively small differences.

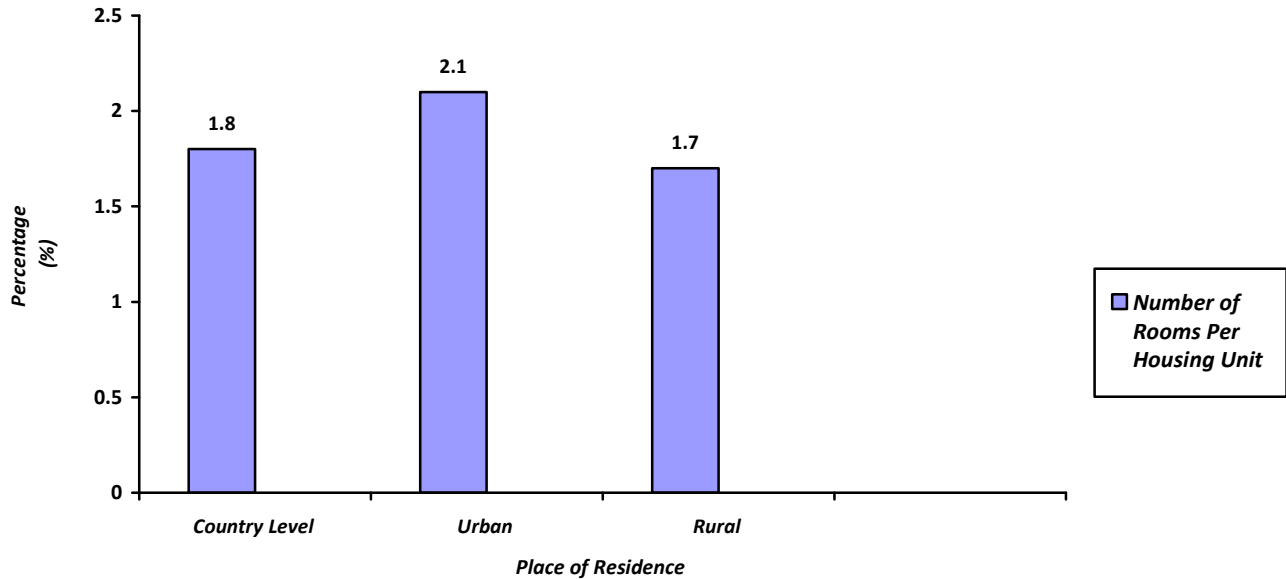
3.3.3 Density of Occupation

A. Average Number of Rooms Per Housing Unit

In general, density of housing unit occupation is consistent with maintenance of health and privacy of occupants. Infectious diseases spread faster in densely populated environment; and it is more difficult to evacuate people during disasters and calamities. There are even suggestions that lack of privacy, high noise level and other concomitant of high densities may tend to increase mental illness and mal-adjustments.

Overcrowding is usually measured in terms of the average number of persons per room and it is also expressed in the relationship between the average size of household and the number of rooms in the housing units. As shown in Table 4.12a and Figure 4.10, at country level the average number of rooms per housing unit was about 1.8. The corresponding figures in urban and rural areas of the country were 2.1 and 1.7, respectively. Moreover, there was regional variation in the average number of rooms per housing unit and it ranges from 1.3 in Affar and Somali regions to 2.4 in Addis Ababa. However, the number of rooms per housing unit is not an adequate measure of adequacy or spacing in view of the household size.

Figure 4.10 Percentage Distribution of Average Number of Rooms Per Housing Unit, Country Level :2007.

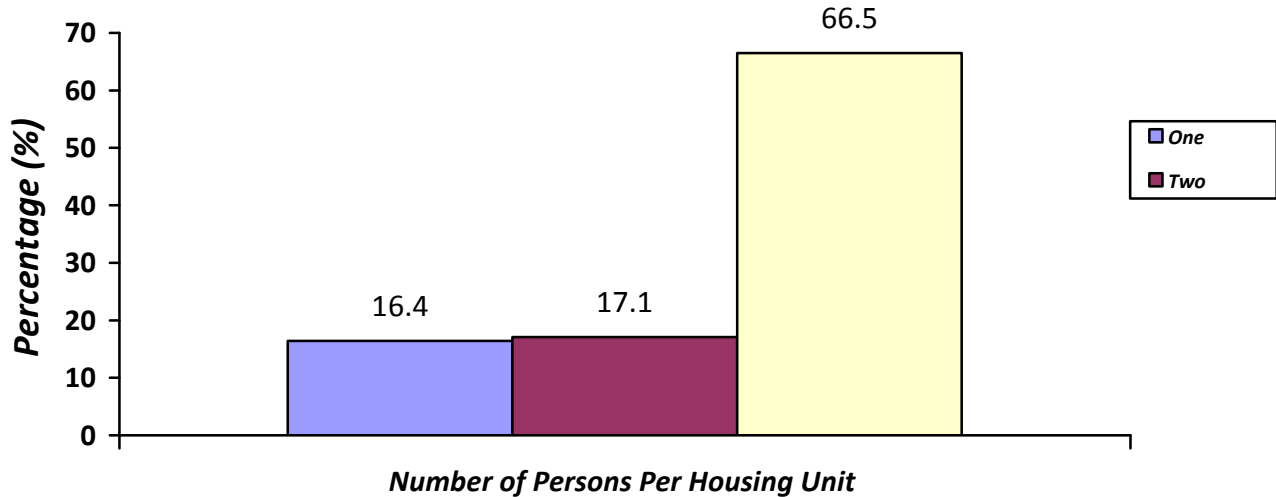


B. Average Number of Persons Per Housing Unit

The number of rooms per occupied housing unit and number of persons living per room were also computed from the data. It should be noted that the averages were computed for conventional population and conventional housing units.

The percentage distributions of urban area housing units by number of persons per housing units are presented in Table 4.12b (See Appendix 12B). Table 12b and Figure 4.11 show that in urban areas of the country 16.4 percent and 17.1 percent of the housing units were occupied by one and two persons, respectively; where as 66.5 percent of the housing units were occupied by three and more persons per housing unit. The data given in Table 4.12b (See Appendix 12B) does not actually reflect the conditions of “overcrowding”. The true picture of “overcrowding” would have been brought out if the analysis were restricted to bedrooms only. Thus, to give additional information on “overcrowding”, the percentage distributions of housing units by number of rooms and number of persons are presented in the following section.

Figure 4.11 Percentage Distribution of Number of Persons Per Housing Unit, Urban -Country Level: 2007.

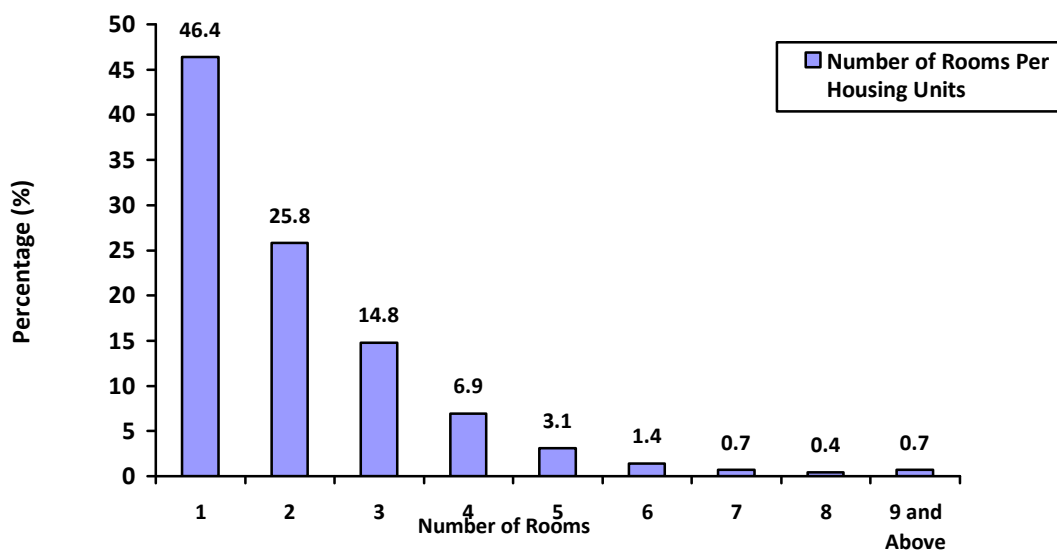


According to the UN Recommendation of Overcrowding (UN, 1967) density of occupation of housing units was classified into three categories. These classifications are:-

- Housing units with more than one room occupied on the average by less than one person per room are classified as **Under Occupied**.
- Housing units with more than one room occupied on the average by 1 to 2.4 persons per room are classified as **Adequately Occupied**.
- Housing units with more than one room occupied on the average by 2.5 or more persons per room are classified as **Overcrowded**.

The degree of over-crowding in urban areas of Ethiopia was assessed based on the classification above. Accordingly, Table 4.12c reveals that 9 percent of the housing units were under occupied, 58 percent were adequately occupied and 31.8 percent were overcrowded.

Figure 4.12 Percentage Distribution of Housing Units by Number of Rooms Per Housing Unit ,Country Level :2007.



The percentage distribution of urban area housing units cross-classified by degree of overcrowding and regions is presented in Table 4.13. As can be seen from the table, based on the housing unit overcrowding recommendation (UN, 1967) stated above at regional level, the proportion of adequately occupied housing units ranges from 28.5 percent in Harari region to Smali region. All regions, except Somali region, have proportion of below the national average. Regarding overcrowded housing units, the proportion of housing units in urban areas of all regions have a higher proportion compared to the national average. On the other hand, under occupied housing units compared to the national average, only 5 regions have a higher average. These are Oromiya (9.4 percent), Benishangul-Gumuz (10.1 percent), SNNP (9.4 percent), Harari (11.1 percent) and Addis Ababa (11.3 percent). Whereas, the other regions have a lower proportions compared to the national average.

Table 4.13 Percentage Distribution of Housing Units Cross-Classified by Degree of Overcrowding and Region, Urban - Ethiopia: 2007

Region	Adequately Occupied	Over crowded	Under Occupied
Tigray	38.6	52.9	8.4
Afar	39.5	52.6	6.3
Amhara	29.1	61.7	8.8
Oromiya	28.6	61.8	9.4
Somali	73.0	24.6	1.8
Benishangul-Gumuz	31.2	58.7	10.1
SNNP	31.5	59.0	9.4
Gambella	39.2	52.9	7.8
Harari	28.5	60.1	11.1
Addis Ababa	29.8	59.0	11.3
Dire Dawa	47.7	47.9	7.4
Special Enumeration Area	31.5	59.0	9.4
Country Total	58.0	31.8	9.0

Table 4.14 shows that distribution of housing units by number of households per housing unit in urban areas of Ethiopia. The data reveals that about 96 percent of the housing units were occupied by one household; whereas about 4 percent of the housing units in urban areas of the country were shared by two or more households. From the above findings, it can be clearly seen that the majority of the housing units in rural areas are below standard and also they are lack adequate space.

C. Average Household Size

At country level the average household size was 4.5; whereas the corresponding figures for urban and rural areas of Ethiopia were 3.6 and 4.7, respectively. On average, about 2.9 persons in rural and 1.9 persons in urban areas of the country live in one room. This number varies from 1.7 persons in Addis Ababa to 4.9 persons in Somali region. On the other hand, the average household size varies from 3.7 in Dire Dawa to 5.8 in Somali region.

3.4 Housing Facilities and Amenities

Sanitation is the hygienic means of promoting health through prevention of human contact with the hazards of wastes. Thus, the availability of sanitary conditions is considered to be a valuable indicator and is associated with the quality of the housing unit. In addition to this, the availability of kitchen

facility, safe water as well as safe and efficient management of human waste is considered among the first basic steps that should be taken towards assuring a suitable environment for the well-being of the population.

During the 1994 Population and Housing Census different census forms with housing questions were employed in the rural and urban parts. The data on housing collected in urban areas was relatively detailed while the data collected in the rural areas was limited. In the 2007 Population and Housing Census, however, the same type of housing questions for urban and rural areas was employed. Also, the census collected whether two or more households shared some toilet and kitchen facilities.

The basic information obtained from the 2007 included whether or not the housing units have essential amenities and housing facilities. We examine the results of this information in the following section.

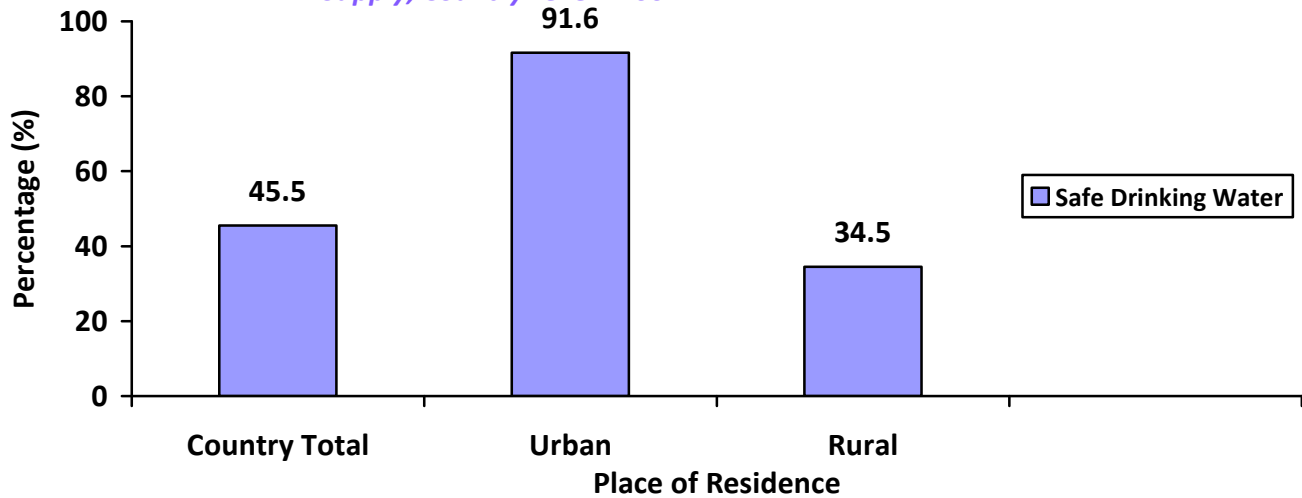
3.4.1 Source of Drinking Water Supply

Protected water supply is of great importance for sanitary purpose, especially with regard to protection against communicable diseases. The most effective means of protecting water from pollution and to ensure its purity is supplying it through pipes provided that the water supply system is effectively administered (UN, 1969).

Table 4.16 (See Appendix 14) shows the distribution of housing units by source of drinking water supply. From the table it can be seen that, at country level, about 45.5 percent of the housing units were using safe drinking water supply as the main source of drinking water. About 28 percent and 26.6 percent of housing units of the country were using unprotected well or spring and river/lake/pond as the main source of drinking water supply, respectively. On the other hand, in Ethiopia urban housing units were much more likely (about 91.6 percent) to have used safe water as a main source of drinking water supply as compared to rural housing units (about 34.5 percent). In the urban areas of the country, about 4.6 percent and 3.8 percent of the housing units used unprotected well or spring and river/lake/pond as the main source of drinking water supply.

However, a higher proportion of rural areas of the country used unprotected well or spring and river/lake/pond as a main source of drinking water supply (about 33.5 percent and 32.0 percent, respectively). From the above findings it is clearly seen that, a higher proportion of housing units in rural parts of the country have access to unprotected water as a main source of drinking water supply, and hence they are still subject to the use of unsafe drinking water supply.

Figure 4.13 Percentage Distribution of Housing Units by Safe Drinking Water Supply, Country Level : 2007.

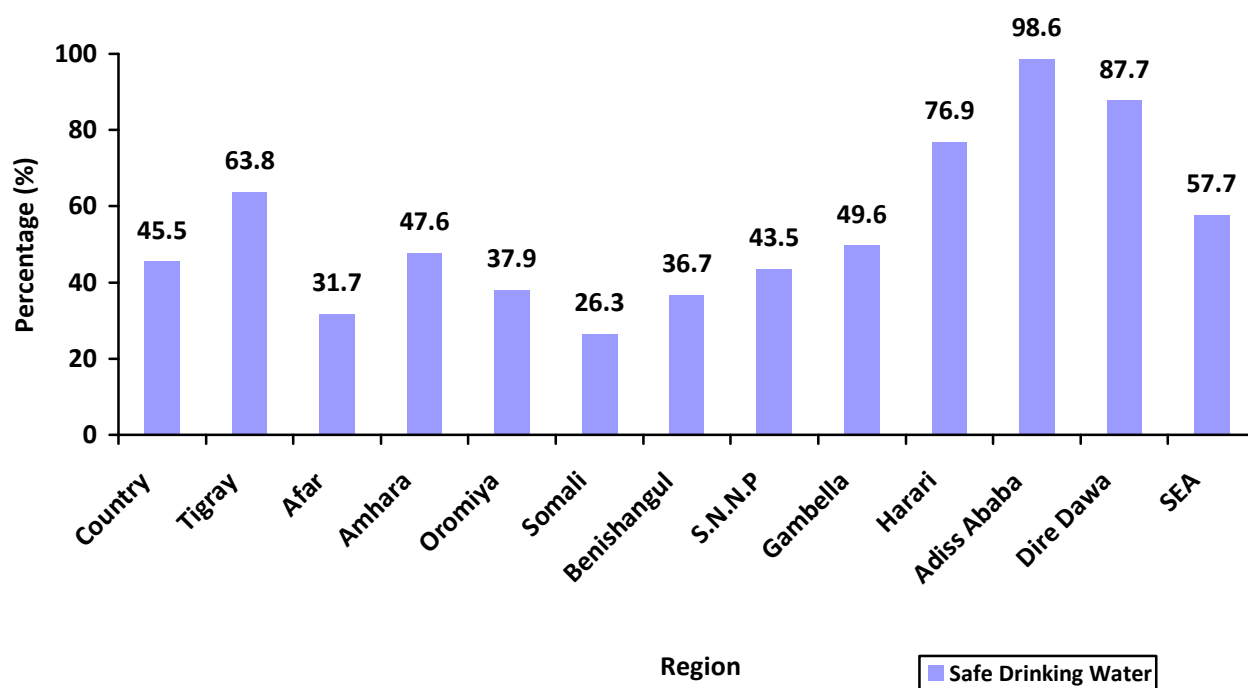


NB – Safe water includes Tap inside the house, in compound private/shared, Tap outside compound and Protected well/spring.

In general, as shown in Figure 4.13 and Table 4.16 (See Appendix 14) the proportion of housing units that has access to safe drinking water as a main source of drinking water supply varied among regions. Figure 4.14 and Table 4.16 show that the proportion ranges from 26.3 percent in Somali region to 98.6 percent in Addis Ababa. Besides, Addis Ababa a higher proportion of housing units in Tigray, Amhara, Gambella, Harari and Dire Dawa regions (with 63.8 percent, 47.6 percent, 49.6 percent, 76.9 percent and 87.7 percent, respectively) used safe drinking water as a main source of drinking water supply.

In the rural areas, the majority of housing units used river/lake/pond as their main source of linking water supply. This proportion ranged from the lowest about 19.2 percent in Dire Dawa to the highest about 50 percent in Gambella region.

Figure 4.14 Percentage Distribution of Housing Units by Safe Drinking Water Supply and Region: 2007.



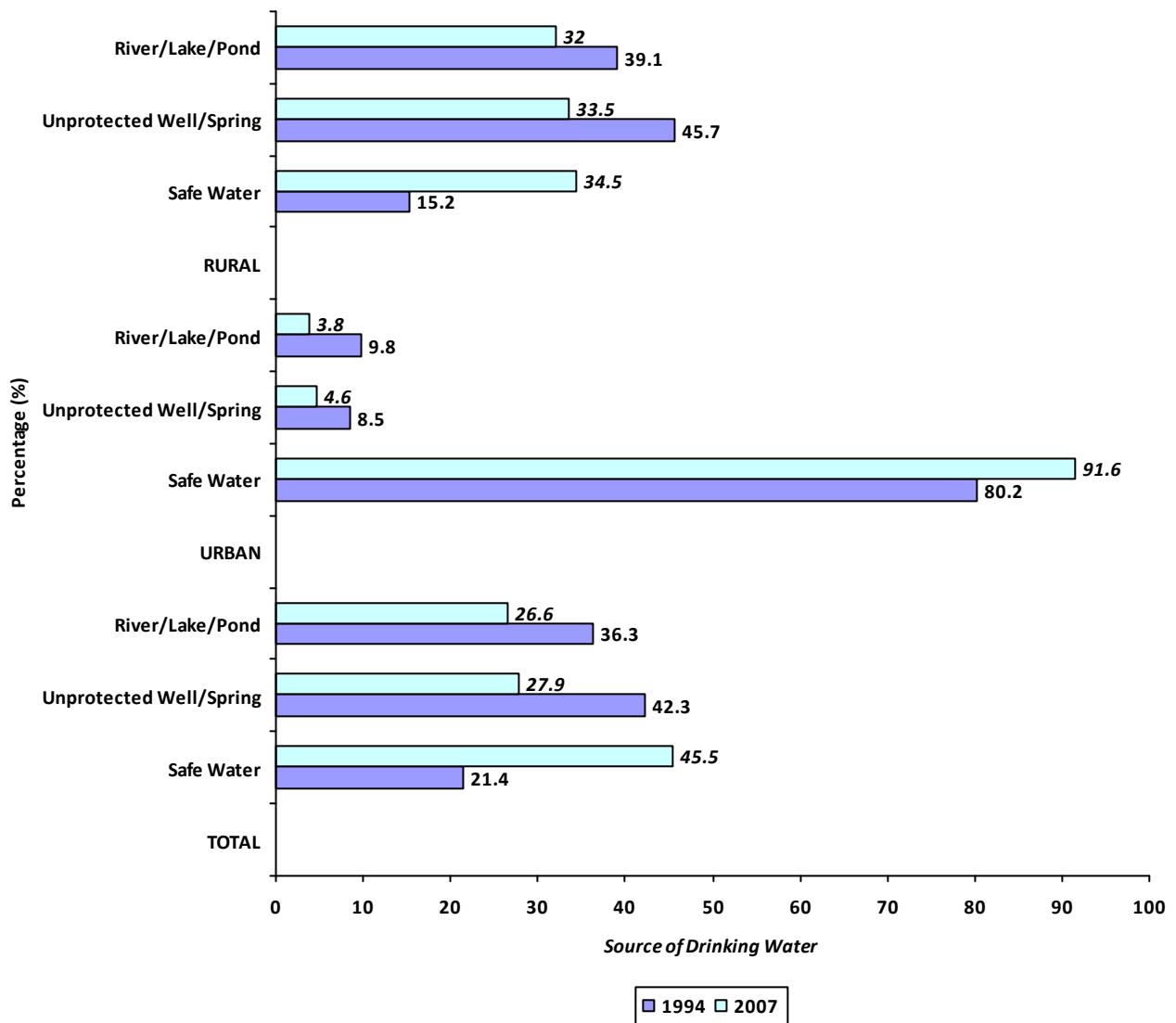
The data on the distribution of housing units in urban areas by main source of drinking water supply is presented in Table 4.17. At country level, about 85.7 percent had piped/tap drinking water supply. However, only small proportion (about 3.4 percent) had this facility inside their houses. Table 4.17 also indicates that households living in about 41.9 percent and 40.4 percent of housing units used piped/tap drinking water from outside their compound and inside their compound (private or shared), respectively. Thus a higher proportion of housing units with tap water inside the house used as main source of drinking water supply.

The proportion of housing units with protected well/spring is highest in Benishangul-Gumuz region (about 21.2 percent) and lowest in Dire Dawa (about 0.5 percent). The proportion of housing units with unprotected well/spring access as a main source of water supply varied from about 0.1 percent

in Dire Dawa to about 17.5 percent in Benishangul-Gumuz region, while the proportion of housing units with river/lake/pond as a main source of drinking water supply varied from 0.03 percent in Dire Dawa to about 25.7 percent in Somali region.

As can be observed from Figure 4.15 given below there were considerable improvements in access to safe water over the last 12 years. At national level, the proportion of housing units which had safe water facility increased from about 81.2 percent in 1994 to 91.6 percent in 2007.

Figure 4.15 Percentage Distribution of Housing Units by Safe Drinking Water Supply between 1994 and 2007.

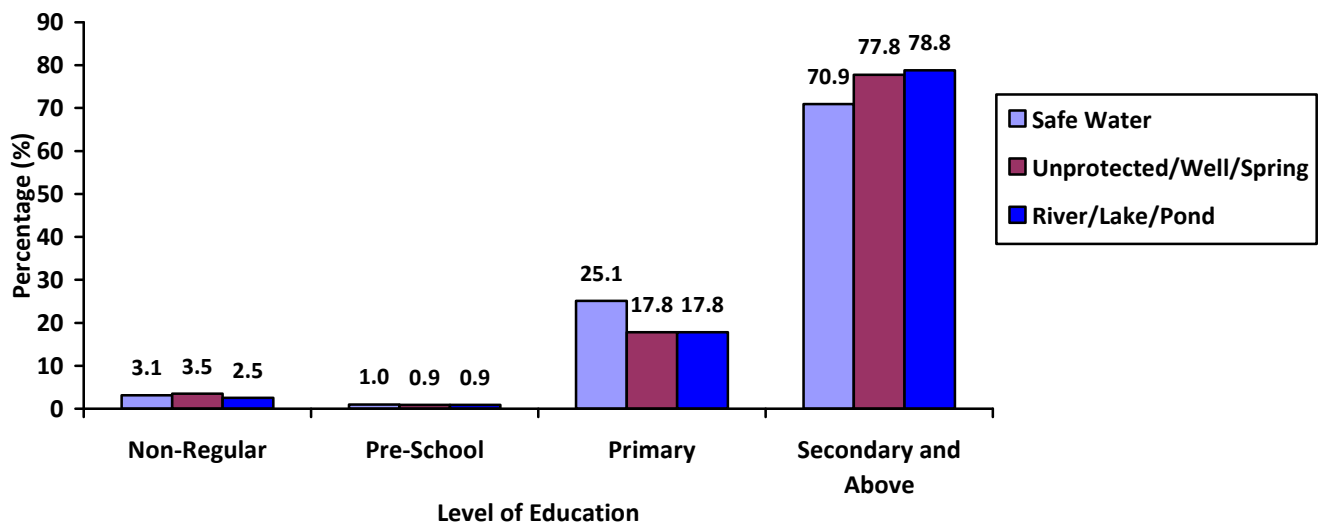


Conversely, nationally there were declines in the proportions of housing units accessing unprotected well/spring and river/lake/pond as a main source of drinking water from about 8.5 percent and 9.8 percent in 1994 to 4.6 percent and 3.8 percent in 2007, respectively.

Percentage distribution of housing units by main source of drinking water and level of education of head of household is shown in Table 4.18 (See Appendix 15). As can be observed from the table, at country level, the proportion of housing units using safe drinking water increases with the educational level of the head of household up to primacy school. The same table also shows that, the pattern of using safe drinking water as main source of drinking water by highest grade completed by head of household observed for the country also holds true for Tigray, Afar, Amhara, oromiya, Somali and SNNP regions.

On the other hand, in Benishangul Gumuz, Gambella, Harari and Dire Dawa a higher proportion of housing units using safe drinking water as a main source of drinking water is observed for housing units with head of household completed non- regular education followed by housing units with head of household completed primary and pre- school, respectively. In Addis Ababa the proportion of housing units using safe water as a main source of drinking water with head of household completed non-regular, pre-school, primary and secondary and above school is almost similar.

Figure 4.16 Percentage Distribution of Housing Units by Main Source of Drinking Water and Level of Education of Head of Household, Country Level : 2007.

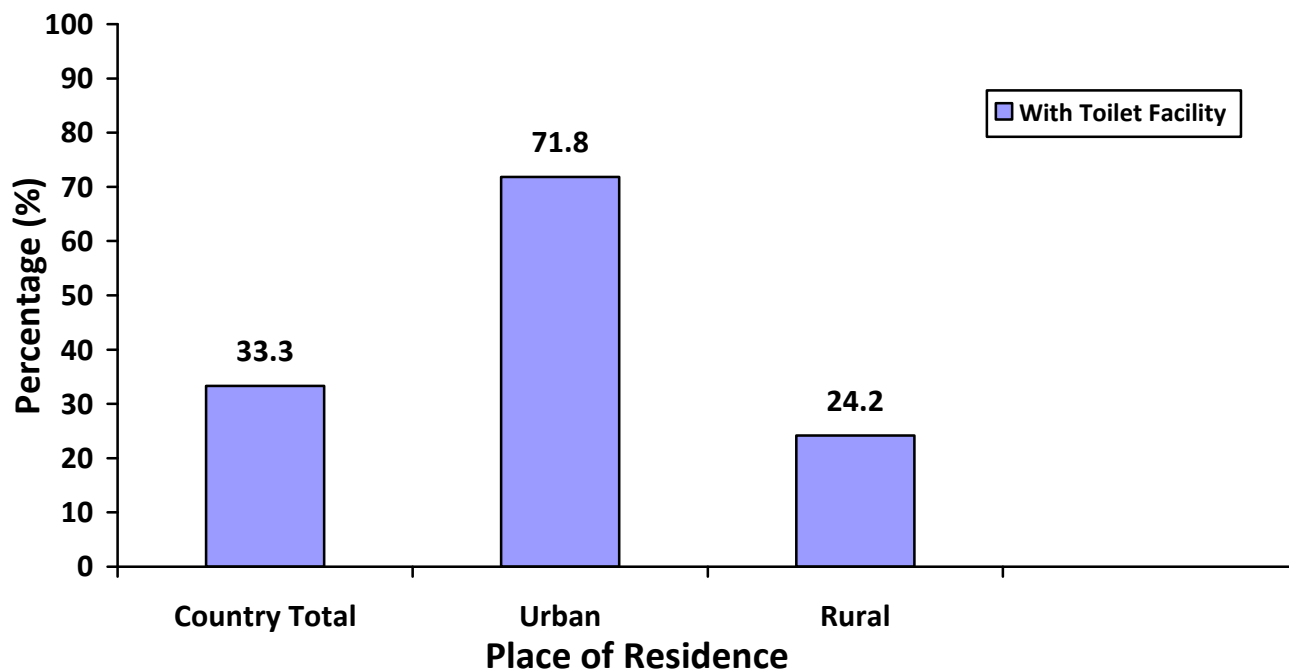


3.4.2 Type of Toilet Facilities

Along with the provision of safe drinking water supply, efficient management of human waste is one of the measurements of environmental sanitation. The 2007 census gathered information on toilet facilities in housing units. The United Nation Principles and Recommendations for Housing Census defined toilet as an installation for the disposal of human excrete and a flush toilet as an installation connected with piped water arranged for humans to discharge their wastes and from which the wastes are flushed by water (UN, 1969).

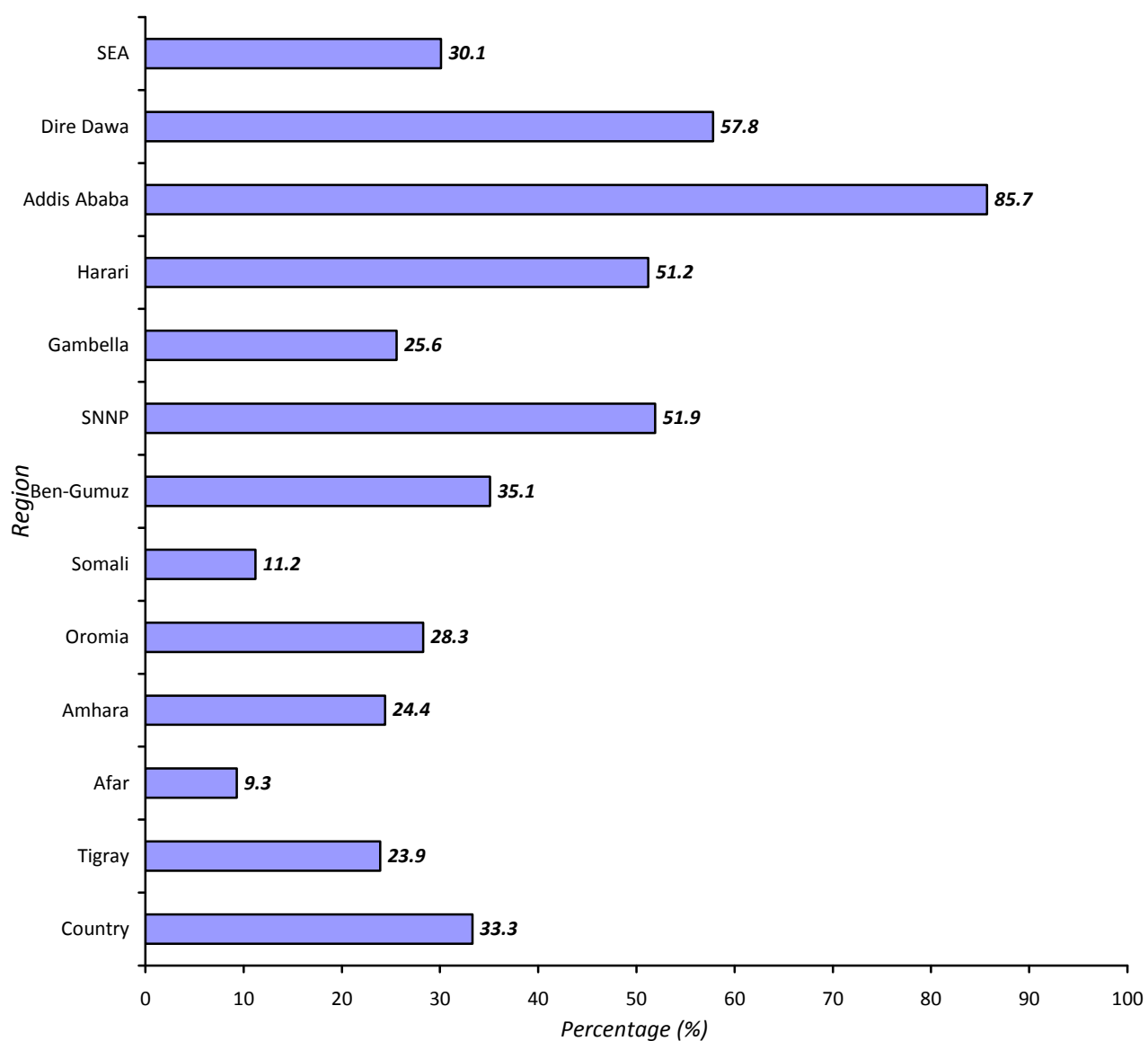
Table 4.19 (See Appendix 16) shows the distribution of housing units by availability of toilet. The majority of the housing units (about 66.7 percent) in Ethiopia had no toilet facility. There is noticeable urban-rural variation in the proportion of housing units by availability of toilet facility. Figure 4.17 reveal that about 71.8 percent of housing units in urban areas have toilet facility as compared with 24.2 percent of rural housing units.

Figure 4.17 Percentage Distribution of Housing Units With Toilet Facility, Country Level : 2007.



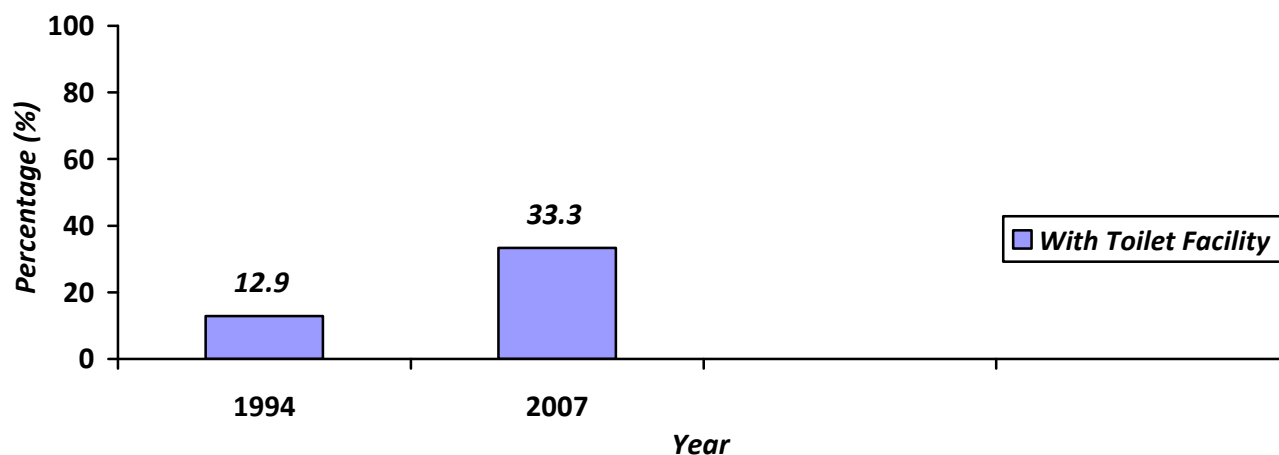
The proportion of urban housing units that had toilet facilities varied among regions ranging from the lowest 43.6 percent in Affar region to 85.7 percent in Addis Ababa. Affar region occupies the lowest position (9.3 percent) followed by Somali region (about 11.2 percent) in terms of its access to toilet facilities. About 90.7 percent and 88.8 percent of housing units in these regions, respectively, have had no toilet facilities (See Figure 4.18).

Figure 4.18 Percentage Distribution of Housing Units With Toilet Facility and Region, Country Level: 2007.



On the other hand, there has been an increase in the proportion of housing units by availability of toilet facility from 12.9 percent in 1994 to 33.3 percent in 2007 (See Figure 4.19).

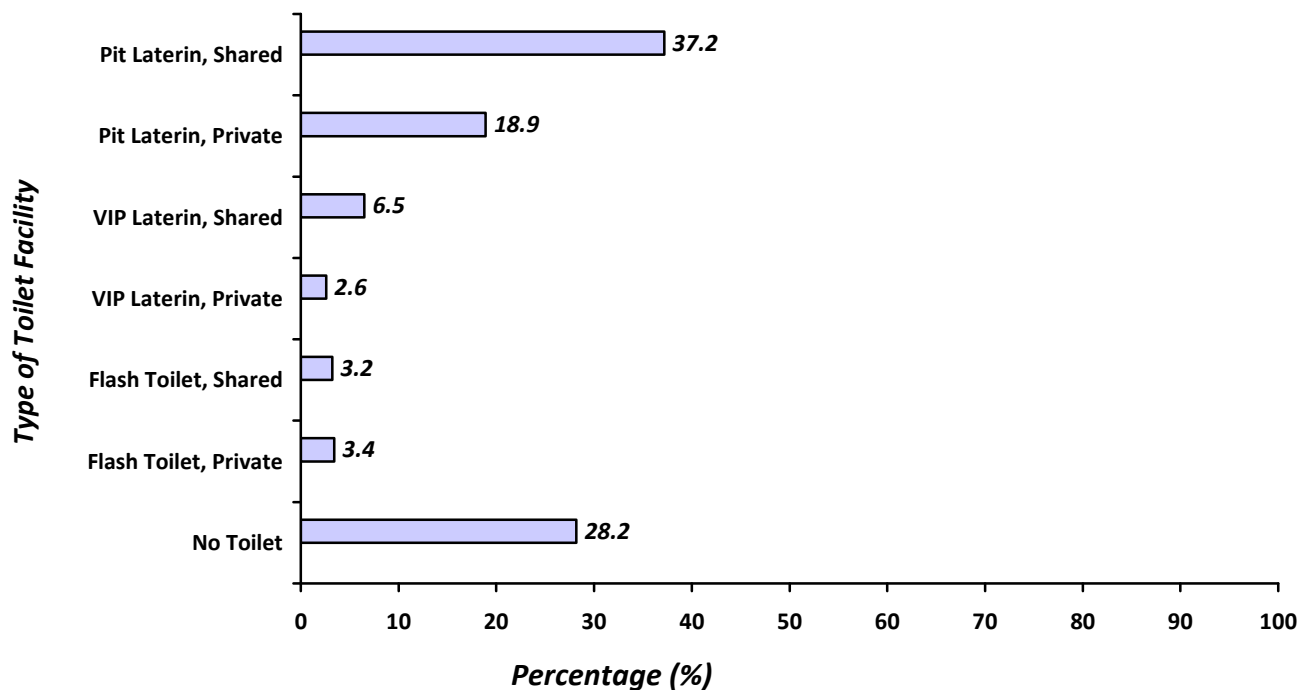
Figure 4.19 Percentage Distribution of Housing Units With Toilet Facility between 1994 and 2007, Country Level : 2007.



The distribution of housing units in urban areas of the country by the type of toilet facility is presented in Table 4.20 (See Annex 18). From the table it is clearly seen that, the majority of the urban housing units had dry pit latrine (private or shared) toilet facilities, which constituted about 56.1 percent. While only 6.6 percent have flush toilet facility (private or shared). Pit latrine toilets are more widely used in urban areas compared with flush toilet.

Besides, Addis Ababa, a higher proportion of urban housing units with flush toilet facility (14.9 percent) the lowest proportion was observed in Benishangul-Gumuz region (about 1.2 percent).

Figure 4.20 Percentage Distribution of Urban Housing Units by Type of Toilet Facility, Country Level: 2007.



3.4.3 Type of Kitchen

The census also gathered information about availability of kitchen by housing units, whether the kitchen is modern or traditional or whether it is shared or privately used. The distribution of housing units in urban areas of the country by type of kitchen is presented in Table 4.21 (See Annex 18). The majority (about 72.5 percent) of housing units in urban area of Ethiopia had a kitchen, out of which, 67.8 percent were traditional and 4.7 percent were modern type of kitchen. Traditional housing units that are used privately constituted about 31 percent. On the other hand, 27.5 percent of the housing units have no kitchen facility.

Figure 4.21 Percentage Distribution of Housing Units in Urban Areas by the Availability of Kitchen Facility, Country Level : 2007.

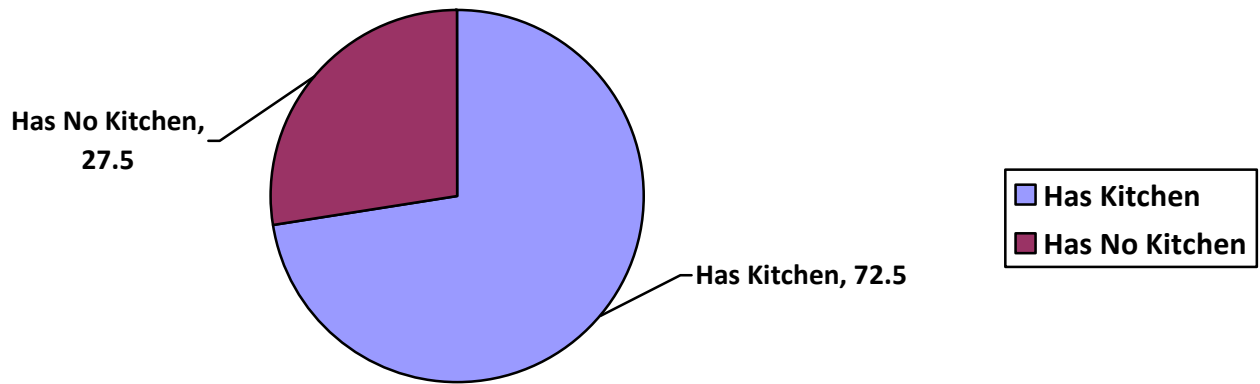


Figure 4.22 Percentage Distribution of Urban Housing Units by Type of Kitchen , Country Level: 2007.

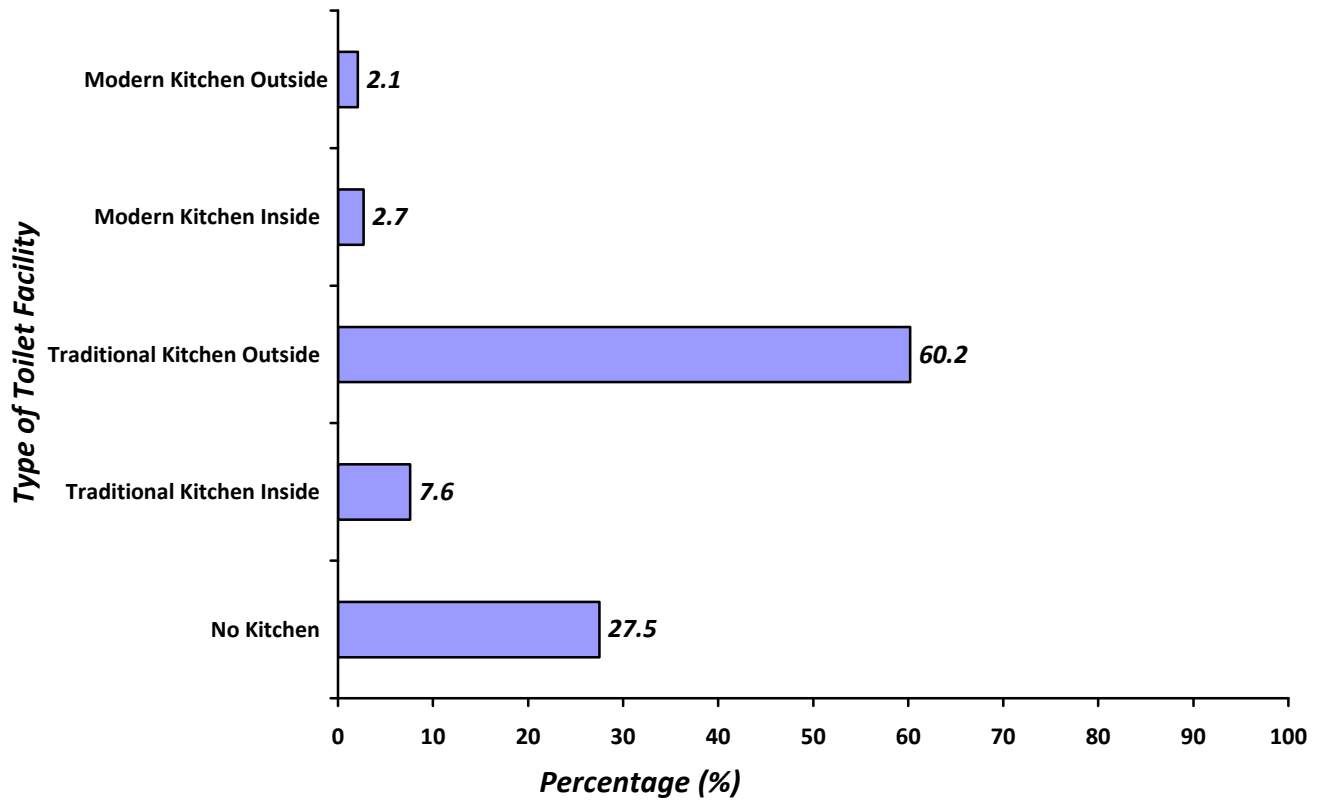


Table 4.21 and Figure 4.23 shows that a higher proportion of traditional types of housing units was observed. The highest proportion of traditional type of kitchen was observed in Oromiya region (about 74.7 percent) and lowest in Gambella region (33.4 percent). The highest proportion of housing units that have modern type of kitchen was observed in Addis Ababa (9.1 percent) followed by Tigray region (5.2 percent); whereas the lowest proportion of housing units with modern type of kitchen were found in Gambella region (1.6 percent). On the other hand, the proportion of housing units in urban area that have modern type of kitchen increased from 4.6 percent in 1994 to 5.7 percent in 2007.

Figure 4.23 Percentage Distribution of Urban Housing Units With Traditional and Modern Type of Kitchen and Region: 2007.

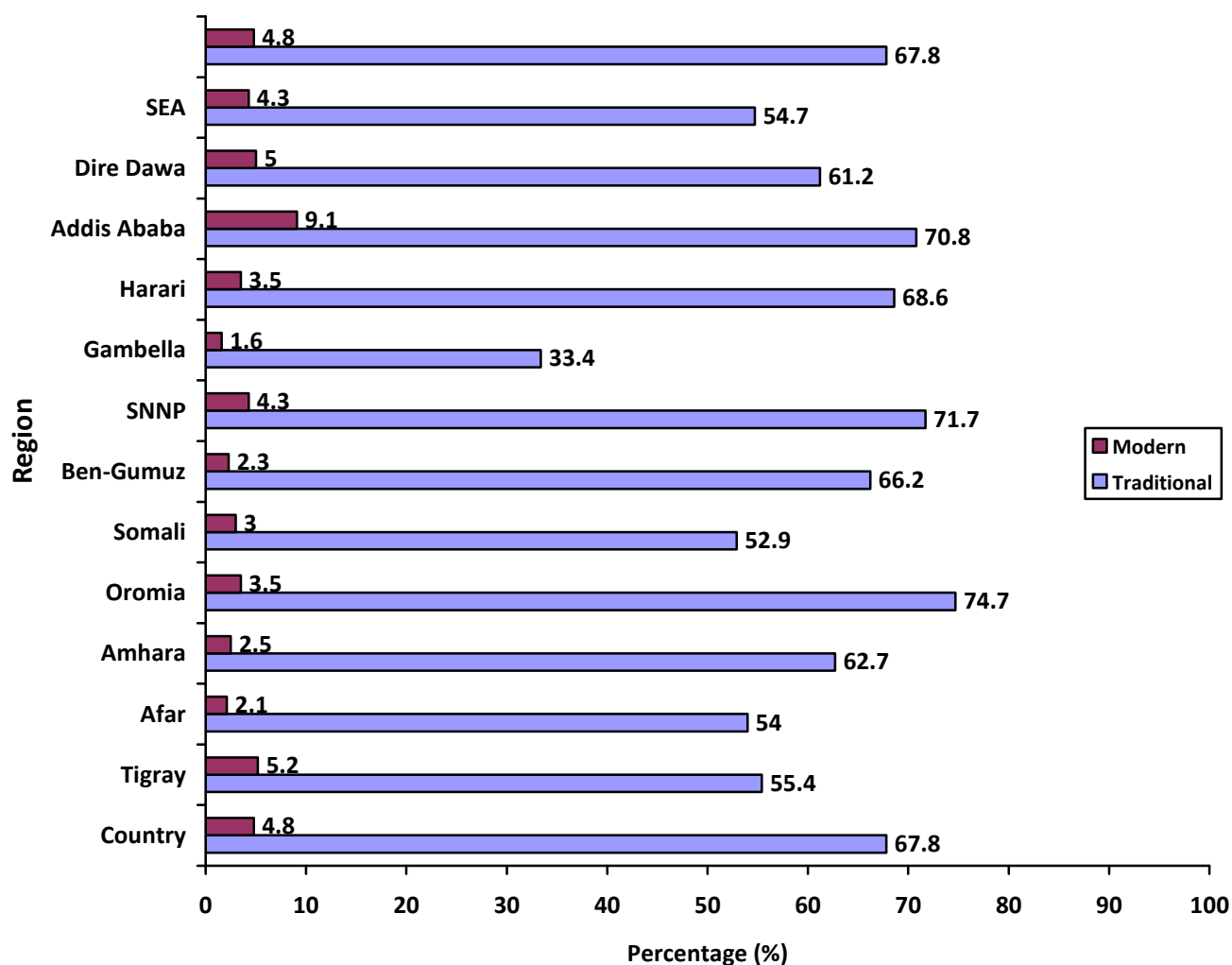


Table 4.22 (See Appendix 19) shows the distribution of housing units by type of kitchen in rural areas of the country. About 53.8 percent of the housing units in rural areas of Ethiopia have no kitchen facilities. On the other hand, about 46.2 percent of the housing units have kitchen facility. Out of which, 23.3 percent had traditional kitchen inside the housing unit, 21.7 percent had traditional kitchen outside the housing unit and about 1.2 percent of modern type of kitchen. The proportion of housing units in rural areas of Ethiopia with kitchen facilities ranges from 21.4 percent in Dire Dawa to 73.6 percent in Tigray region.

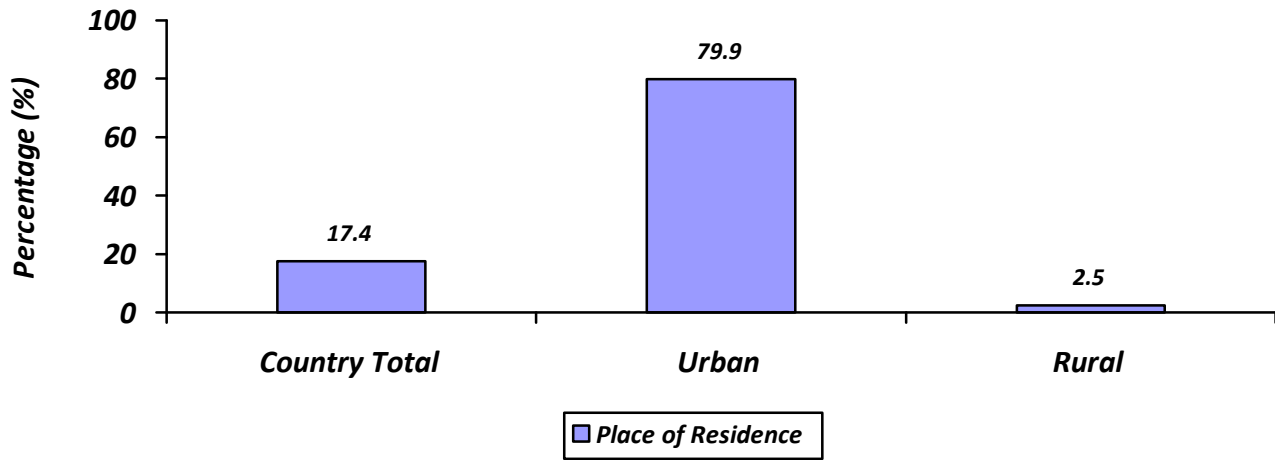
The distribution of housing units by whether livestock spend the night in the room where persons also spend the night in rural areas of the country at the time of enumeration is presented in Table 4.23. The data depict that in about 48.6 percent of the housing units in rural areas of Ethiopia livestock spend the night in the same room as household members for sleeping.

The proportion of housing units with the same room used by household members for sleeping as livestock varies by region. The proportion ranges from a low of 5.3 percent in Affar region to a high of 70.8 percent in Dire Dawa.

3.4.4 Type of Lighting

Information on the source of lighting in housing unit could provide planners with useful indication of areas where lighting services are deficient and need to be extended. According to the census result, at country level, 17.4 percent of the housing units have electricity, but it varies widely by place of residence. Only 2.5 percent of the housing units in rural areas observed have electricity (See Figure 4.24).

Figure 4.24 Percentage Distribution of Housing Units With Electricity as Source of Lighting, Country Level : 2007.



The distribution of housing unit in urban areas of the country by type of lighting is shown in Table 4.24 (See Appendix 20). In urban areas of the country about 80 percent of the housing units were using electricity for lighting. Out of which, 28.1 percent of the housing units had private electric and 51.9 percent had shared electric meter reader. About 12 percent of the housing units used kerosene lamp, while 6.1 percent and 8 percent used lantern and other sources of lighting, respectively (See Figure 4.25).

Among the urban areas of the region's the proportion of housing units that used electricity for lighting ranged from the lowest 35.8 percent in Somali region to 98.1 percent in Addis Ababa, while those who used kerosene lamp varied from 1.5 percent in Addis Ababa to 23.1 percent in Amhara region. On the other hand, the proportion of housing units that used lantern and other types of lighting varied from the lowest 0.4 percent in Addis Ababa to 51.2 percent in Somali region.

Figure 4.25 Percentage Distribution of Urban Housing Units by Type of Fuel for Lighting, Country Level: 2007.

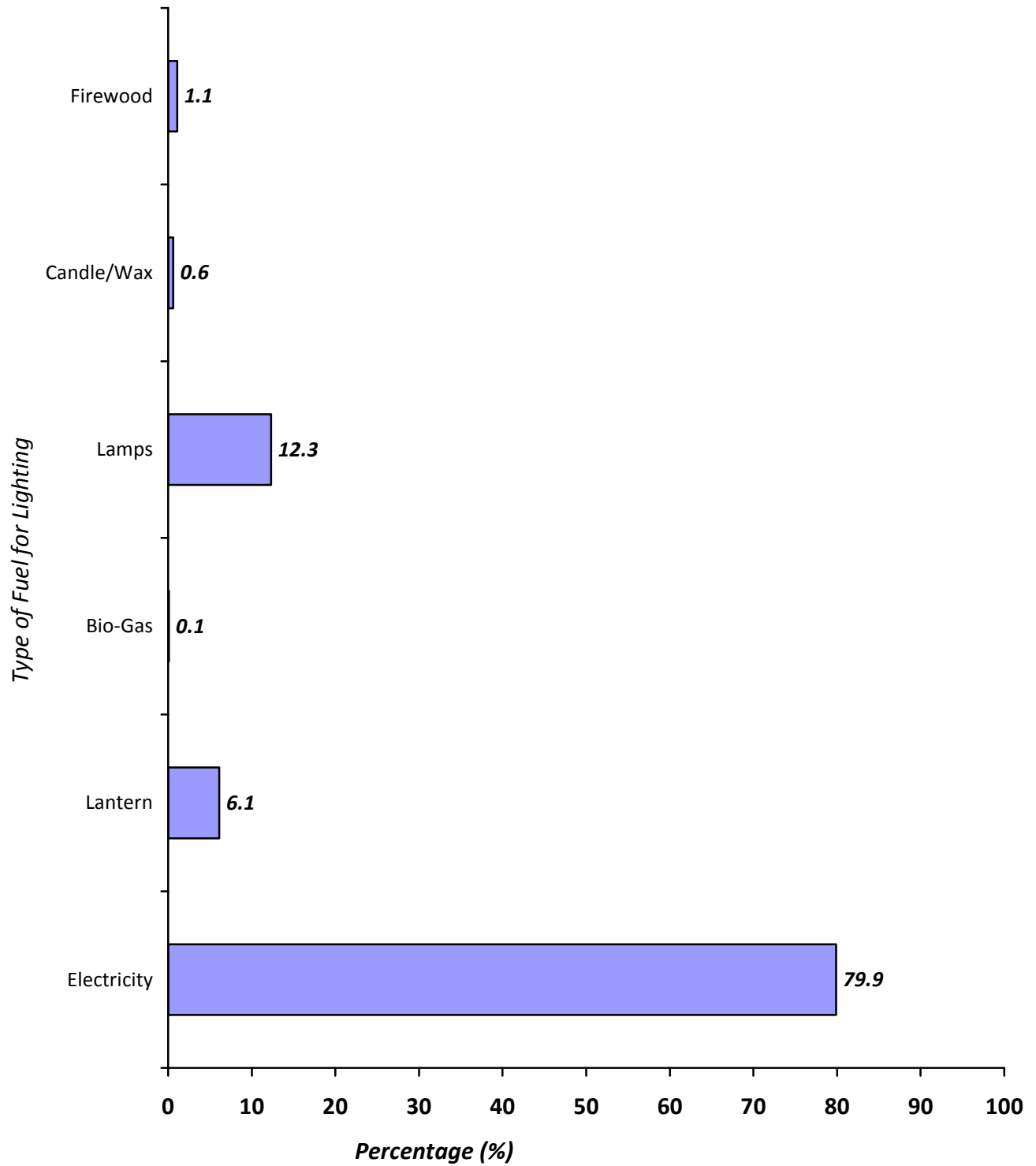
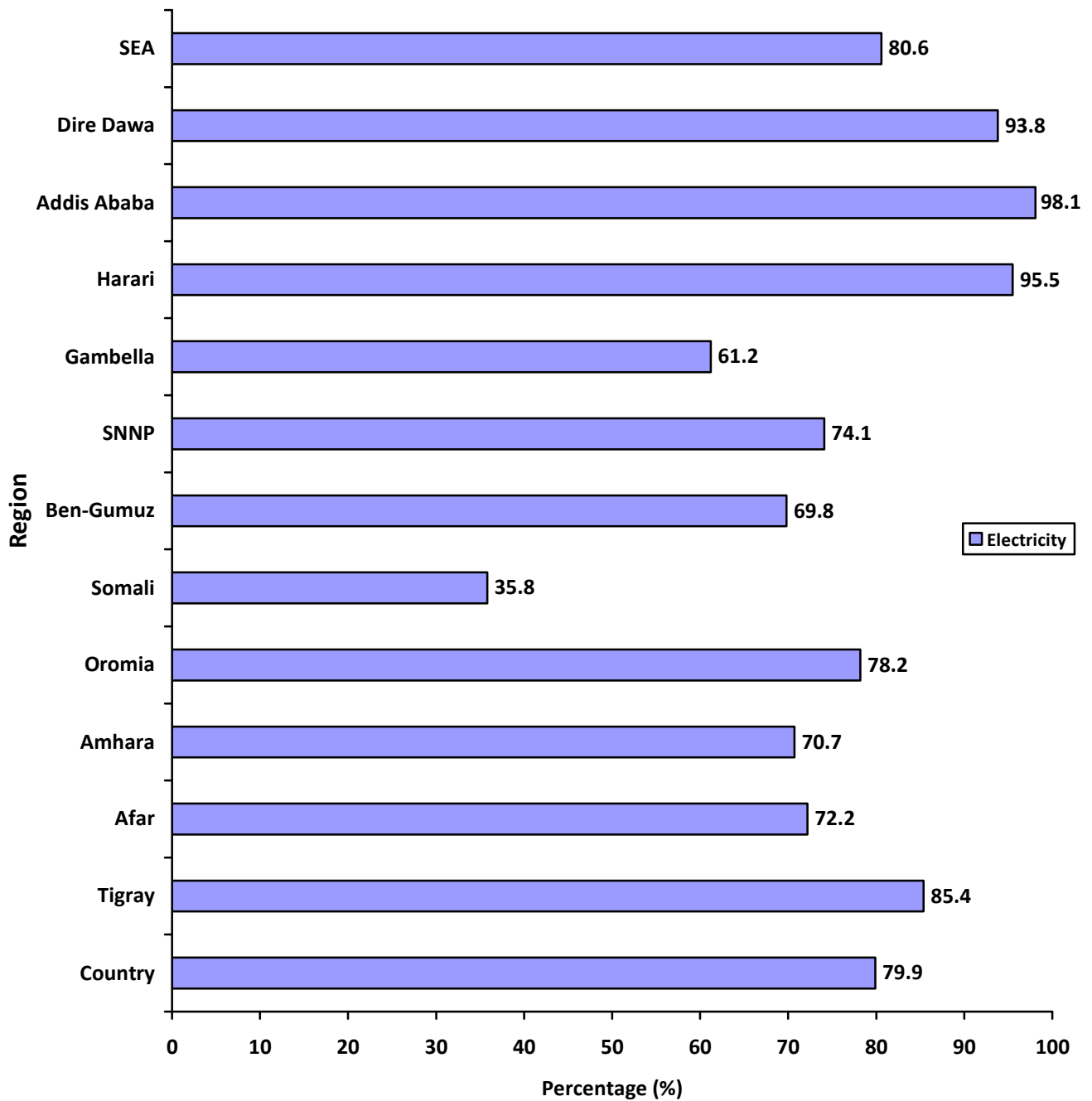
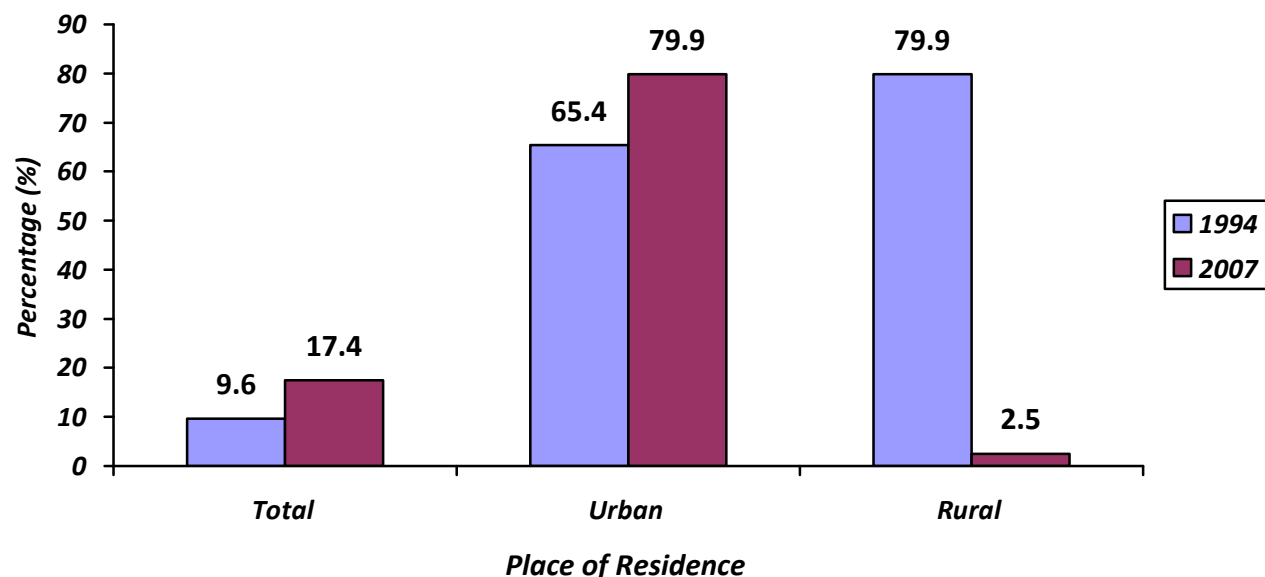


Figure 4.26 Percentage Distribution of Housing Units With Electricity as Source of Lighting and Region: 2007.



Moreover, as shown in Figure 4.27 the proportions of housing units in urban area with electricity have increased from 65.4 percent in 1994 to 79.9 percent in 2007.

Figure 4.27 Percentage Distribution of Housing Units With Electricity as Source of Lighting for Urban Areas between 1994 and 2007.



3.4.5 Type of Fuel for Cooking

The census gathered information on the type of fuel households used for cooking. Here it is worth to mention that during data collection households were asked to mention all the type of fuels they were using mostly for cooking.

The distribution of housing units by type of fuel mostly used for cooking is given in Tables 25a -25h (See Appendix 21A - 21H). Several types of fuels are used for cooking in Ethiopia. As can be seen from Figure 4.28 about nine out of ten housing units used firewood mostly as fuel for cooking, 37.1 percent used dung, 17.6 percent use charcoal, 11.9 percent used kerosene, 2.3 percent used electricity 0.4 percent used bio-gas and 15.8 percent use other type of fuel for cooking in 2007. Regarding urban-rural variation, firewood is more commonly used for cooking in the rural areas (89.3 percent) than other types of fuel used for cooking. In urban areas of the country the majority of the housing units (74.8 percent) used firewood mostly as fuel for cooking.

Figure 4.28 Percentage Distribution of Housing Units by Type of Fuel Used for Cooking, Country Level: 2007.

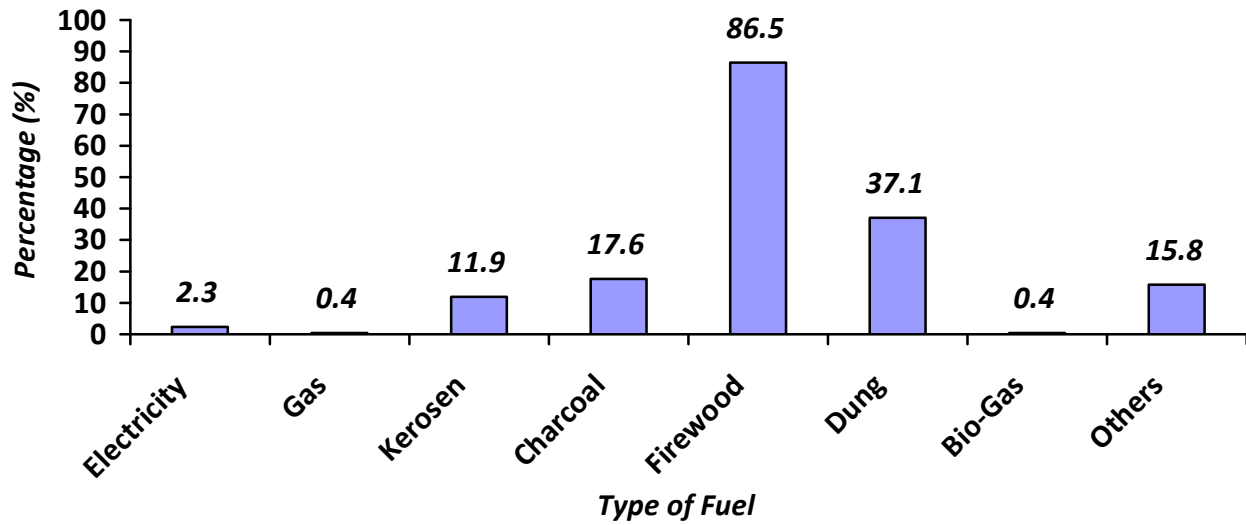


Figure 4.29a Percentage Distribution of Housing Units With Electricity Used as Fuel for Cooking and Region: 2007.

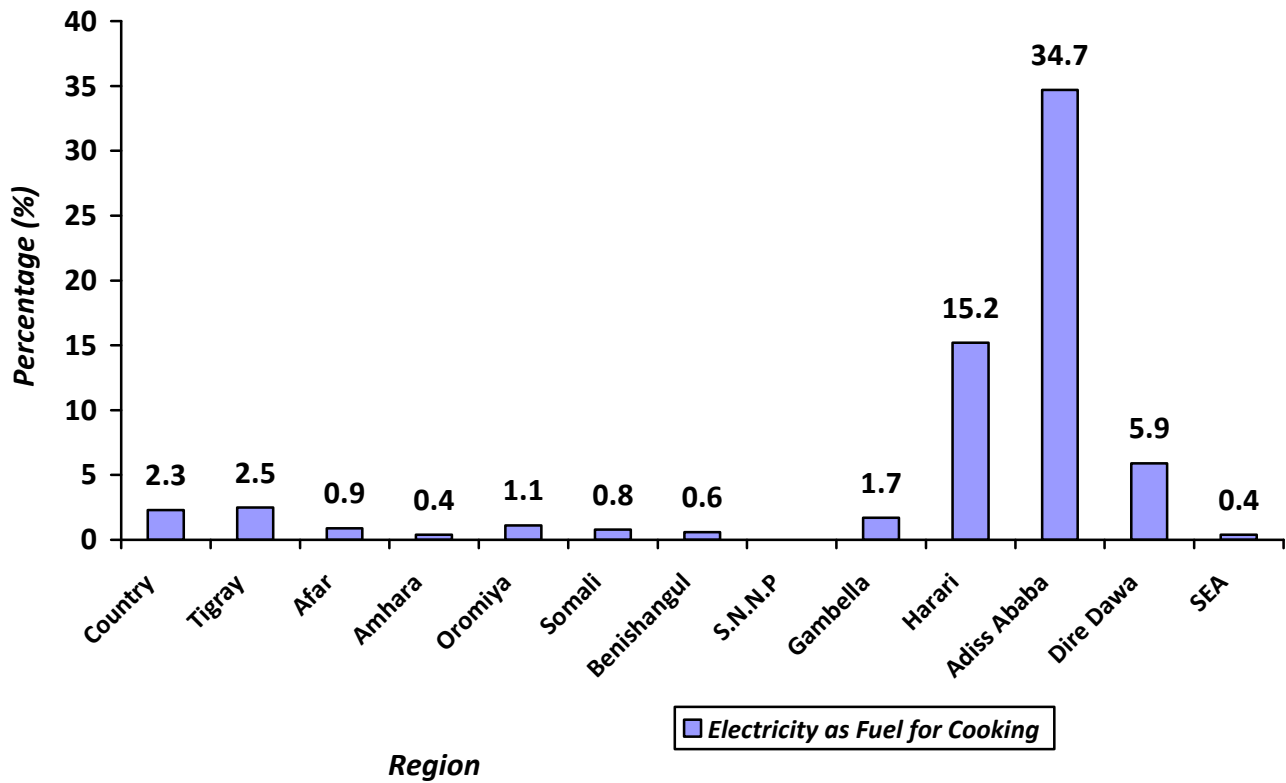


Figure 4.29b Percentage Distribution of Housing Units With Gas Used as Fuel for Cooking and Region: 2007.

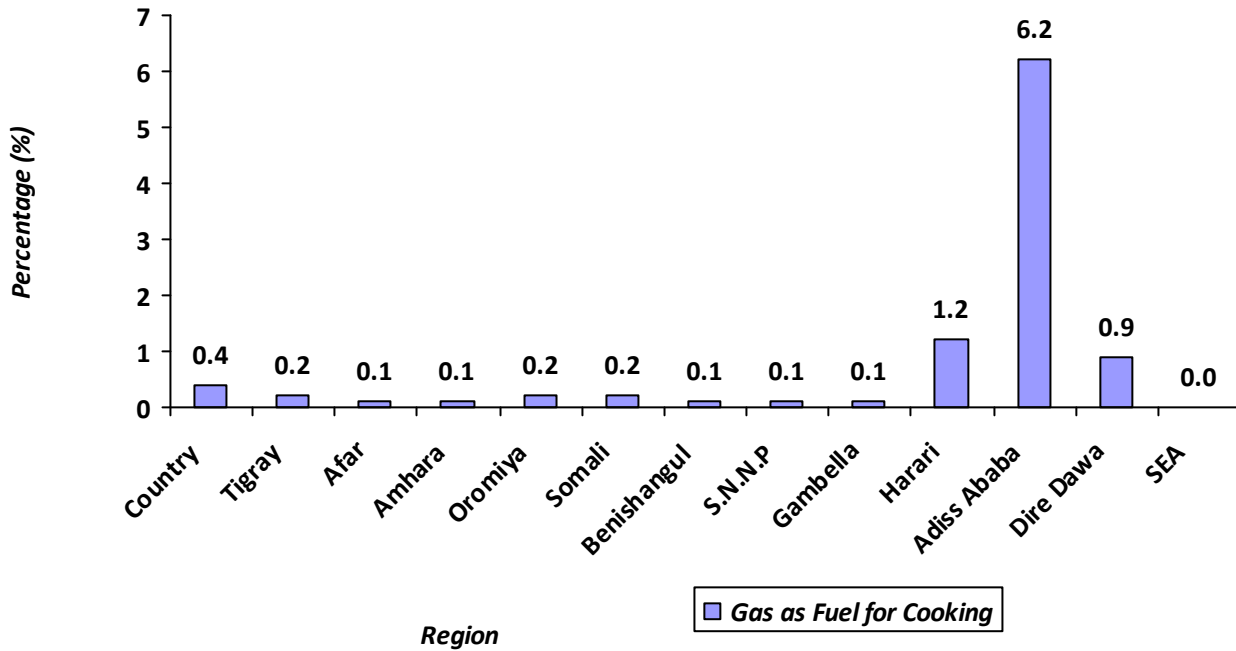


Figure 4.29c Percentage Distribution of Housing Units With Kerosene Used as Fuel for Cooking and Region: 2007.

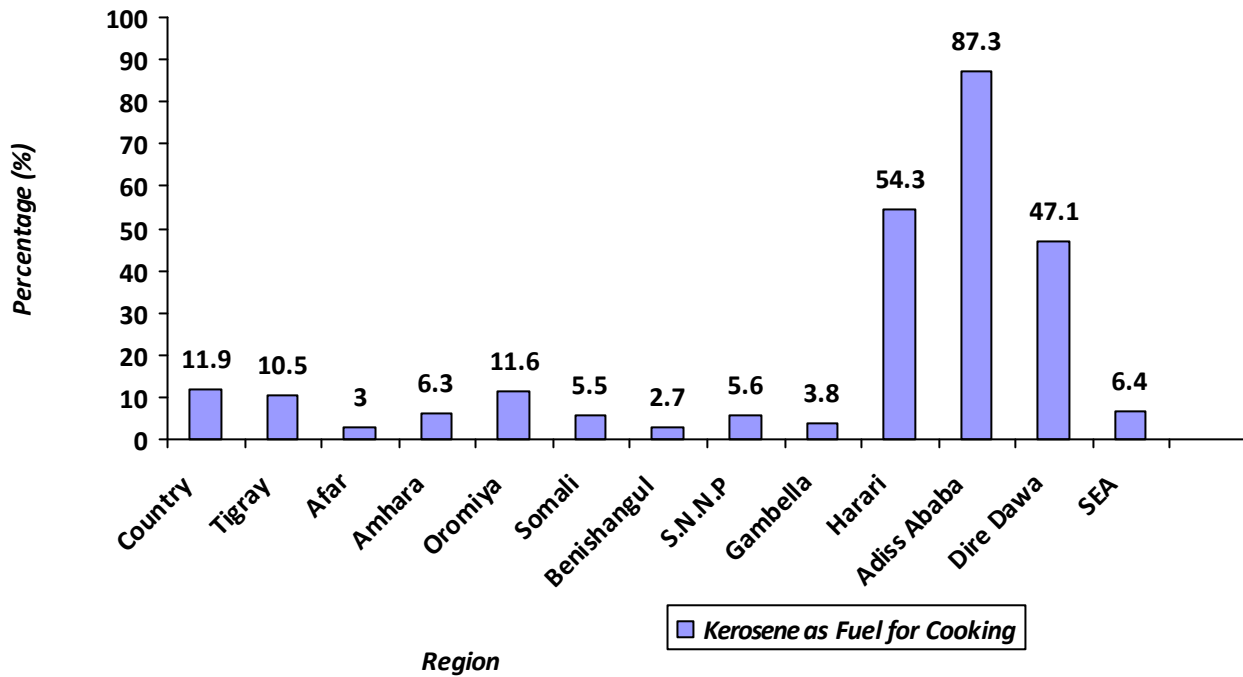


Figure 4.29d Percentage Distribution of Housing Units With Charcoal Used as Fuel for Cooking and Region: 2007.

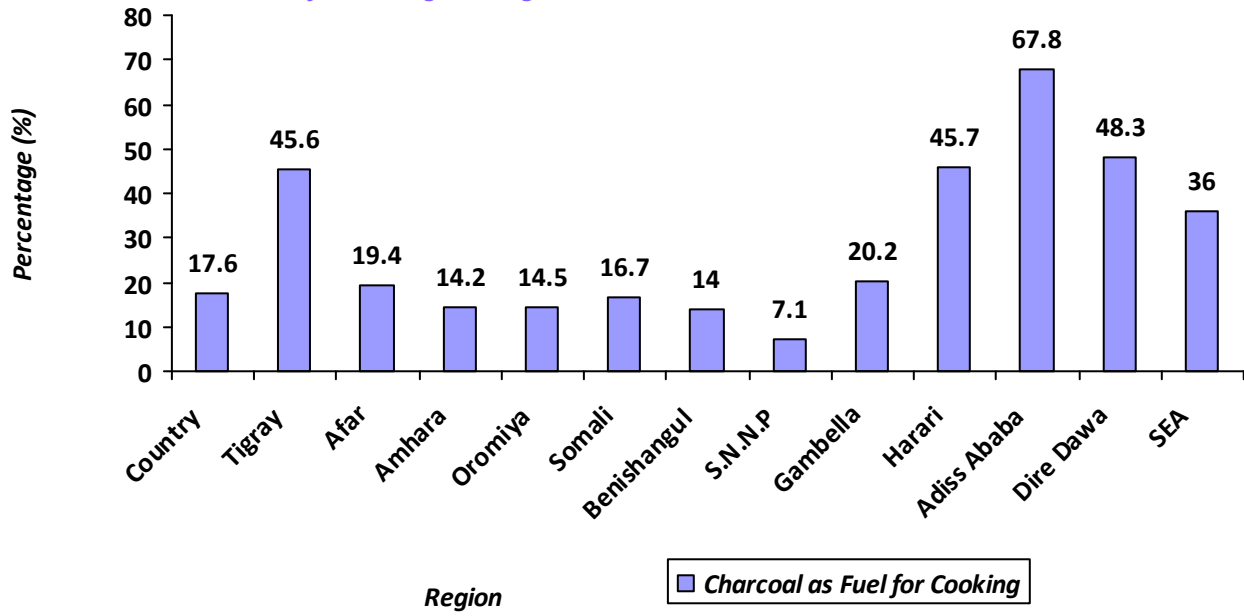


Figure 4.29e Percentage Distribution of Housing Units With Firewood Used as Fuel for Cooking and Region: 2007.

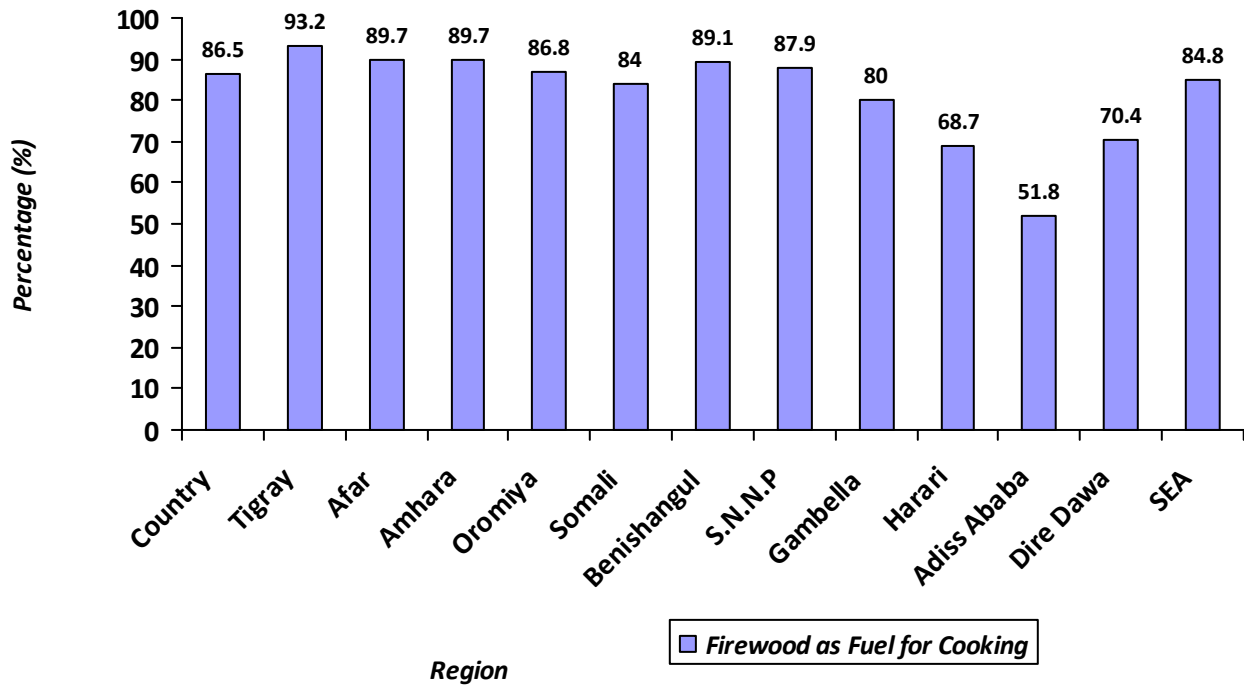


Figure 4.29f Percentage Distribution of Housing Units With Dung Used as Fuel for Cooking and Region: 2007.

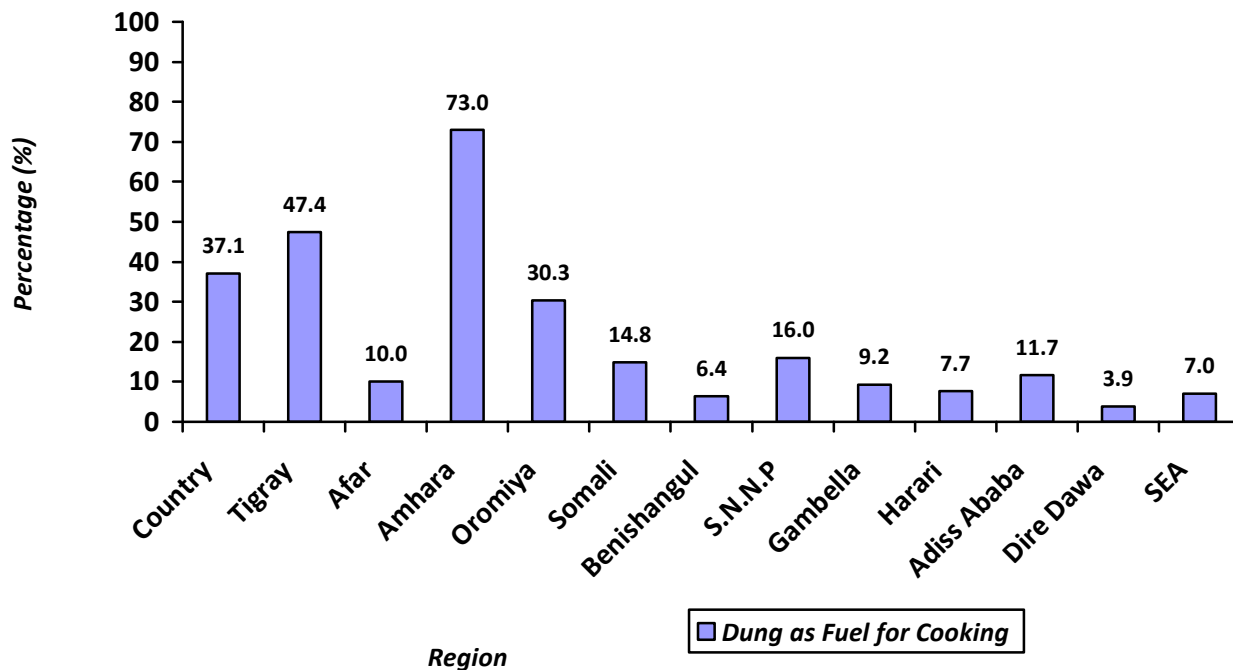


Figure 4.29g Percentage Distribution of Housing Units With Bio-Gas Used as Fuel for Cooking and Region: 2007.

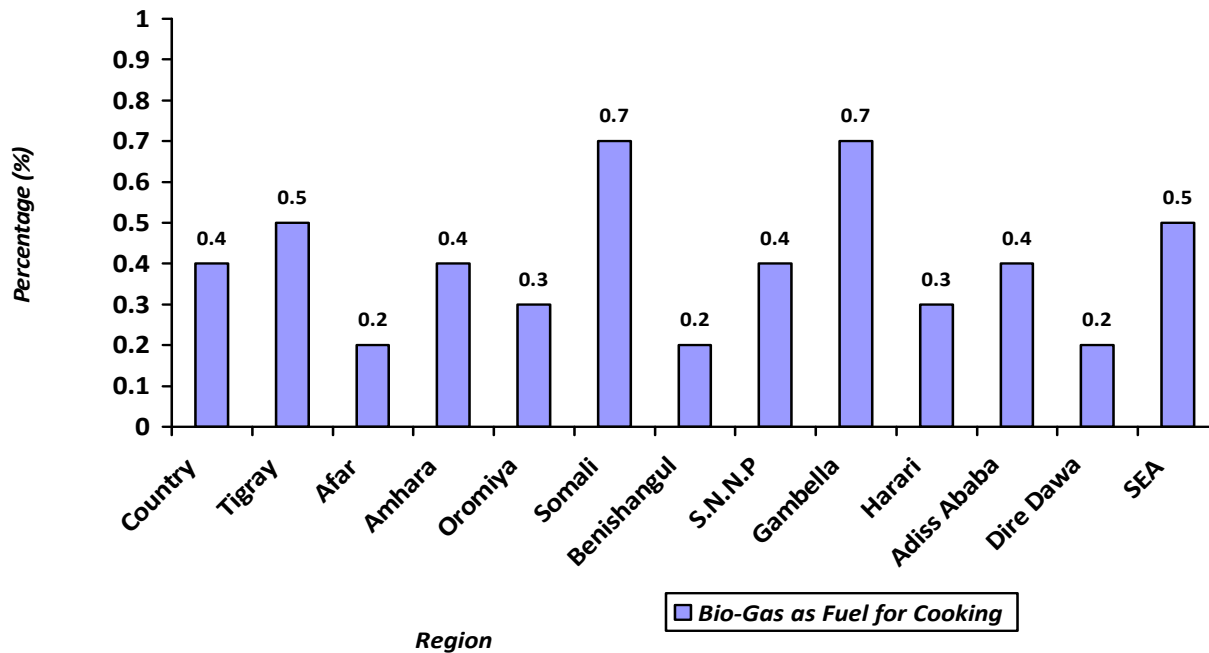
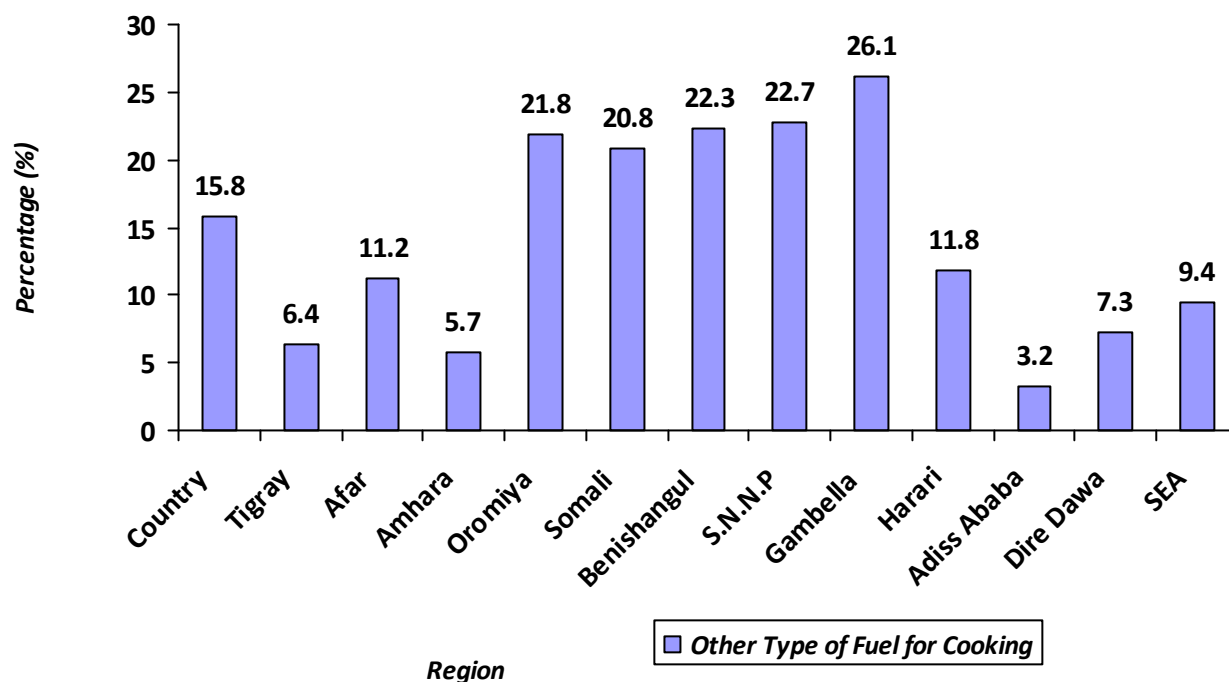


Figure 4.29h Percentage Distribution of Housing Units With Other Type of Fuel Used for Cooking and Region: 2007.



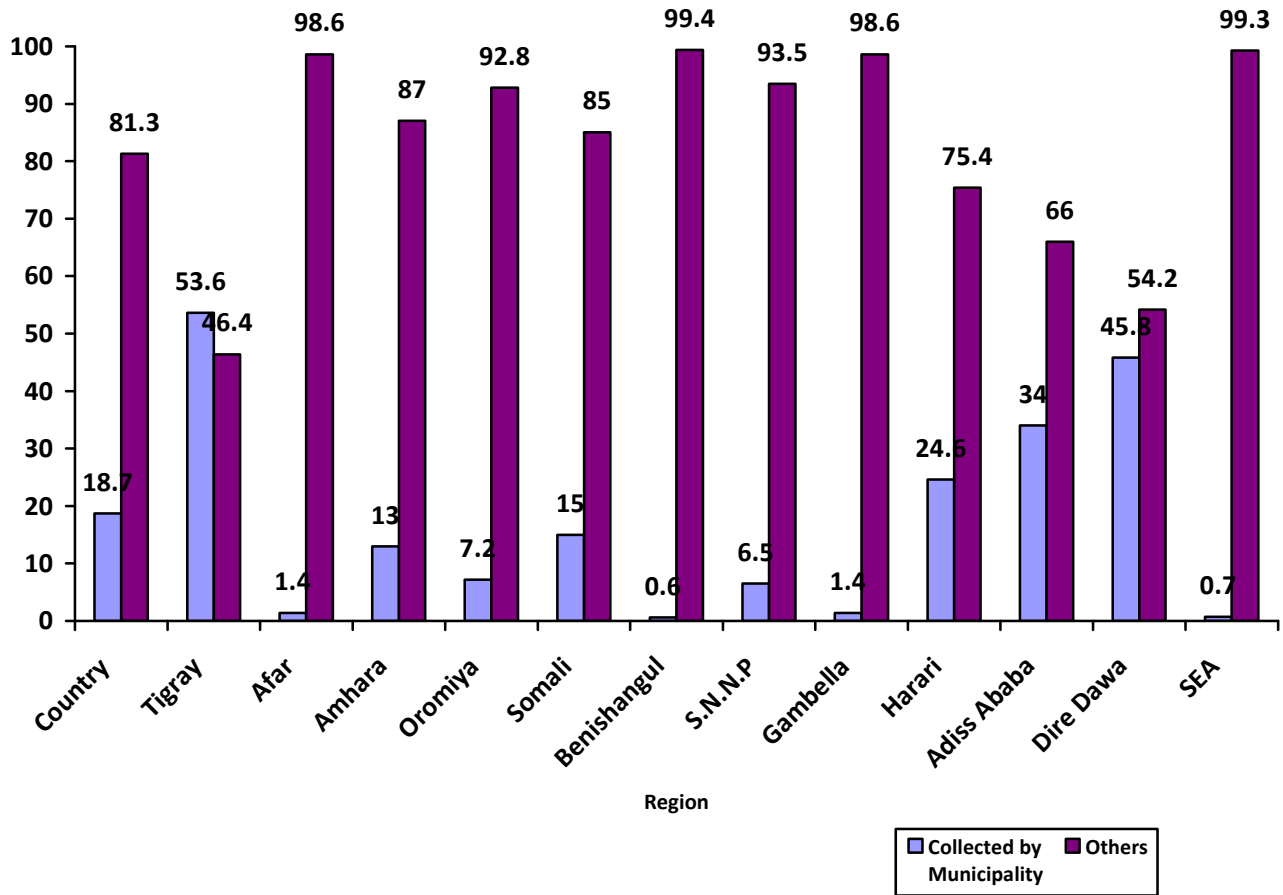
3.4.6 Type of Waste Disposal

Table 4.26 (See Annex 22) shows the distribution of housing units by type of waste disposal. The result indicates that at country level most housing units (77.9 percent) use open space/behind the housing unit to dispose solid wastes. About 12.4 percent wastes were burnt /buried and 3.9 percent wastes were collected by municipality/private/individual.

As can be observed from the result, 36.2 percent of housing units in urban areas of the country dispose solid wastes through open space behind the housing unit and less than 1 percent of housing units in rural areas use this form of waste disposal.

In the regions, the proportion of housing units in urban areas using open space/behind the housing units for solid waste disposal varies between 62.2 percent in Benishangul-Gumuz and 5.8 percent in Addis Ababa (See Figure 4.30).

Figure 4.30 Percentage Distribution of Housing Units by Type of Waste Disposal and Region for Urban Areas: 2007.



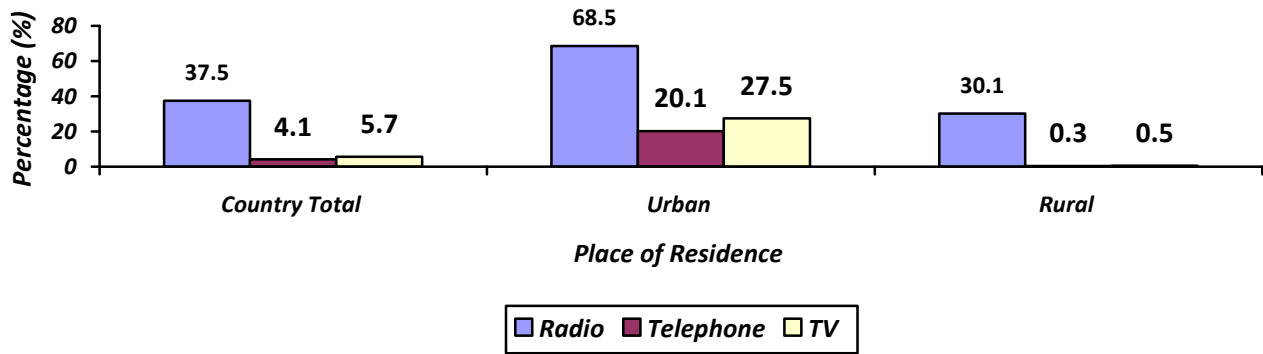
3.4.7 Household Durable Goods

Information on the proportion of households possessing three household durable goods; namely radio, telephone and television is presented in Table 4.27 (See Appendix 23). These indicators usually provide a rough measure of the socio economic status of the households.

3.4.7.1 Availability of Radio, Telephone and Television

At country level, about 37.5 percent of the housing unit had radio. There is urban-rural variation in the proportion of availability of radio. Households residing in about 68.5 percent of urban housing units had radio as compared to 30.1 percent of housing units in rural areas (See Figure 4.31).

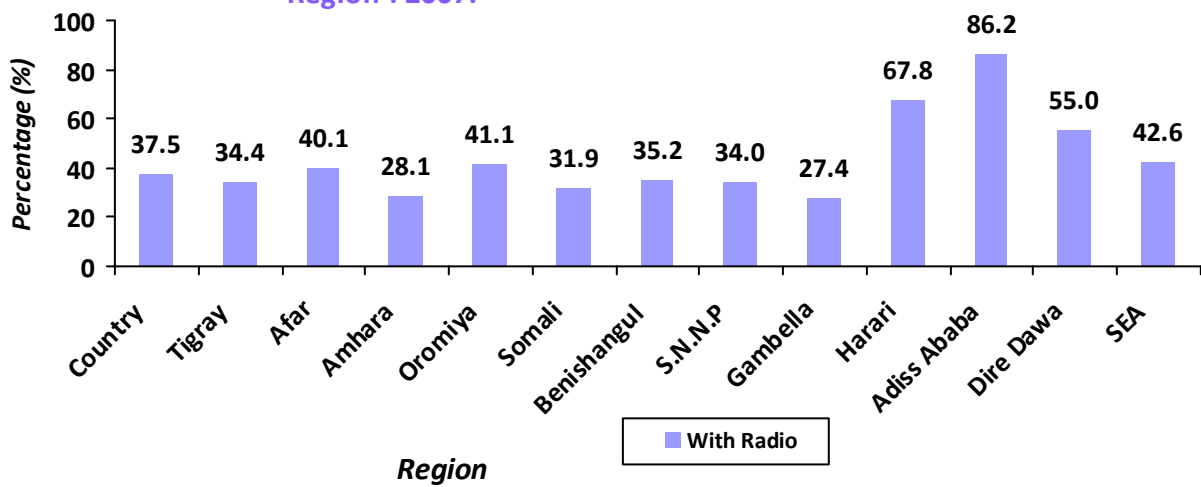
Figure 4.31 Percentage Distribution of Housing Units With Radio, Telephone and TV, Country Level : 2007.



From Table 4.27 (See Appendix 23) and Figure 4.31 it can be also observed that 4.1 percent and 5.7 percent of housing units of Ethiopia had telephone and television, respectively. In general, rural Ethiopia housing units are less likely to possess telephone and television (0.3 percent and 0.5 percent) as compared to urban area housing units (68.5 percent, 20.1 percent and 27.5 percent, respectively).

Figure 4.32 reveals that the proportion of household possession of radio by region varies considerably. The proportion varies from 27.4 percent in Gambella region to 86.2 percent in Addis Ababa.

Figure 4.32 Percentage Distribution of Housing Units With Radio and Region : 2007.



The data also reveal that the proportion of households that possess telephones varied by region. The proportion ranges from 1.5 percent in Somali region to 40.8 percent in Addis Ababa (See Figure 4.33).

Figure 4.33 Percentage Distribution of Housing Units With Telephone and Region : 2007.

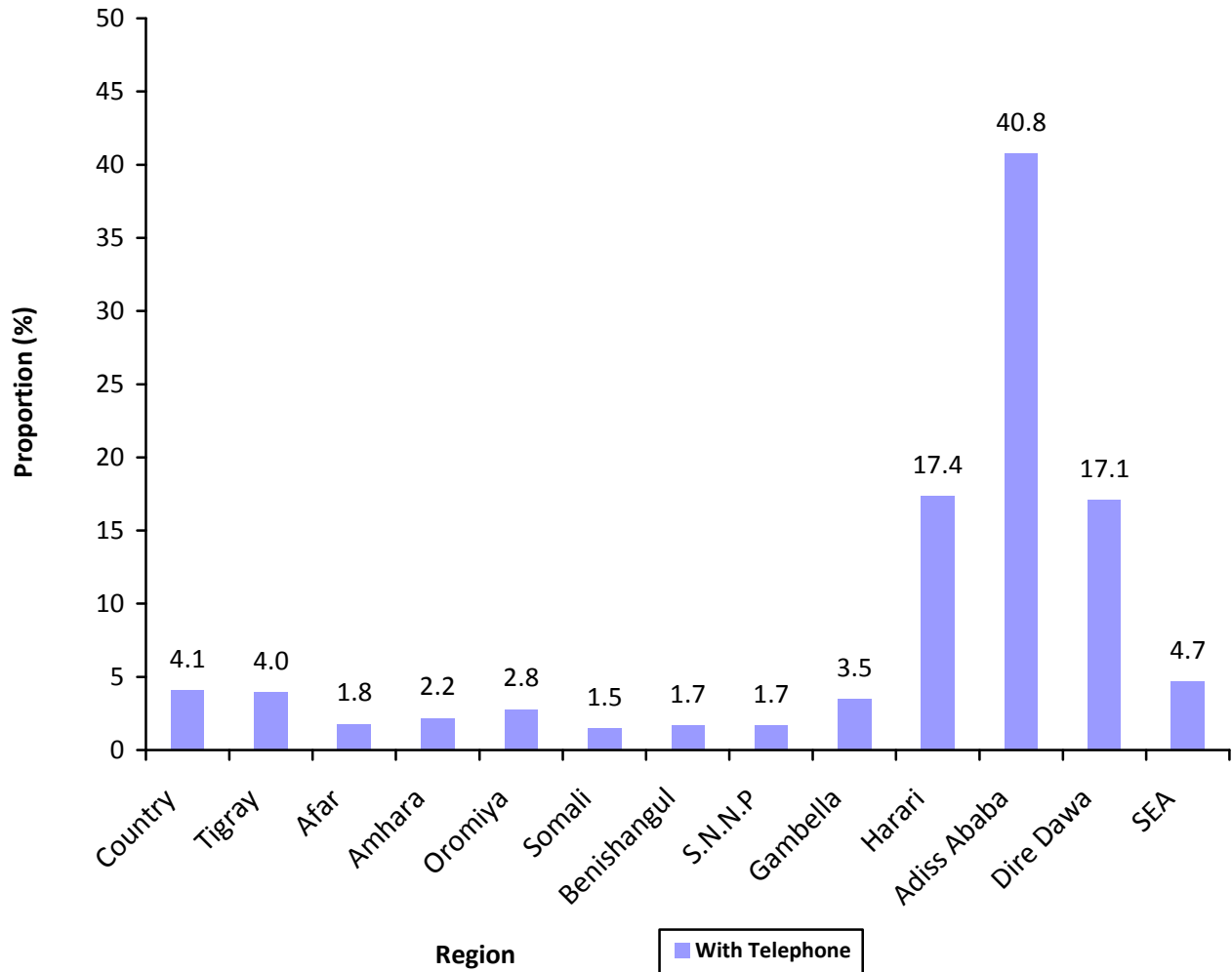
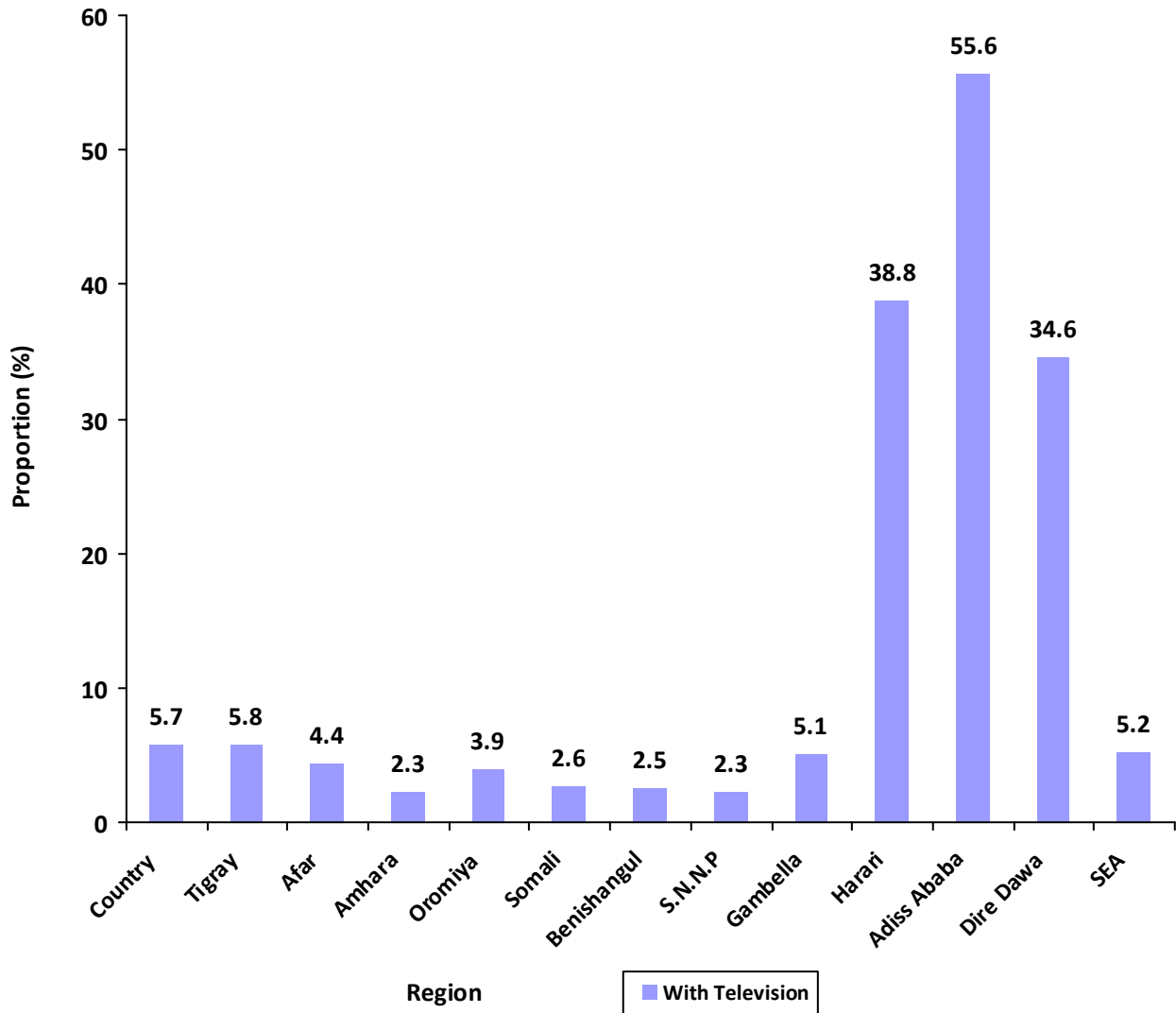


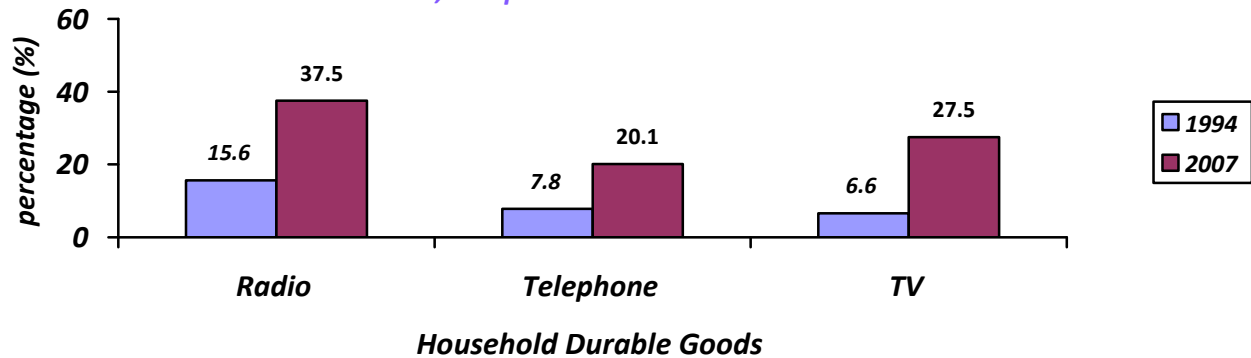
Figure 4.34 reveals that among the regions, the proportion of housing units owning at least one television set was highest in Addis Ababa (about 55.6 percent) and lowest in Amhara and Southern Nations, Nationalities and Peoples region (each about 2.3 percent).

Figure 4.34 Percentage Distribution of Housing Units With Television and Region : 2007.



Moreover, as shown in Figure 4.35 below the proportion of urban housing units that had radio, telephone and television increased by 21.9 percent, 12.3 percent and 20.9 percent, respectively in the last 12 years.

Figure 4.35 Percentage Distribution of Urban Housing Units With Radio, Telephone and TV between 1994 and 2007.



3.5 Status of Tenure

Tenure refers to the arrangements under which the household occupied its living quarters. A housing unit is said to be owner occupied, if the occupant household owns it and it is free from rent. Similarly, a housing unit is considered as rented if the household living in it pays rent to a private individual or to Kebele office or to an Agency for the Administration of Rented Housing or to other organizations. There are also housing units occupied by households paying difference in rent. These are households that own another housing unit elsewhere that is rented for a lesser or greater rent compared to the rent of the housing unit the household is occupying at the time of enumeration.

The data on Table 4.28 (See Appendix 24) presents tenure status of the housing units in urban areas of the country. Information on tenure status of the housing units is necessary for development of housing and establishment of rent policy.

As can be seen from the distribution of housing units by type of tenure given in Table 4.28 (See Appendix 24), at country level, about 39.3 percent of the housing units in urban areas were owner occupied and 53.7 percent were rented. Out of the rented housing units about 11.9 percent were rented from kebele, 0.8 percent were rented from house renting agency, 40.9 percent were rented from private households or other organizations. On the other hand, less than one percent (about 0.1 percent) of the urban housing units were owned by paying difference in rent and about 6.9 percent were owned by rent free.

Figure 4.36 Percentage Distribution of Housing Units by Type of Tenure Status, Country Level :2007.

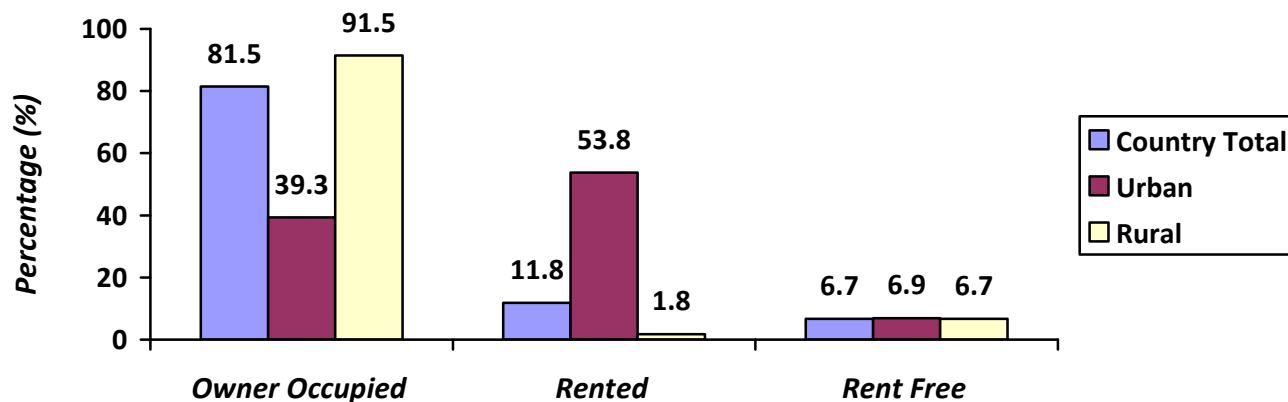
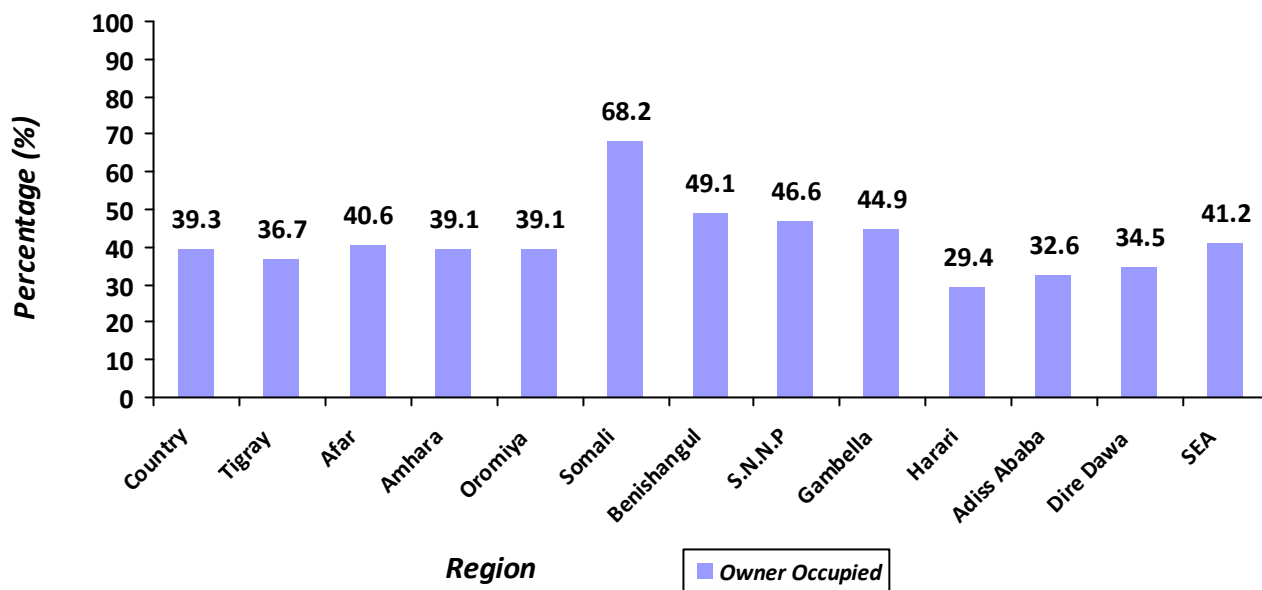


Figure 4.37 depicts the proportion of urban housing units which were owner occupied. This varies from about 29.4 percent in Harari region to about 68.2 percent in Somali region. Whereas, the proportions of housing units rented from kebele ranged from about 0.6 percent in Benishangul-Gumuz region to about 25.3 percent in Harari region.

Figure 4.37 Percentage Distribution of Urban Housing Units by Owner Occupied and Region : 2007.



CHAPTER IV

SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

4.1 Introduction

This section contains a summary of the main findings based on the analysis of the 2007 Population and Housing Census data on housing characteristics and conditions and a number of recommendations.

4.2 Summary of key findings

4.2.1 Type and quality of Housing units

Overall, the proportion of housing units rose nearly by 1.2 percent (from 95.8 percent to 97 percent) during the 1994 – 2007 intercensal period. On the other hand, the proportion of improved, mobile and other type of housing units declined by 0.3, 0.3 and 0.1 percent, respectively.

4.2.2 Housing Facilities and Amenities

There is a strong correlation between the socio-economic condition of household and the vulnerability of its members, and especially children to common diseases. The amenities and assets available to household are important in determining the general socio-economic status of the population.

The availability of and accessibility to safe drinking water supply to a large extent minimize the prevalence of water born diseases among household members, specially young children. The source of drinking water is vital because potentially fatal diseases; such as diarrheal diseases, guinea worm, bilharzias, typhoid, cholera and dysentery are common in some parts of in the country. The national level of proportion of housing units which had safe drinking water facility indicates intercensal increase by 21.6 percent between the 1994 and 2007 censuses. The proportion of safe drinking water facility increased from 23.9 percent to 45.5 percent between the two censuses. The rural - urban analysis indicates a similar trend. In 1994, the proportion of housing units which had safe drinking water facility in urban areas was higher, 81.2 % compared with 14.9 % in rural areas. On the other

hand, in 2007, the proportions of housing units which had safe drinking water facility were 91.6 in urban areas and 34.5 % in rural areas.

Regional analysis depict that in all regions the proportion of housing units which had safe drinking water facility showed an increase during 1994 – 2007 intercensal period.

About two in ten of housing units in Ethiopia had electricity in 2007, more than three fourth of housing units in urban areas (79.9%) have electricity compared with only 2.5 percent of rural housing units. The proportion of urban housing units with electricity rose nearly by 14.5 percent during the 1994-2007 inter censual period.

The majority of housing units in Ethiopia were owner occupied in 2007. The distribution of housing units by urban-rural residence shows the proportion of owner occupied housing units in rural areas (91.5 percent) were higher compared to housing units in urban areas (39.3 percent).

Combined with other indicators, information on ownership of household durable goods (such as radio, television and telephone) can be used to generate a wealth index that acts as a proxy estimate for the socio-economic status of a household. Ownership of a radio or television is a measure of access to mass media and telephone ownership measures access to efficient communications. In generally ownership of these items has a bearing on the household's access to health information and services. According to the 2007 census result, although the proportion of housing units with radio, television and telephone show increment during the 1994 -2007 intercensal period the possession of household durable goods mentioned above are not common in Ethiopia. Only 4 percent and 6 percent of the housing units had telephone and television, respectively. But housing units with radio is better as compared to television and telephone. Overall, six in ten housing units in Ethiopia have no television or telephone or radio.

4.3 Implications of the Findings

This section presents the policy implications of the key findings of the 2007 Population and Housing Census.

4.3.1 Construction materials

As evident from the census results of 2007, in the country, the majority of the housing units were made of traditional wall and roof. Hence, there is a need to review the existing financial instruments related to the prices of the basic construction materials, such as cement and iron sheets in order to make them more affordable and hence enable more households, especially in rural areas, to improve the quality of their housing unit.

4.3.2 Source of drinking water

In spite of the proportion of the housing units with safe drinking water supply increased from 23.9 percent to 45.5 percent since 1994; the census results showed that the overwhelming proportion of (54.5 percent) of housing units in the country were using unprotected well or spring, river, lake and pond as main source of drinking water supply which all regarded as unsafe water sources, which may expose many people for serious health problems. Therefore, beyond the current government and non government organizations effort, there is a need to allocate more resources for water management and development of water supply system. Also, there is a need to design program that will help an efficient utilization of water resources.

4.3.3 Sanitation facilities

Good sanitation conditions in any human settlement have direct impact on prevailing environmental and health standards in the neighborhood. According to the census results, in 2007, poor sanitation conditions prevailed in the country. Even if, the proportion of housing units with toilet facility improved between 1994 and 2007, the housing units with sanitation facility has not matched the growth/increase in population implying that the government needs to put in place a process to review the existing health policy to address some of the identified problems in the sanitation area. Also, health education/ campaigns need to be stepped up to encourage the population, especially in

rural areas and informal settlements, to improve their sanitary conditions through among other measures, building of pit latrines.

4.3.4 Fuel for cooking and lighting

Exposure to pollutions from biomass fuels; such as Firewood, agricultural wastes and animal dung are the major sources of energy in developing countries in general and in Ethiopia in particular. The findings of the census results revealed that the main source of cooking fuel for the majority of housing units in the country were firewood and charcoal. This dependence on firewood and charcoal as fuel for cooking gas has serious impact on the health status of the people as well as forest cover of the country. Thus, in order to ensure the health of the population and sustainable firewood supply, while at the same time avoiding environmental degradation, there is a need to have an appropriate policy and program on farm wood production for fast growing trees. Moreover, promotion of efficient use of firewood and charcoal by encouraging the use of efficient cooking facilities should also be stepped up.

From the census result, it is evident that kerosene and firewood were the main sources of lighting in Ethiopia. However, renewable energy like biogas and solar energy are not widely used, but have considerable potential for sustainable development in the country as alternative source of domestic energy. Therefore, there is a need for the enactment of a comprehensive energy policy that will address the use of biomass fuels as source of domestic energy.

4.3.5 Tenure

The census results revealed that in 2007, out of the total housing units, only 2.6 percent were publicly rented. On the other hand, a larger proportion of housing units (9.2 percent) were rented by private households and other organizations, which are known to be less responsive to the housing needs of the middle and low income as well as the disadvantaged members of the population. Specially, in urban areas of the country the majority of the housing units were rented from private households (40.4 percent). Therefore, through a comprehensive housing survey to capture more detailed information on the magnitude of shelter and human settlement problems in the urban areas and

informal settlements, there is a need to make coordinated and effective effort regarding the provision of housing.

4.4 Recommendation

Based on the results of housing data from the 2007 census and in order to improve planning and refining of policy strategies aimed at improving the quality and provision of housing units as well as housing facilities and amenities, it is recommended that the government need to:

- encourage the private sector to participate and play a key role in the housing delivery process;
- enhance the role of the public in the supply of low cost housing for the poor at affordable rentals or provide house ownership through long term mortgage;
- design strategies that promote the participation of housing cooperatives in the housing development process and allocating funds for the union of housing coops; and
- design an appropriate strategy to provide land, particularly for the poor, to construct houses with long term loans.

Appendix 1: Table 4.1A Percentage Distribution of Housing Units by Type of Housing Unit and Region, Ethiopia : 2007

Urban/Rural	All Housing Units	Type of Housing Unit				
		Total	Conventional/Permanent	Improvised	Mobile	Others
COUNTRY TOTAL						
Urban+Rural	15,103,136	100.0	94.5	3.5	2.0	-
Urban	2,897,018	100.0	97.0	2.6	.4	-
Rural	12,206,118	100.0	93.9	3.7	2.3	-
TIGRAY REGION						
Urban+Rural	957,686	100.0	98.1	1.8	.1	-
Urban	231,827	100.0	97.3	2.6	.1	-
Rural	725,859	100.0	98.3	1.6	.1	-
AFAR REGION						
Urban+Rural	235,754	100.0	44.5	10.2	45.2	-
Urban	43,762	100.0	90.3	2.9	6.7	-
Rural	191,992	100.0	34.1	11.9	54.0	-
AMHARA REGION						
Urban+Rural	3,849,142	100.0	98.6	1.4	-	-
Urban	591,428	100.0	98.1	1.9	-	-
Rural	3,257,714	100.0	98.7	1.3	-	-
OROMIA REGION						
Urban+Rural	5,425,093	100.0	97.2	2.6	.2	-
Urban	836,074	100.0	98.0	1.9	.1	-
Rural	4,589,019	100.0	97.0	2.8	.2	-
SOMALI REGION						
Urban+Rural	648,541	100.0	47.7	27.0	25.1	.1
Urban	91,241	100.0	82.6	11.4	5.8	.2
Rural	557,300	100.0	42.0	29.5	28.3	.1
BENISHANGUL-GUMUZ REGION						
Urban+Rural	167,749	100.0	97.4	2.6	-	-
Urban	27,347	100.0	97.7	2.3	-	-
Rural	140,402	100.0	97.3	2.6	-	-
S.N.N.P REGION						
Urban+Rural	2,993,046	100.0	97.1	2.6	.3	-
Urban	342,224	100.0	97.2	2.7	.1	-
Rural	2,650,822	100.0	97.0	2.6	.3	-
GAMBELLA REGION						
Urban+Rural	63,692	100.0	87.5	12.1	.4	-
Urban	19,080	100.0	94.7	5.1	.2	-
Rural	44,612	100.0	84.4	15.0	.5	-
HARARI REGION						
Urban+Rural	44,915	100.0	97.4	1.9	.6	.1
Urban	27,415	100.0	96.2	2.8	.9	.1
Rural	17,500	100.0	99.4	.6	-	-
ADDIS ABABA CITY ADMINISTRATION						
Urban+Rural	628,986	100.0	97.3	2.6	.1	-
Urban	628,986	100.0	97.3	2.6	.1	-
Rural	-	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION						
Urban+Rural	72,939	100.0	93.9	4.3	1.7	.1
Urban	51,596	100.0	96.0	3.7	.3	.1
Rural	21,343	100.0	89.1	5.7	5.2	-
SPECIAL ENUMERATION AREA						
Urban+Rural	15,596	100.0	63.3	14.7	21.7	.3
Urban	6,041	100.0	92.7	3.3	3.9	-
Rural	9,555	100.0	44.7	21.9	32.9	.5

Appendix 2: Table 4.2 Percentage Distribution of Urban Housing Units
Cross-Classified by Type of Housing Unit, Literacy
Status of Head of Household and Region, Ethiopia: 2007

Region/Type of Housing Unit	All Housing Unit	Literacy Status of Head of Household		
		Total	Literate	Illiterate
COUNTRY TOTAL				
Total	2,897,017	100.0	66.3	33.7
Conventional/ Permanent	2,811,191	100.0	66.7	33.3
Improved	74,591	100.0	56.9	43.1
Mobile	10,615	100.0	17.4	82.6
Others	620	100.0	43.4	56.6
TIGRAY REGION				
Total	231,826	100.0	59.6	40.4
Conventional/ Permanent	225,683	100.0	59.6	40.4
Improved	6,005	100.0	59.1	40.9
Mobile	128	100.0	79.7	20.3
Others	10	100.0	50.0	50.0
AFAR REGION				
Total	43,762	100.0	51.1	48.9
Conventional/ Permanent	39,535	100.0	55.1	44.9
Improved	1,286	100.0	31.6	68.4
Mobile	2,931	100.0	6.3	93.7
Others	10	100.0	-	100.0
AMHARA REGION				
Total	591,428	100.0	60.0	40.0
Conventional/ Permanent	580,122	100.0	60.1	39.9
Improved	10,973	100.0	56.9	43.1
Mobile	260	100.0	68.8	31.2
Others	73	100.0	67.1	32.9
OROMIA REGION				
Total	836,074	100.0	68.6	31.4
Conventional/ Permanent	819,536	100.0	68.7	31.3
Improved	15,736	100.0	64.8	35.2
Mobile	685	100.0	43.2	56.8
Others	117	100.0	62.4	37.6
SOMALI REGION				
Total	91,241	100.0	26.6	73.4
Conventional/ Permanent	75,393	100.0	29.6	70.4
Improved	10,374	100.0	13.7	86.3
Mobile	5,314	100.0	8.8	91.2
Others	160	100.0	20.6	79.4
BENISHANGUL-GUMUZ REGION				
Total	27,347	100.0	64.8	35.2
Conventional/ Permanent	26,721	100.0	65.3	34.7
Improved	621	100.0	43.2	56.8
Mobile	-	-	-	-
Others	5	100.0	-	100.0
S.N.N.P REGION				
Total	342,223	100.0	68.9	31.1
Conventional/ Permanent	332,582	100.0	69.1	30.9
Improved	9,334	100.0	64.5	35.5
Mobile	250	100.0	62.4	37.6
Others	57	100.0	63.2	36.8
GAMBELLA REGION				
Total	19,080	100.0	71.3	28.7
Conventional/ Permanent	18,071	100.0	71.1	28.9
Improved	978	100.0	72.8	27.2
Mobile	31	100.0	83.9	16.1
Others	-	-	-	-

Appendix 2: Table 4.2 Percentage Distribution of Urban Housing Units
 Cross-Classified by Type of Housing Unit, Literacy
 Status of Head of Household and Region, Ethiopia: 2007

Region/Type of Housing Unit	All Housing Unit	Literacy Status of Head of Household		
		Total	Literate	Illiterate
HARARI REGION				
Total	27,413	100.0	73.0	27.0
Conventional/ Permanent	26,365	100.0	74.8	25.2
Improvised	762	100.0	30.2	69.8
Mobile	256	100.0	16.0	84.0
Others	30	100.0	33.3	66.7
ADDIS ABABA CITY ADMINISTRATION				
Total	628,986	100.0	76.5	23.5
Conventional/ Permanent	612,071	100.0	76.6	23.4
Improvised	16,416	100.0	74.8	25.2
Mobile	382	100.0	73.6	26.4
Others	117	100.0	49.6	50.4
DIRE DAWA CITY ADMINISTRATION				
Total	51,596	100.0	68.5	31.5
Conventional/ Permanent	49,509	100.0	69.0	31.0
Improvised	1,904	100.0	55.4	44.6
Mobile	143	100.0	72.0	28.0
Others	40	100.0	15.0	85.0
SPECIAL ENUMERATION AREA				
Total	6,040	100.0	59.5	40.5
Conventional/ Permanent	5,603	100.0	62.3	37.7
Improvised	202	100.0	43.1	56.9
Mobile	235	100.0	6.8	93.2
Others	-	-	-	-

Appendix 3: Table 4.3A Percentage Distribution of Housing Units by Construction Material of Wall and Region, Ethiopia : 2007

Urban/Rural	All Housing Units	Total	Construction Material of Wall										
			Wood and Mud	Wood and Thatch/Wood only	Stone and Mud	Stone and Cement	Plastered Hollow Blocks	Unplastered Hollow Blocks	Bricks	Corrugated Iron	Reed/Bamboo	Mud Bricks	Others
COUNTRY TOTAL													
Urban+Rural	15,103,135	100.0	73.9	13.0	7.1	.9	1.2	.2	.1	.4	2.5	.3	.4
Urban	2,897,018	100.0	80.0	2.2	4.3	3.8	5.5	.6	.6	1.3	.3	1.0	.4
Rural	12,206,117	100.0	72.5	15.5	7.8	.2	.1	-	-	.2	3.0	.1	.4
TIGRAY REGION													
Urban+Rural	957,685	100.0	20.7	2.8	67.0	5.8	2.2	.3	.1	.7	-	.2	.1
Urban	231,826	100.0	32.0	.9	35.4	19.7	8.4	.8	.4	1.6	-	.7	.1
Rural	725,859	100.0	17.0	3.5	77.1	1.3	.3	.2	-	.4	-	.1	.1
AFAR REGION													
Urban+Rural	235,754	100.0	22.6	67.0	3.3	1.6	1.1	.1	.1	1.2	.6	-	2.4
Urban	43,762	100.0	65.7	11.8	3.2	6.5	4.5	.3	.2	5.6	.4	-	1.7
Rural	191,992	100.0	12.8	79.6	3.4	.5	.3	-	-	.2	.6	-	2.6
AMHARA REGION													
Urban+Rural	3,849,141	100.0	85.5	3.8	9.3	.3	.3	.1	-	.2	.4	-	.1
Urban	591,428	100.0	91.9	1.1	2.3	1.2	2.0	.6	.1	.5	.1	.1	.1
Rural	3,257,713	100.0	84.3	4.3	10.6	.1	.1	-	-	.1	.4	-	-
OROMIA REGION													
Urban+Rural	5,425,093	100.0	87.5	8.3	.5	.4	.6	.1	.1	.2	1.4	.6	.2
Urban	836,074	100.0	90.0	.9	.7	1.8	2.6	.3	.5	.5	.1	2.3	.2
Rural	4,589,019	100.0	87.1	9.7	.5	.1	.2	.1	-	.2	1.7	.3	.2
SOMALI REGION													
Urban+Rural	648,541	100.0	30.1	60.5	.9	1.1	.3	-	.1	.6	.8	.2	5.4
Urban	91,241	100.0	58.3	24.8	2.9	5.3	1.9	.2	.1	2.1	.4	.2	3.8
Rural	557,300	100.0	25.5	66.3	.6	.4	.1	-	.1	.3	.9	.2	5.6
BENISHANGUL-GUMUZ REGION													
Urban+Rural	167,749	100.0	67.3	6.5	.2	.2	.5	-	-	.2	25.0	-	-
Urban	27,347	100.0	83.9	2.0	.9	.8	2.3	.1	-	.3	9.6	.1	-
Rural	140,402	100.0	64.1	7.3	.1	.1	.2	-	-	.1	28.0	-	-
S.N.N.P REGION													
Urban+Rural	2,993,046	100.0	65.7	25.0	.4	.3	.2	-	.1	.2	7.9	-	.2
Urban	342,224	100.0	90.1	4.0	1.0	1.7	1.4	.1	.1	.3	1.0	-	.1
Rural	2,650,822	100.0	62.5	27.7	.3	.1	-	-	.1	.2	8.8	-	.2
GAMBELLA REGION													
Urban+Rural	63,692	100.0	76.5	18.6	.4	1.0	1.7	.3	.1	.6	.4	.2	.4
Urban	19,080	100.0	80.8	7.8	1.0	2.8	4.8	.7	.2	.9	.1	.5	.4
Rural	44,612	100.0	74.7	23.2	.1	.2	.4	.1	-	.4	.5	-	.4

Appendix 3: Table 4.3A Percentage Distribution of Housing Units by Construction Material of Wall and Region, Ethiopia : 2007

Urban/Rural	All Housing Units	Total	Construction Material of Wall										
			Wood and Mud	Wood and Thatch/Wood only	Stone and Mud	Stone and Cement	Plastered Hollow Blocks	Unplastered Hollow Blocks	Bricks	Corrugated Iron	Reed/Bamboo	Mud Bricks	Others
HARARI REGION													
Urban+Rural	44,914	100.0	75.0	2.1	11.7	3.3	4.6	.4	.3	.4	.1	1.8	.4
Urban	27,414	100.0	68.1	2.6	11.8	5.4	6.9	.6	.4	.7	.1	2.9	.5
Rural	17,500	100.0	85.7	1.4	11.6	.2	.8	-	-	-	.1	.1	.1
ADDIS ABABA CITY ADMINISTRATION													
Urban+Rural	628,986	100.0	76.9	.3	.8	2.5	13.0	1.3	1.5	3.0	.1	-	.5
Urban	628,986	100.0	76.9	.3	.8	2.5	13.0	1.3	1.5	3.0	.1	-	.5
Rural	-	-	-	-	-	-	-	-	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION													
Urban+Rural	72,938	100.0	31.4	4.0	17.5	16.4	15.6	1.4	.1	3.6	-	9.3	.6
Urban	51,595	100.0	21.2	.9	12.6	22.5	21.8	2.0	.2	4.9	-	13.1	.9
Rural	21,343	100.0	56.0	11.4	29.1	1.9	.7	.1	-	.5	-	.2	-
SPECIAL ENUMERATION AREA													
Urban+Rural	15,596	100.0	48.5	40.6	.2	1.3	2.9	.2	.1	.1	1.0	-	5.0
Urban	6,041	100.0	79.1	8.0	.2	1.3	7.1	.4	.1	.1	.1	.1	3.7
Rural	9,555	100.0	29.2	61.3	.2	1.4	.2	.2	.1	.1	1.6	-	5.9

Appendix 4: Table 4.4 Percentage Distribution of Housing by Construction Material of Wall and Region, Urban, Ethiopia : 2007

Construction Material of Wall	All Housing Unit	Type of Housing Unit				
		Total	Conventional/Permanent	Improved	Mobile	Others
COUNTRY TOTAL						
Traditional Material	2,418,525	100.0	97.3	2.4	.3	-
Modern Material	342,489	100.0	96.0	3.7	.2	-
Other	136,002	100.0	95.0	3.5	1.4	.1
Total	2,897,016	100.0	97.0	2.6	.4	-
TIGRAY REGION						
Traditional Material	78,072	100.0	96.2	3.8	-	-
Modern Material	71,540	100.0	97.9	2.0	.1	-
Other	82,213	100.0	98.0	1.9	-	-
Total	231,825	100.0	97.4	2.6	.1	-
AFAR REGION						
Traditional Material	34,090	100.0	89.7	3.0	7.3	-
Modern Material	7,514	100.0	96.6	3.0	.3	-
Other	2,157	100.0	79.3	1.9	18.6	.2
Total	43,761	100.0	90.3	2.9	6.7	-
AMHARA REGION						
Traditional Material	551,026	100.0	98.2	1.8	-	-
Modern Material	25,992	100.0	95.8	3.8	.3	.1
Other	14,410	100.0	98.2	1.7	-	.1
Total	591,428	100.0	98.1	1.9	-	-
OROMIA REGION						
Traditional Material	780,683	100.0	98.2	1.8	.1	-
Modern Material	47,617	100.0	96.3	3.3	.4	-
Other	7,773	100.0	92.6	6.3	1.1	.1
Total	836,073	100.0	98.0	1.9	.1	-
SOMALI REGION						
Traditional Material	76,354	100.0	82.4	11.9	5.5	.1
Modern Material	8,780	100.0	96.0	3.7	.3	-
Other	6,107	100.0	65.7	15.6	17.3	1.4
Total	91,241	100.0	82.6	11.4	5.8	.2
BENISHANGUL-GUMUZ REGION						
Traditional Material	26,132	100.0	97.7	2.3	-	-
Modern Material	964	100.0	97.9	2.1	-	-
Other	251	100.0	100.0	-	-	-
Total	27,347	100.0	97.7	2.3	-	-
S.N.N.P REGION						
Traditional Material	325,668	100.0	97.3	2.7	-	-
Modern Material	12,865	100.0	96.0	3.5	.5	-
Other	3,691	100.0	94.2	4.4	1.4	-
Total	342,224	100.0	97.2	2.7	.1	-
GAMBELLA REGION						
Traditional Material	17,005	100.0	94.7	5.2	.2	-
Modern Material	1,812	100.0	94.8	5.2	-	-
Other	262	100.0	96.2	1.9	1.9	-
Total	19,079	100.0	94.7	5.1	.2	-
HARARI REGION						
Traditional Material	20,211	100.0	96.0	2.9	1.0	-
Modern Material	3,834	100.0	98.3	1.6	.1	-
Other	3,369	100.0	94.7	3.2	1.4	.8
Total	27,414	100.0	96.2	2.8	.9	.1

Appendix 4: Table 4.4 Percentage Distribution of Housing by Construction Material of Wall and Region, Urban, Ethiopia : 2007

Construction Material of Wall	All Housing Unit	Total	Type of Housing Unit			
			Conventional/Permanent	Improvised	Mobile	Others
ADDIS ABABA CITY ADMINISTRATION						
Traditional Material	485,860	100.0	98.1	1.8	-	-
Modern Material	134,556	100.0	94.9	4.9	.1	-
Other	8,572	100.0	88.9	9.9	1.2	-
Total	628,988	100.0	97.3	2.6	.1	-
DIRE DAWA CITY ADMINISTRATION						
Traditional Material	18,156	100.0	96.1	3.8	-	.1
Modern Material	26,479	100.0	96.0	3.7	.3	-
Other	6,960	100.0	95.5	3.5	.8	.2
Total	51,595	100.0	96.0	3.7	.3	.1
SPECIAL ENUMERATION AREA						
Traditional Material	5,270	100.0	93.5	2.1	4.5	-
Modern Material	535	100.0	100.0	-	-	-
Other	235	100.0	60.4	39.6	-	-
Total	6,040	100.0	92.7	3.3	3.9	-

Appendix 5: Table 4.5A Percentage Distribution of Housing Units by Construction Material of Roof and Region ,Ethiopia:2007

Construction Material of Roof										
Urban/Rural	All Housing Units	Total	Corrugated Iron sheet	Concrete/Cement	Thatch	Wood and Mud	Bamboo/Reed	Plastic/Shera	Asbestos	Others
COUNTRY TOTAL										
Urban+Rural	15,103,135	100.0	38.3	.6	50.8	5.0	3.4	1.2	.1	.6
Urban	2,897,019	100.0	90.8	.5	6.0	1.4	.3	.6	.1	.3
Rural	12,206,116	100.0	25.8	.6	61.4	5.8	4.1	1.4	.1	.7
TIGRAY REGION										
Urban+Rural	957,685	100.0	40.9	.6	23.1	34.5	.3	.2	-	.4
Urban	231,827	100.0	90.4	1.8	4.8	2.6	.1	.1	-	.2
Rural	725,858	100.0	25.1	.3	28.9	44.7	.4	.2	-	.4
AFAR REGION										
Urban+Rural	235,754	100.0	12.2	.8	57.9	16.3	.5	6.9	.4	5.0
Urban	43,762	100.0	49.3	1.0	10.0	34.8	.4	1.4	.9	2.3
Rural	191,992	100.0	3.7	.7	68.8	12.0	.6	8.2	.3	5.6
AMHARA REGION										
Urban+Rural	3,849,140	100.0	46.8	.5	50.4	1.2	.9	.1	-	.1
Urban	591,427	100.0	92.4	.2	6.8	.2	.1	.2	-	-
Rural	3,257,713	100.0	38.5	.6	58.4	1.3	1.1	-	-	.1
OROMIA REGION										
Urban+Rural	5,425,095	100.0	38.1	.6	54.7	3.0	2.4	.5	.2	.6
Urban	836,075	100.0	94.7	.2	4.0	.5	.2	.3	-	.1
Rural	4,589,020	100.0	27.8	.7	63.9	3.4	2.8	.5	.2	.6
SOMALI REGION										
Urban+Rural	648,539	100.0	11.5	.8	53.0	11.7	.6	18.2	.1	4.1
Urban	91,239	100.0	50.4	.6	26.3	7.7	.3	11.1	.1	3.5
Rural	557,300	100.0	5.1	.9	57.3	12.3	.7	19.3	.2	4.2
BENISHANGUL-GUMUZ REGION										
Urban+Rural	167,748	100.0	18.5	.6	72.2	1.3	7.4	-	-	-
Urban	27,347	100.0	69.6	.4	27.8	.3	1.8	-	-	-
Rural	140,401	100.0	8.5	.7	80.8	1.4	8.5	-	-	-
S.N.N.P REGION										
Urban+Rural	2,993,046	100.0	21.6	.6	63.0	2.8	10.8	.5	-	.6
Urban	342,224	100.0	84.8	.3	12.7	.6	1.3	.2	-	.1
Rural	2,650,822	100.0	13.5	.7	69.5	3.1	12.0	.5	-	.7
GAMBELLA REGION										
Urban+Rural	63,693	100.0	24.7	1.1	61.3	7.9	.1	3.5	.3	1.2
Urban	19,080	100.0	59.3	.5	34.1	4.4	-	.7	.9	-
Rural	44,613	100.0	9.8	1.3	73.0	9.3	.1	4.7	-	1.7
HARARI REGION										
Urban+Rural	44,913	100.0	85.8	.9	6.4	5.1	-	1.2	.1	.4
Urban	27,413	100.0	90.0	1.4	1.5	4.3	-	1.9	.2	.7
Rural	17,500	100.0	79.3	.2	14.0	6.3	-	.1	-	-

Appendix 5: Table 4.5A Percentage Distribution of Housing Units by Construction Material of Roof and Region ,Ethiopia:2007

Urban/Rural	All Housing Units	Total	Construction Material of Roof							
			Corrugated Iron sheet	Concrete/Cement	Thatch	Wood and Mud	Bamboo/Reed	Plastic/Sheera	Asbestos	Others
ADDIS ABABA CITY ADMINISTRATION										
Urban+Rural	628,986	100.0	98.0	1.0	.3	.1	-	.3	.2	.2
Urban	628,986	100.0	98.0	1.0	.3	.1	-	.3	.2	.2
Rural	-	-	-	-	-	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION										
Urban+Rural	72,938	100.0	82.2	.8	6.9	9.0	.1	.7	.1	.3
Urban	51,596	100.0	96.0	1.0	.3	1.4	-	.7	.1	.3
Rural	21,342	100.0	48.8	.1	22.8	27.2	.3	.7	.1	.1
SPECIAL ENUMERATION AREA										
Urban+Rural	15,596	100.0	35.0	.7	40.8	9.5	.7	12.1	-	1.2
Urban	6,040	100.0	82.1	.1	5.3	1.9	-	10.0	.1	.6
Rural	9,556	100.0	5.2	1.1	63.2	14.4	1.2	13.4	-	1.6

Appendix 6: Table 4.6A Percentage Distribution of Urban Housing Units by Type of Construction Material of Roof and Region, Ethiopia: 2007

Type of Housing Unit	All Housing Units	Construction Material of Roof								
		Total	Corrugated Iron sheet	Concrete/Cement	Thatch	Wood and Mud	Bamboo/Reed	Plastic/Shera	Asbestos	Others
COUNTRY TOTAL										
TOTAL	2,894,490	100.0	90.9	.5	6.0	1.4	.3	.6	.1	.3
Conventional/Permanent	2,808,749	100.0	91.8	.5	5.5	1.3	.3	.3	.1	.2
Improved	74,528	100.0	69.1	.7	16.9	2.7	.8	8.3	.1	1.4
Mobile	10,593	100.0	12.6	.3	45.8	3.7	.9	22.1	.2	14.6
Others	620	100.0	52.3	3.4	16.5	-	-	10.6	-	17.3
TIGRAY REGION										
TOTAL	231,747	100.0	90.4	1.8	4.8	2.6	.1	.1	-	.2
Conventional/Permanent	225,604	100.0	90.7	1.8	4.6	2.6	.1	.1	-	.2
Improved	6,006	100.0	81.4	.7	12.3	3.1	.7	1.5	-	.3
Mobile	127	100.0	92.1	-	3.9	-	-	-	-	3.9
Others	10	100.0	100.0	-	-	-	-	-	-	-
AFAR REGION										
TOTAL	43,374	100.0	49.8	1.0	10.1	35.1	.4	1.4	.9	2.3
Conventional/Permanent	39,158	100.0	54.1	1.1	5.4	37.5	.3	.4	1.0	1.2
Improved	1,280	100.0	26.8	.4	33.8	33.4	.8	3.7	.4	1.2
Mobile	2,926	100.0	1.6	.2	62.4	3.6	1.5	13.8	.2	16.9
Others	10	100.0	-	-	50.0	-	-	-	-	50.0
AMHARA REGION										
TOTAL	591,312	100.0	92.4	.2	6.8	.2	.1	.2	-	-
Conventional/Permanent	580,018	100.0	92.8	.2	6.6	.2	.1	.1	-	-
Improved	10,962	100.0	70.4	.7	20.9	2.2	.9	4.4	.1	.5
Mobile	259	100.0	82.6	-	5.8	-	-	11.6	-	-
Others	73	100.0	79.5	-	-	-	-	6.8	-	13.7
OROMIA REGION										
TOTAL	835,867	100.0	94.7	.2	4.0	.5	.2	.3	-	.1
Conventional/Permanent	819,343	100.0	95.0	.1	3.8	.5	.2	.2	-	.1
Improved	15,721	100.0	82.3	.2	10.2	1.4	.8	4.3	.1	.9
Mobile	685	100.0	41.0	.7	28.6	4.7	-	18.8	-	6.1
Others	118	100.0	63.6	-	26.3	-	-	-	-	10.2
SOMALI REGION										
TOTAL	91,152	100.0	50.4	.6	26.4	7.7	.3	11.1	.1	3.6
Conventional/Permanent	75,317	100.0	59.2	.5	22.3	8.1	.2	7.4	.1	2.3
Improved	10,369	100.0	11.9	1.2	43.5	6.8	.6	30.4	-	5.6
Mobile	5,307	100.0	1.7	.4	50.9	4.2	.4	25.3	.1	16.9
Others	159	100.0	3.8	3.1	28.3	-	-	30.8	-	34.0
BENISHANGUL-GUMUZ REGION										
TOTAL	27,347	100.0	69.6	.4	27.8	.3	1.8	-	-	-
Conventional/Permanent	26,721	100.0	70.3	.4	27.3	.3	1.6	-	-	-
Improved	621	100.0	39.3	-	49.8	.8	10.1	-	-	-
Mobile	-	-	-	-	-	-	-	-	-	-
Others	5	100.0	100.0	-	-	-	-	-	-	-

Appendix 6: Table 4.6A Percentage Distribution of Urban Housing Units by Type of Construction Material of Roof and Region, Ethiopia: 2007

Type of Housing Unit	All Housing Units	Construction Material of Roof								
		Total	Corrugated Iron sheet	Concrete/Cement	Thatch	Wood and Mud	Bamboo/Reed	Plastic/Shera	Asbestos	Others
S.N.N.P REGION										
TOTAL	342,181	100.0	84.8	.3	12.7	.6	1.3	.2	-	.1
Conventional/Permanent	332,545	100.0	85.3	.3	12.4	.6	1.2	.1	-	-
Improvised	9,334	100.0	70.6	.2	22.5	1.0	2.2	2.7	-	.7
Mobile	245	100.0	58.8	-	24.1	-	10.6	-	2.0	6.5
Others	57	100.0	63.2	-	36.8	-	-	-	-	-
GAMBELLA REGION										
TOTAL	18,900	100.0	59.9	.5	34.4	4.4	-	.7	1.0	-
Conventional/Permanent	17,897	100.0	59.9	.5	34.7	4.2	-	.6	1.0	-
Improvised	972	100.0	60.5	-	30.2	7.0	-	2.3	.5	-
Mobile	31	100.0	35.5	-	16.1	48.4	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
HARARI REGION										
TOTAL	27,347	100.0	90.2	1.4	1.5	4.3	-	1.9	.2	.7
Conventional/Permanent	26,299	100.0	92.8	1.4	.9	4.4	-	-	.3	.6
Improvised	762	100.0	32.2	1.3	22.8	3.4	-	40.3	-	-
Mobile	255	100.0	2.0	-	2.0	-	-	88.2	-	7.8
Others	31	100.0	16.1	-	-	-	-	-	-	83.9
ADDIS ABABA CITY ADMINISTRATION										
TOTAL	627,688	100.0	98.2	1.0	.3	.1	-	.3	.2	.2
Conventional/Permanent	610,794	100.0	98.4	1.0	.3	.1	-	.1	.2	.1
Improvised	16,400	100.0	93.0	1.2	.2	.1	-	4.4	.1	1.1
Mobile	377	100.0	77.5	-	-	-	-	8.5	1.3	14.1
Others	117	100.0	86.3	13.7	-	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION										
TOTAL	51,532	100.0	96.1	1.0	.3	1.4	-	.7	.1	.3
Conventional/Permanent	49,451	100.0	96.8	1.1	.1	1.4	-	.3	.1	.3
Improvised	1,898	100.0	78.1	.6	4.2	2.4	.6	12.0	.3	2.1
Mobile	143	100.0	95.8	-	-	-	-	4.2	-	-
Others	40	100.0	72.5	-	-	-	-	27.5	-	-
SPECIAL ENUMERATION AREA										
TOTAL	6,033	100.0	82.2	.1	5.3	1.9	-	10.0	.1	.6
Conventional/Permanent	5,597	100.0	88.5	-	4.7	1.8	-	4.8	.1	.3
Improvised	201	100.0	2.5	2.5	10.9	-	-	84.1	-	-
Mobile	235	100.0	-	-	15.3	6.4	-	69.8	-	8.5
Others	-	-	-	-	-	-	-	-	-	-

Appendix 7: Table 4.7 Percentage Distribution of Housing Units by Construction Material of Ceiling and Region, Urban Ethiopia: 2007

Urban Areas	All Housing Units	Total	Has no Ceiling	Fabrics	Construction Material of Ceiling							Others
					Bamboo/ Reed	Chip Wood/ Hard Wood	Parquet or Polished Wood	Wood Planks	Concrete/ Cement	Polythene Sheet/ "Madaberia"		
COUNTRY TOTAL-URBAN	2,897,018	100.0	52.3	16.6	.2	-	.3	.1	.7	23.4	6.3	
TIGRAY REGION-URBAN	231,826	100.0	82.4	3.5	.4	-	.9	.1	2.1	5.1	5.5	
AFAR REGION_URBAN	43,762	100.0	74.7	4.2	.2	-	.1	-	.6	15.7	4.5	
AMHARA REGION-URBAN	591,427	100.0	64.8	6.6	.1	-	.2	-	.2	25.3	2.8	
OROMIA REGION_URBAN	836,073	100.0	51.8	13.7	.1	-	.2	-	.2	30.4	3.6	
SOMALI REGION-URBAN	91,241	100.0	74.0	14.9	.2	-	.2	-	.2	7.5	2.9	
BENISHANGUL-GUMUZ REGION-URBAN	27,346	100.0	70.2	9.1	.1	-	-	-	.1	18.0	2.4	
S.N.N.P REGION-URBAN	342,224	100.0	56.9	15.4	.8	-	.2	-	.1	22.6	3.8	
GAMBELLA REGION_URBAN	19,079	100.0	72.7	6.0	.2	-	.2	.1	.2	15.4	5.2	
HARARI REGION-URBAN	27,414	100.0	35.6	34.6	.2	-	.3	.2	1.0	22.0	6.1	
ADDIS ABABA CITY ADMINISTRATION-URB	628,986	100.0	22.1	36.0	.1	-	.7	.1	1.6	24.2	15.2	
DIRE DAWA CITY ADMINISTRATION-URBAN	51,595	100.0	58.0	22.4	.1	-	.9	.1	1.4	6.5	10.7	
SPECIAL ENUMERATION AREA_URBAN	6,041	100.0	50.1	9.9	-	-	.2	.1	.1	30.0	9.6	

Appendix 8: Table 4.8A Percentage Distribution of Housing Units by Construction Material of Floor and Region,Urban Ethiopia:2007

Urban Areas	Housing Units	Total	Construction Material of Floor								
			Mud	Bamboo/ Reed	Wood Planks	Polished Wood	Cement Screed/ Cement Screed/ Not applied	Plastic Tiles	Tiles/ Brick Tiles	Marble Tiles	Others
COUNTRY TOTAL-URBAN	2,897,017	100.0	66.0	1.3	1.7	-	25.6	.8	3.3	.4	.9
TIGRAY REGION-URBAN	231,826	100.0	64.3	.1	.1	-	30.6	.4	2.9	1.0	.6
AFAR REGION_URBAN	43,763	100.0	81.7	.1	-	-	15.6	.6	1.6	.1	.3
AMHARA REGION-URBAN	591,428	100.0	86.6	.2	.4	-	10.6	.3	1.4	.2	.3
OROMIA REGION_URBAN	836,074	100.0	72.2	1.8	1.4	-	20.2	.4	3.2	.2	.6
SOMALI REGION-URBAN	91,240	100.0	81.7	.2	.1	-	14.9	.4	1.9	.1	.7
BENISHANGUL-GUMUZ REGION-URBAN	27,348	100.0	88.5	.1	-	-	9.2	.9	1.3	.1	-
S.N.N.P REGION-URBAN	342,224	100.0	61.0	6.0	.4	-	28.6	.3	3.3	.2	.2
GAMBELLA REGION_URBAN	19,079	100.0	83.6	.1	.2	-	14.1	.3	1.4	.1	.2
HARARI REGION-URBAN	27,414	100.0	45.8	.1	.2	-	46.1	.2	6.9	.2	.5
ADDIS ABABA CITY ADMINISTRATION-URBAN	628,987	100.0	40.0	.1	5.5	-	43.1	2.5	5.5	.7	2.6
DIRE DAWA CITY ADMINISTRATION-URBAN	51,595	100.0	39.6	.1	.1	-	54.7	.5	4.0	.4	.7
SPECIAL ENUMERATION AREA_URBAN	6,040	100.0	49.1	-	-	-	45.8	.2	4.5	.2	.3

Appendix 9: Table 4.9A Percentage Distribution of Urban Housing Units by Type of Construction Material of Floor and region, Ethiopia:2007

Type of Housing Unit	All Housing Units	Total	Construction Material of Floor								
			Mud	Bamboo/ Reed	Wood Planks	Polished Wood	Cement Screed/ Cement Screed Not Applied	Plastic Tiles	Tiles/ Brick Tiles	Marble Tiles	Others
COUNTRY TOTAL											
TOTAL	2,897,016	100.0	66.0	1.3	1.7	-	25.6	.8	3.3	.4	.9
Conventional/Permanent	2,811,192	100.0	65.6	1.3	1.8	-	25.9	.8	3.3	.4	.9
Improvised	74,590	100.0	79.1	.9	.7	-	15.7	.7	2.0	.1	.8
Mobile	10,614	100.0	91.9	.3	1.1	-	3.8	.4	.3	.2	1.9
Others	620	100.0	71.1	-	.8	-	14.5	-	2.4	-	11.1
TIGRAY REGION											
TOTAL	231,826	100.0	64.3	.1	.1	-	30.6	.4	2.9	1.0	.6
Conventional/Permanent	225,683	100.0	63.9	.1	.1	-	30.9	.4	3.0	1.0	.6
Improvised	6,005	100.0	79.0	.1	.3	-	17.8	.2	1.4	.5	.8
Mobile	128	100.0	67.2	-	-	-	24.2	-	-	-	8.6
Others	10	100.0	-	-	-	-	100.0	-	-	-	-
AFAR REGION											
TOTAL	43,762	100.0	81.7	.1	-	-	15.6	.6	1.6	.1	.3
Conventional/Permanent	39,535	100.0	80.1	.1	-	-	17.0	.7	1.7	.2	.2
Improvised	1,286	100.0	93.7	-	-	-	6.3	-	-	-	-
Mobile	2,931	100.0	98.1	.2	.3	-	.9	-	-	-	.5
Others	10	100.0	100.0	-	-	-	-	-	-	-	-
AMHARA REGION											
TOTAL	591,428	100.0	86.6	.2	.4	-	10.6	.3	1.4	.2	.3
Conventional/Permanent	580,121	100.0	86.5	.2	.4	-	10.7	.3	1.4	.2	.3
Improvised	10,974	100.0	92.5	.2	.3	-	5.4	.3	1.1	.1	.1
Mobile	260	100.0	82.7	-	1.9	-	15.4	-	-	-	-
Others	73	100.0	80.8	-	-	-	19.2	-	-	-	-
OROMIA REGION											
TOTAL	836,074	100.0	72.2	1.8	1.4	-	20.2	.4	3.2	.2	.6
Conventional/Permanent	819,536	100.0	72.0	1.8	1.4	-	20.3	.4	3.2	.2	.6
Improvised	15,736	100.0	80.4	1.0	.7	-	14.2	.9	2.3	.1	.4
Mobile	685	100.0	81.2	-	2.2	-	9.8	.7	3.1	-	3.1
Others	117	100.0	86.3	-	4.3	-	9.4	-	-	-	-
SOMALI REGION											
TOTAL	91,240	100.0	81.7	.2	.1	-	14.9	.4	1.9	.1	.6
Conventional/Permanent	75,393	100.0	78.7	.2	.1	-	17.6	.4	2.3	.2	.6
Improvised	10,373	100.0	95.7	.4	-	-	3.0	.3	.2	-	.5
Mobile	5,315	100.0	97.1	.4	.2	-	-	.6	-	.1	1.6
Others	159	100.0	86.8	-	-	-	3.1	-	-	-	10.1

Appendix 9: Table 4.9A Percentage Distribution of Urban Housing Units by Type of Construction Material of Floor and region, Ethiopia:2007

Type of Housing Unit	All Housing Units	Total	Construction Material of Floor									
			Mud	Bamboo/ Reed	Wood Planks	Polished Wood	Cement Screed/ Cement Not Applied	Plastic Tiles	Tiles/ Brick Tiles	Marble Tiles	Others	
BENISHANGUL-GUMUZ REGION												
TOTAL	27,348	100.0	88.5	.1	-	-	-	9.2	.9	1.3	.1	-
Conventional/Permanent	26,722	100.0	88.5	.1	-	-	-	9.3	.8	1.3	.1	-
Improvised	621	100.0	91.5	-	-	-	-	5.5	3.1	-	-	-
Mobile	-	-	-	-	-	-	-	-	-	-	-	-
Others	5	100.0	100.0	-	-	-	-	-	-	-	-	-
S.N.N.P REGION												
TOTAL	342,222	100.0	61.0	6.0	.4	-	-	28.6	.3	3.3	.2	.2
Conventional/Permanent	332,581	100.0	60.8	6.1	.4	-	-	28.7	.3	3.3	.2	.2
Improvised	9,335	100.0	69.8	4.0	.2	-	-	22.3	.1	3.2	.1	.3
Mobile	249	100.0	59.0	4.4	6.0	-	-	18.5	2.0	4.0	-	6.0
Others	57	100.0	82.5	-	-	-	-	8.8	-	8.8	-	-
GAMBELLA REGION												
TOTAL	19,078	100.0	83.6	.1	.2	-	-	14.1	.3	1.4	.1	.2
Conventional/Permanent	18,070	100.0	83.4	.1	.2	-	-	14.4	.3	1.4	.1	.2
Improvised	977	100.0	87.6	-	-	-	-	8.6	1.6	1.1	-	1.0
Mobile	31	100.0	83.9	-	-	-	-	16.1	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-
HARARI REGION												
TOTAL	27,412	100.0	45.8	.1	.2	-	-	46.1	.2	6.9	.2	.5
Conventional/Permanent	26,364	100.0	44.3	-	.3	-	-	47.5	.3	7.1	.2	.4
Improvised	761	100.0	84.0	2.0	-	-	-	11.4	-	2.6	-	-
Mobile	256	100.0	98.0	-	-	-	-	2.0	-	-	-	-
Others	31	100.0	-	-	-	-	-	16.1	-	-	-	83.9
ADDIS ABABA CITY ADMINISTRATION												
TOTAL	628,987	100.0	40.0	.1	5.5	-	-	43.1	2.5	5.5	.7	2.6
Conventional/Permanent	612,071	100.0	39.4	.1	5.6	-	-	43.5	2.5	5.6	.7	2.6
Improvised	16,416	100.0	61.7	.2	2.3	-	-	28.6	1.6	3.5	.1	2.1
Mobile	383	100.0	40.2	-	13.8	-	-	30.5	-	-	2.9	12.5
Others	117	100.0	49.6	-	-	-	-	17.9	-	9.4	-	23.1
DIRE DAWA CITY ADMINISTRATION												
TOTAL	51,595	100.0	39.6	.1	.1	-	-	54.7	.5	4.0	.4	.7
Conventional/Permanent	49,508	100.0	38.2	-	.1	-	-	56.0	.5	4.1	.4	.7
Improvised	1,904	100.0	75.2	.6	.3	-	-	21.8	-	.9	-	1.2
Mobile	143	100.0	32.2	-	4.2	-	-	47.6	4.2	4.2	-	7.7
Others	40	100.0	57.5	-	-	-	-	42.5	-	-	-	-
SPECIAL ENUMERATION AREA												
TOTAL	6,040	100.0	49.1	-	-	-	-	45.8	.2	4.5	.2	.3
Conventional/Permanent	5,602	100.0	45.1	-	-	-	-	49.4	.2	4.9	.2	.3
Improvised	202	100.0	100.0	-	-	-	-	-	-	-	-	-
Mobile	236	100.0	100.0	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-

Appendix 10: Table 4.10 Percentage Distribution of Construction Material of Housing Units
Wall, Roof, Floor by Level of Education of Head of Household and Region, Ethiopia: 2007

Construction Material of Wall, Roof and Floor	All Housing Unit	Total	Highest Grade Completed by Head of Household			
			Non-Regular	Pre-School	Primary	Secondary and Above
COUNTRY TOTAL						
Wall						
Traditional Material	13,543,557	100.0	2.8	1.0	21.3	74.9
Modern Material	414,753	100.0	1.5	.8	25.5	72.2
Others	1,144,825	100.0	5.6	1.0	17.1	76.2
Total	15,103,135	100.0	3.0	1.0	21.1	74.9
Roof						
Corrugated Iron Sheet	5,778,557	100.0	3.9	1.0	27.2	67.9
Concrete/Cement	94,134	100.0	2.2	.8	16.8	80.2
Thatch	7,670,874	100.0	2.6	.9	17.3	79.1
Wood and Mud	753,761	100.0	2.6	1.1	16.3	80.0
Reed/Bamboo	508,686	100.0	.7	.9	21.5	76.9
Plastic/Shera	185,141	100.0	1.0	.7	10.6	87.6
Asbestos	14,721	100.0	.4	.4	35.5	63.6
Others	97,263	100.0	.9	.7	15.2	83.2
Total	15,103,137	100.0	3.0	1.0	21.1	74.9
Floor						
Traditional Material	14,089,997	100.0	3.1	1.0	20.7	75.2
Modern Material	997,772	100.0	1.6	.8	27.0	70.6
Others	15,367	100.0	1.4	.9	18.0	79.7
Total	15,103,136	100.0	3.0	1.0	21.1	74.9
TIGRAY REGION						
Wall						
Traditional Material	227,633	100.0	2.6	1.1	20.9	75.3
Modern Material	87,634	100.0	1.7	.6	31.0	66.6
Others	642,417	100.0	4.3	1.2	19.8	74.7
Total	957,684	100.0	3.7	1.2	21.1	74.1
Roof						
Corrugated Iron Sheet	391,689	100.0	3.2	1.0	28.0	67.9
Concrete/Cement	5,917	100.0	1.9	.5	25.5	72.0
Thatch	220,816	100.0	3.7	1.3	14.7	80.3
Wood and Mud	330,440	100.0	4.3	1.3	17.1	77.3
Reed/Bamboo	3,235	100.0	3.6	1.9	16.6	77.9
Plastic/Shera	1,805	100.0	3.4	.6	35.4	60.6
Asbestos	281	100.0	-	-	18.5	81.5
Others	3,504	100.0	3.6	2.1	13.0	81.3
Total	957,687	100.0	3.7	1.2	21.1	74.1
Floor						
Traditional Material	866,416	100.0	3.9	1.2	20.1	74.8
Modern Material	89,246	100.0	1.7	.6	30.1	67.6
Others	2,022	100.0	4.6	.8	22.9	71.7
Total	957,684	100.0	3.7	1.2	21.1	74.1
AFAR REGION						
Wall						
Traditional Material	212,638	100.0	1.5	.5	7.7	90.3
Modern Material	9,533	100.0	2.2	.6	29.3	67.9
Others	13,583	100.0	2.7	.7	9.5	87.2
Total	235,754	100.0	1.6	.5	8.7	89.2
Roof						
Corrugated Iron Sheet	28,730	100.0	2.2	.7	30.0	67.1
Concrete/Cement	1,844	100.0	.6	-	8.1	91.3
Thatch	136,530	100.0	1.4	.4	2.7	95.5
Wood and Mud	38,335	100.0	2.4	.7	17.2	79.7
Reed/Bamboo	1,256	100.0	.4	.9	9.0	89.7
Plastic/Shera	16,297	100.0	1.4	.5	2.8	95.3
Asbestos	1,014	100.0	.5	-	25.0	74.5
Others	11,749	100.0	1.6	.4	4.7	93.4
Total	235,755	100.0	1.6	.5	8.7	89.2
Floor						
Traditional Material	225,555	100.0	1.6	.5	7.8	90.1
Modern Material	9,376	100.0	1.7	.7	30.1	67.5
Others	821	100.0	.6	.7	9.5	89.2
Total	235,752	100.0	1.6	.5	8.7	89.2

Appendix 10: Table 4.10 Percentage Distribution of Construction Material of Housing Units
Wall, Roof, Floor by Level of Education of Head of Household and Region, Ethiopia: 2007

Construction Material of Wall, Roof and Floor	All Housing Unit	Total	Highest Grade Completed by Head of Household			
			Non-Regular	Pre-School	Primary	Secondary and Above
AMHARA REGION						
Wall						
Traditional Material	3,452,780	100.0	7.4	.9	14.1	77.6
Modern Material	34,896	100.0	3.3	.6	19.6	76.5
Others	361,466	100.0	9.6	.8	13.2	76.4
Total	3,849,142	100.0	7.6	.9	14.1	77.5
Roof						
Corrugated Iron Sheet	1,801,078	100.0	8.7	.9	18.4	72.0
Concrete/Cement	21,134	100.0	6.6	.8	10.2	82.4
Thatch	1,941,338	100.0	6.8	.8	10.2	82.3
Wood and Mud	44,771	100.0	4.2	.9	10.8	84.1
Reed/Bamboo	36,109	100.0	4.9	1.1	10.5	83.6
Plastic/Shera	1,937	100.0	4.4	.8	23.8	71.0
Asbestos	185	100.0	2.7	2.7	33.0	61.6
Others	2,590	100.0	5.1	.8	10.7	83.4
Total	3,849,142	100.0	7.6	.9	14.1	77.5
Floor						
Traditional Material	3,760,170	100.0	7.7	.9	13.9	77.5
Modern Material	88,148	100.0	2.8	.6	19.7	76.9
Others	822	100.0	3.6	1.8	20.0	74.6
Total	3,849,140	100.0	7.6	.9	14.1	77.5
OROMIA REGION						
Wall						
Traditional Material	5,311,315	100.0	1.5	1.0	24.1	73.4
Modern Material	75,528	100.0	1.1	.8	26.3	71.9
Others	38,250	100.0	2.3	1.0	17.2	79.5
Total	5,425,093	100.0	1.5	1.0	24.0	73.4
Roof						
Corrugated Iron Sheet	2,068,162	100.0	1.8	1.1	31.0	66.2
Concrete/Cement	32,571	100.0	1.3	1.0	17.7	80.0
Thatch	2,967,308	100.0	1.5	.9	19.7	78.0
Wood and Mud	162,043	100.0	1.0	1.1	17.4	80.5
Reed/Bamboo	128,917	100.0	.4	.9	22.0	76.7
Plastic/Shera	25,253	100.0	.9	.9	25.3	72.8
Asbestos	9,938	100.0	.2	.3	42.6	56.9
Others	30,902	100.0	.6	.8	24.1	74.5
Total	5,425,094	100.0	1.5	1.0	24.0	73.4
Floor						
Traditional Material	5,174,508	100.0	1.6	1.0	23.8	73.6
Modern Material	245,503	100.0	1.1	.8	28.5	69.5
Others	5,081	100.0	.5	.6	22.1	76.7
Total	5,425,092	100.0	1.5	1.0	24.0	73.4
SOMALI REGION						
Wall						
Traditional Material	594,237	100.0	1.2	.9	4.5	93.4
Modern Material	13,443	100.0	.7	1.0	15.1	83.2
Others	40,863	100.0	.4	.5	3.7	95.3
Total	648,543	100.0	1.1	.9	4.7	93.3
Roof						
Corrugated Iron Sheet	74,620	100.0	.6	1.2	13.6	84.5
Concrete/Cement	5,253	100.0	.2	.7	4.8	94.4
Thatch	343,500	100.0	1.4	1.0	3.4	94.2
Wood and Mud	75,699	100.0	.7	1.0	4.7	93.6
Reed/Bamboo	3,908	100.0	.7	.2	4.1	95.0
Plastic/Shera	117,945	100.0	1.0	.7	3.1	95.3
Asbestos	953	100.0	-	1.4	7.2	91.4
Others	26,661	100.0	.5	.4	3.4	95.7
Total	648,539	100.0	1.1	.9	4.7	93.3
Floor						
Traditional Material	623,560	100.0	1.1	.9	4.3	93.7
Modern Material	21,573	100.0	.9	1.2	15.2	82.8
Others	3,409	100.0	.8	.5	3.5	95.1
Total	648,542	100.0	1.1	.9	4.7	93.3

Appendix 10: Table 4.10 Percentage Distribution of Construction Material of Housing Units
Wall, Roof, Floor by Level of Education of Head of Household and Region, Ethiopia: 2007

Construction Material of Wall, Roof and Floor	All Housing Unit	Total	Highest Grade Completed by Head of Household			
			Non-Regular	Pre-School	Primary	Secondary and Above
BENISHANGUL-GUMUZ REGION						
Wall						
Traditional Material	165,839	100.0	2.5	.7	23.2	73.6
Modern Material	1,548	100.0	.6	.6	20.0	78.7
Others	360	100.0	1.4	1.4	15.0	82.2
Total	167,747	100.0	2.5	.7	23.2	73.6
Roof						
Corrugated Iron Sheet	31,013	100.0	2.4	.8	32.7	64.1
Concrete/Cement	1,041	100.0	1.5	.5	21.4	76.6
Thatch	121,082	100.0	2.5	.7	21.1	75.7
Wood and Mud	2,121	100.0	.8	.8	15.0	83.5
Reed/Bamboo	12,389	100.0	2.5	1.0	20.4	76.1
Plastic/Shera	58	100.0	-	-	27.6	72.4
Asbestos	5	100.0	-	-	100.0	-
Others	42	100.0	-	-	38.1	61.9
Total	167,751	100.0	2.5	.7	23.2	73.6
Floor						
Traditional Material	163,375	100.0	2.5	.7	23.2	73.6
Modern Material	4,269	100.0	.6	.8	21.3	77.3
Others	105	100.0	4.8	-	35.2	60.0
Total	167,749	100.0	2.5	.7	23.2	73.6
S.N.N.P REGION						
Wall						
Traditional Material	2,950,215	100.0	.4	1.0	26.7	71.9
Modern Material	23,391	100.0	.3	.9	27.2	71.7
Others	19,440	100.0	.2	.7	19.6	79.5
Total	2,993,046	100.0	.4	1.0	26.6	72.0
Roof						
Corrugated Iron Sheet	647,064	100.0	.4	1.0	34.2	64.4
Concrete/Cement	18,268	100.0	.4	.9	24.6	74.1
Thatch	1,885,364	100.0	.4	1.1	24.7	73.9
Wood and Mud	84,635	100.0	.2	1.2	24.3	74.4
Reed/Bamboo	322,556	100.0	.2	.9	22.9	75.9
Plastic/Shera	15,015	100.0	.3	1.1	45.4	53.3
Asbestos	708	100.0	1.4	.7	30.1	67.8
Others	19,437	100.0	.5	1.0	23.7	74.8
Total	2,993,047	100.0	.4	1.0	26.6	72.0
Floor						
Traditional Material	2,846,859	100.0	.4	1.1	26.5	72.0
Modern Material	144,236	100.0	.3	.7	28.6	70.4
Others	1,952	100.0	-	1.8	21.9	76.3
Total	2,993,047	100.0	.4	1.0	26.6	72.0
GAMBELLA REGION						
Wall						
Traditional Material	60,893	100.0	.5	.7	27.1	71.6
Modern Material	2,330	100.0	.2	.2	21.1	78.5
Others	469	100.0	-	1.1	36.2	62.7
Total	63,692	100.0	.5	.7	27.0	71.8
Roof						
Corrugated Iron Sheet	15,714	100.0	.9	.4	40.7	57.9
Concrete/Cement	687	100.0	-	.7	16.7	82.5
Thatch	39,062	100.0	.4	.9	23.8	75.0
Wood and Mud	5,000	100.0	.4	.5	17.9	81.1
Reed/Bamboo	65	100.0	-	-	7.7	92.3
Plastic/Shera	2,229	100.0	.2	.9	15.1	83.8
Asbestos	192	100.0	-	-	5.7	94.3
Others	742	100.0	-	-	17.3	82.7
Total	63,691	100.0	.5	.7	27.0	71.8
Floor						
Traditional Material	59,979	100.0	.5	.7	26.9	71.9
Modern Material	3,529	100.0	.3	.5	28.2	71.1
Others	185	100.0	2.7	-	38.4	58.9
Total	63,693	100.0	.5	.7	27.0	71.8

Appendix 10: Table 4.10 Percentage Distribution of Construction Material of Housing Units
Wall, Roof, Floor by Level of Education of Head of Household and Region, Ethiopia: 2007

Construction Material of Wall, Roof and Floor	All Housing Unit	Total	Highest Grade Completed by Head of Household			
			Non-Regular	Pre-School	Primary	Secondary and Above
HARARI REGION						
Wall						
Traditional Material	35,483	100.0	2.4	1.0	26.5	70.0
Modern Material	4,020	100.0	1.1	.6	24.6	73.6
Others	5,410	100.0	1.8	1.1	19.5	77.5
Total	44,913	100.0	2.2	1.0	25.5	71.3
Roof						
Corrugated Iron Sheet	38,548	100.0	2.2	.9	27.5	69.4
Concrete/Cement	415	100.0	2.4	1.2	18.6	77.8
Thatch	2,859	100.0	2.8	.9	12.0	84.3
Wood and Mud	2,273	100.0	2.9	1.1	16.8	79.1
Reed/Bamboo	5	100.0	-	-	-	100.0
Plastic/Shera	549	100.0	-	4.7	2.9	92.3
Asbestos	66	100.0	-	-	7.6	92.4
Others	200	100.0	-	5.0	13.0	82.0
Total	44,915	100.0	2.2	1.0	25.5	71.3
Floor						
Traditional Material	29,450	100.0	2.4	1.3	25.0	71.3
Modern Material	15,405	100.0	1.8	.4	26.6	71.2
Others	61	100.0	8.2	-	16.4	75.4
Total	44,916	100.0	2.2	1.0	25.5	71.3
ADDIS ABABA CITY ADMINISTRATION						
Wall						
Traditional Material	485,859	100.0	2.6	1.2	34.7	61.4
Modern Material	134,555	100.0	1.5	.9	22.6	75.0
Others	8,572	100.0	2.3	.8	29.9	67.0
Total	628,986	100.0	2.4	1.2	32.1	64.4
Roof						
Corrugated Iron Sheet	616,555	100.0	2.4	1.2	32.3	64.2
Concrete/Cement	6,330	100.0	.7	.5	14.0	84.8
Thatch	1,644	100.0	1.0	1.9	24.5	72.6
Wood and Mud	408	100.0	6.6	2.7	33.8	56.9
Reed/Bamboo	48	100.0	-	10.4	22.9	66.7
Plastic/Shera	1,642	100.0	3.9	.7	42.7	52.7
Asbestos	1,298	100.0	1.2	.8	21.6	76.3
Others	1,062	100.0	.5	.5	25.9	73.2
Total	628,987	100.0	2.4	1.2	32.1	64.4
Floor						
Traditional Material	286,515	100.0	2.6	1.3	38.7	57.4
Modern Material	341,697	100.0	2.2	1.0	26.5	70.3
Others	775	100.0	2.1	2.1	30.2	65.7
Total	628,987	100.0	2.4	1.2	32.1	64.4
DIRE DAWA CITY ADMINISTRATION						
Wall						
Traditional Material	32,598	100.0	1.7	.7	26.6	71.0
Modern Material	27,162	100.0	1.5	.8	31.1	66.6
Others	13,178	100.0	1.1	.8	28.1	69.9
Total	72,938	100.0	1.5	.8	28.6	69.2
Roof						
Corrugated Iron Sheet	59,933	100.0	1.7	.8	32.6	64.9
Concrete/Cement	567	100.0	1.9	-	22.0	76.0
Thatch	5,017	100.0	.9	.5	6.5	92.1
Wood and Mud	6,543	100.0	.6	.7	10.2	88.5
Reed/Bamboo	86	100.0	-	5.8	7.0	87.2
Plastic/Shera	532	100.0	-	3.2	13.9	82.9
Asbestos	74	100.0	-	-	62.2	37.8
Others	187	100.0	-	-	27.3	72.7
Total	72,939	100.0	1.5	.8	28.6	69.2
Floor						
Traditional Material	41,308	100.0	1.4	.7	26.3	71.6
Modern Material	31,524	100.0	1.7	.8	31.5	66.0
Others	107	100.0	5.6	-	26.2	68.2
Total	72,939	100.0	1.5	.8	28.6	69.2

Appendix 10: Table 4.10 Percentage Distribution of Construction Material of Housing Units
Wall, Roof, Floor by Level of Education of Head of Household and Region, Ethiopia: 2007

Construction Material of Wall, Roof and Floor	All Housing Unit	Total	Highest Grade Completed by Head of Household			
			Non-Regular	Pre-School	Primary	Secondary and Above
SPECIAL ENUMERATION AREA						
Wall						
Traditional Material	14,066	100.0	1.1	.3	15.8	82.9
Modern Material	714	100.0	.7	.7	28.2	70.4
Others	815	100.0	3.3	-	7.5	89.2
Total	15,595	100.0	1.2	.3	15.9	82.6
Roof						
Corrugated Iron Sheet	5,451	100.0	2.2	.3	37.5	60.0
Concrete/Cement	107	100.0	-	-	-	100.0
Thatch	6,360	100.0	.2	.3	4.1	95.4
Wood and Mud	1,487	100.0	.3	.3	2.2	97.2
Reed/Bamboo	115	100.0	-	-	-	100.0
Plastic/Shera	1,883	100.0	2.3	.3	7.2	90.2
Asbestos	5	100.0	-	-	100.0	-
Others	187	100.0	-	-	2.7	97.3
Total	15,595	100.0	1.2	.3	15.9	82.6
Floor						
Traditional Material	12,305	100.0	1.0	.3	9.7	89.0
Modern Material	3,266	100.0	1.8	.2	39.7	58.4
Others	25	100.0	-	-	-	100.0
Total	15,596	100.0	1.2	.3	15.9	82.6

Appendix 11: Table 4.11 Percentage Distribution of Housing Units by Number of Rooms and Region, Ethiopia :2007

Urban/Rural	All Housing Units	Number of Rooms										Total Number of Rooms	Average Number of Rooms Per Housing Unit
		Total	1	2	3	4	5	6	7	8+			
COUNTRY TOTAL													
Urban+Rural	41,781,493	100.0	19.2	10.6	4.1	1.4	.4	.2	.1	.1	.1	26,678,358	63.9
Urban	8,980,114	100.0	15.0	8.3	4.8	2.2	1.0	.4	.2	.4	.4	6,083,095	67.7
Rural	32,801,379	100.0	20.4	11.2	4.0	1.2	.3	.1	-	.1	.1	20,595,263	62.8
TIGRAY REGION													
Urban+Rural	2,774,568	100.0	16.6	9.8	5.4	1.8	.5	.2	.1	.1	.1	1,816,882	65.5
Urban	648,350	100.0	22.5	6.7	3.1	1.6	.8	.4	.2	.4	.4	416,524	64.2
Rural	2,126,218	100.0	14.8	10.8	6.1	1.9	.4	.1	-	.1	.1	1,400,358	65.9
AFAR REGION													
Urban+Rural	539,138	100.0	34.8	7.1	1.3	.4	.1	-	-	.1	.1	303,382	56.3
Urban	116,670	100.0	21.4	11.3	2.8	1.1	.4	.2	.1	.1	.1	72,907	62.5
Rural	422,468	100.0	38.5	5.9	.8	.1	-	-	-	.1	.1	230,475	54.6
AMHARA REGION													
Urban+Rural	10,447,979	100.0	20.4	9.8	4.7	1.4	.3	.1	-	.1	.1	6,598,838	63.2
Urban	1,736,649	100.0	17.4	8.0	5.1	2.1	.8	.3	.1	.2	.2	1,145,222	65.9
Rural	8,711,330	100.0	21.0	10.2	4.6	1.2	.2	-	-	.1	.1	5,453,616	62.6
OROMIA REGION													
Urban+Rural	15,274,694	100.0	17.0	12.2	4.1	1.4	.4	.2	.1	.1	.1	9,849,602	64.5
Urban	2,627,542	100.0	13.1	9.3	5.1	2.4	1.0	.4	.2	.2	.2	1,791,468	68.2
Rural	12,647,152	100.0	17.8	12.8	3.9	1.3	.3	.1	-	.1	.1	8,058,134	63.7
SOMALI REGION													
Urban+Rural	1,464,488	100.0	36.7	6.1	.9	.2	.1	-	-	.2	.2	815,946	55.7
Urban	233,358	100.0	26.2	9.1	2.2	.8	.3	.2	.1	.3	.3	142,117	60.9
Rural	1,231,130	100.0	38.7	5.6	.7	.1	-	-	-	.2	.2	673,829	54.7
BENISHANGUL-GUMUZ REGION													
Urban+Rural	437,967	100.0	23.9	9.2	3.3	1.1	.4	.2	.1	.1	.1	270,219	61.7
Urban	81,955	100.0	16.6	8.0	4.7	2.3	1.0	.4	.2	.2	.2	54,609	66.6
Rural	356,012	100.0	25.6	9.5	3.0	.9	.3	.1	-	.1	.1	215,610	60.6
S.N.N.P REGION													
Urban+Rural	8,161,075	100.0	20.0	10.7	3.9	1.4	.4	.1	-	.1	.1	5,168,030	63.3
Urban	1,086,258	100.0	13.0	8.5	5.7	2.7	.9	.3	.1	.3	.3	744,034	68.5
Rural	7,074,817	100.0	21.1	11.1	3.6	1.2	.3	.1	-	.1	.1	4,423,996	62.5
GAMBELLA REGION													
Urban+Rural	171,122	100.0	22.4	8.6	3.9	1.3	.5	.2	.1	.2	.2	107,429	62.8
Urban	52,181	100.0	22.9	7.2	3.6	1.4	.9	.2	.1	.3	.3	33,100	63.4
Rural	118,941	100.0	22.2	9.2	4.1	1.3	.4	.1	-	.1	.1	74,329	62.5

Appendix 11: Table 4.11 Percentage Distribution of Housing Units by Number of Rooms and Region, Ethiopia :2007

Urban/Rural	All Housing Units	Total	Number of Rooms								Total Number of Rooms	Average Number of Rooms Per Housing Unit
			1	2	3	4	5	6	7	8+		
HARARI REGION												
Urban+Rural	129,022	100.0	18.3	9.6	3.7	1.6	.8	.3	.1	.3	84,107	65.2
Urban	82,390	100.0	16.8	8.6	3.8	2.0	1.1	.4	.2	.4	54,976	66.7
Rural	46,632	100.0	21.0	11.3	3.6	.9	.4	.2	.1	.1	29,131	62.5
ADDIS ABABA CITY ADMINISTRATION												
Urban+Rural	2,153,796	100.0	11.5	7.6	4.6	2.4	1.4	.7	.4	.7	1,524,810	70.8
Urban	2,153,796	100.0	11.5	7.6	4.6	2.4	1.4	.7	.4	.7	1,524,810	70.8
Rural	-	-	-	-	-	-	-	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION												
Urban+Rural	190,369	100.0	26.9	6.3	2.7	1.2	.5	.3	.1	.3	117,431	61.7
Urban	145,181	100.0	21.7	7.2	3.3	1.6	.7	.4	.2	.4	93,585	64.5
Rural	45,188	100.0	43.3	3.2	.5	.1	-	-	-	.1	23,846	52.8
SPECIAL ENUMERATION AREA												
Urban+Rural	37,277	100.0	31.0	8.0	1.8	.5	.1	.1	-	.2	21,681	58.2
Urban	15,783	100.0	23.0	10.2	3.4	1.1	.2	.3	.1	.1	9,742	61.7
Rural	21,494	100.0	37.0	6.4	.6	.1	-	-	-	.3	11,939	55.5

Table 4.12a. Selected Indicators of Over Crowding and Region, Ethiopia:2007

Urban/Rural	Selected Indicators				
	Persons per Housing Unit	Rooms Per Housing Unit	Rooms Per Household	Persons Per Room	Average Household Size
COUNTRY TOTAL					
Urban+Rural No.	4.9	1.8	1.7	2.7	4.7
Urban No.	4.0	2.1	1.9	1.9	3.9
Rural No.	5.1	1.7	1.6	2.9	4.9
TIGRAY REGION					
Urban+Rural No.	4.5	1.9	1.8	2.3	4.3
Urban No.	3.6	1.8	1.7	2.0	3.5
Rural No.	4.8	1.9	1.8	2.4	4.6
AFFAR REGION					
Urban+Rural No.	5.9	1.3	1.2	4.4	5.6
Urban No.	4.2	1.7	1.5	2.3	4.0
Rural No.	6.3	1.2	1.1	5.0	6.0
AMHARA REGION					
Urban+Rural No.	4.5	1.7	1.6	2.6	4.3
Urban No.	3.5	1.9	1.8	1.8	3.4
Rural No.	4.6	1.7	1.6	2.7	4.5
OROMIA REGION					
Urban+Rural No.	5.0	1.8	1.7	2.7	4.8
Urban No.	3.9	2.1	2.0	1.8	3.7
Rural No.	5.2	1.8	1.6	2.9	5.0
SOMALI REGION					
Urban+Rural No.	6.8	1.3	1.2	4.9	6.5
Urban No.	6.8	1.6	1.3	4.1	6.1
Rural No.	6.8	1.2	1.2	5.1	6.6
BENISHANGUL-GUMUZ REGION					
Urban+Rural No.	4.7	1.6	1.5	2.8	4.5
Urban No.	3.8	2.0	1.9	1.9	3.7
Rural No.	4.8	1.5	1.5	3.0	4.7
S.N.N.P REGION					
Urban+Rural No.	5.0	1.7	1.6	2.8	4.8
Urban No.	4.3	2.2	2.0	1.9	4.1
Rural No.	5.1	1.7	1.6	3.0	4.9
GAMBELLA REGION					
Urban+Rural No.	4.8	1.7	1.6	2.8	4.6
Urban No.	4.0	1.7	1.6	2.2	3.9
Rural No.	5.1	1.7	1.6	3.1	4.9
HARARI REGION					
Urban+Rural No.	4.0	1.9	1.8	2.1	3.9
Urban No.	3.6	2.0	1.9	1.7	3.5
Rural No.	4.8	1.7	1.6	2.8	4.6
ADDIS ABABA CITY ADMINISTRATION					
Urban+Rural No.	4.3	2.4	2.2	1.7	4.1
Urban No.	4.3	2.4	2.2	1.7	4.1
Rural No.	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION					
Urban+Rural No.	4.7	1.6	1.5	2.7	4.5
Urban No.	4.5	1.8	1.7	2.2	4.3
Rural No.	5.1	1.1	1.1	4.5	4.9
SPECIAL ENUMERATION AREA					
Urban+Rural No.	6.2	1.4	1.1	4.4	5.4
Urban No.	4.7	1.6	1.5	2.6	4.6
Rural No.	7.1	1.2	.9	6.0	5.9

Appendix 12B: Table 4.12b Percentage Distribution of Housing Units by Total Number of Persons Per Housing Unit and Region, Urban Ethiopia :2007

Urban Areas	All Housing Units	Total	Number of Persons									
			One Person	Two Persons	Three Persons	Four Persons	Five Persons	Six Persons	Seven Persons	Eight Persons	Nine Persons	Ten or More
COUNTRY TOTAL-URBAN	2,897,018	100.0	16.4	17.1	16.3	14.5	11.8	9.1	6.2	6.1	.6	2.0
TIGRAY REGION-URBAN	231,827	100.0	19.7	18.7	17.2	14.1	11.1	8.1	5.5	3.9	.5	1.0
AFAR REGION_URBAN	43,762	100.0	18.2	17.9	15.8	13.6	10.1	7.8	5.7	8.7	.4	1.8
AMHARA REGION-URBAN	591,429	100.0	18.4	21.0	17.8	14.3	10.7	7.5	4.8	3.7	.5	1.2
OROMIA REGION_URBAN	836,076	100.0	17.2	17.5	16.5	14.4	11.6	9.0	6.1	5.4	.6	1.7
SOMALI REGION-URBAN	91,241	100.0	7.2	7.0	7.5	10.0	11.5	12.1	10.0	25.7	.8	8.3
BENISHANGUL-GUMUZ REGION-URBAN	27,345	100.0	19.8	17.2	15.5	13.6	12.0	8.8	6.3	4.9	.5	1.3
S.N.N.P REGION-URBAN	342,224	100.0	15.9	15.6	14.8	13.6	11.5	10.1	7.1	7.8	.8	2.7
GAMBELLA REGION_URBAN	19,081	100.0	21.1	17.0	15.4	13.9	9.9	7.7	5.3	7.7	.5	1.4
HARARI REGION-URBAN	27,414	100.0	20.5	18.5	17.8	14.9	11.2	7.1	4.5	4.3	.4	1.0
ADDIS ABABA CITY ADMINISTRATION	628,986	100.0	13.0	14.6	16.4	16.1	13.6	10.3	7.0	6.2	.7	2.1
DIRE DAWA CITY ADMINISTRATION-U	51,595	100.0	15.9	16.0	16.4	15.1	11.5	8.6	6.1	7.6	.5	2.2
SPECIAL ENUMERATION AREA_URBAN	6,042	100.0	19.7	13.9	12.7	12.3	11.3	11.9	7.5	8.0	.4	2.4

Table 4.12c Percentage Distribution of Housing Units by Number of Rooms and Number of Persons, Urban Ethiopia:2007

Urban	All Housing Units	Total	Number of Rooms Per Housing unit								
			1	2	3	4	5	6	7	8	9+
COUNTRY TOTAL											
1 Person	473,997	100.0	76.1	15.9	4.6	1.7	.8	.3	.2	.1	.4
2 Person	495,928	100.0	62.8	23.1	8.7	3.0	1.2	.5	.2	.2	.3
3 Person	471,751	100.0	49.8	28.1	13.3	5.0	2.0	.8	.4	.2	.4
4 Person	420,201	100.0	37.3	30.9	18.0	7.7	3.3	1.3	.6	.3	.6
5 Person	340,689	100.0	29.1	30.4	21.2	10.4	4.7	2.0	1.0	.5	.8
6 Person	262,664	100.0	24.8	29.2	22.6	12.1	5.9	2.6	1.2	.7	1.1
7 Person	179,415	100.0	22.9	27.4	23.3	13.2	6.5	3.1	1.5	.9	1.3
8 Person	177,527	100.0	25.6	25.4	21.6	12.6	6.5	3.4	1.7	1.2	1.9
9+ Person	74,849	100.0	37.7	26.1	17.8	9.3	4.2	2.2	1.0	.7	1.0
Total	2,897,021	100.0	46.4	25.8	14.8	6.9	3.1	1.4	.7	.4	.7

Adequately Occupied = One or less than three persons per room = 58 percent

Over Crowded = Three and above persons per room = 31.8 percent

Under Occupied = Less than one person per room = 9 percent

Table 4.14 Percentage Distribution of Housing Units by Number of Households Per Housing Unit and Region, Urban Ethiopia: 2007

Urban Areas	All Housing Units	Total	Number of Households Per Housing Unit			
			One Household	Two Households	Three Households and Above	Total Number of Households
COUNTRY TOTAL-URBAN	5,922,347	100.0	47.0	1.7	.2	51.1
TIGRAY REGION-URBAN	472,208	100.0	47.5	1.5	.1	50.9
AFAR REGION_URBAN	89,611	100.0	47.0	1.6	.3	51.2
AMHARA REGION-URBAN	1,207,309	100.0	47.2	1.6	.2	51.0
OROMIA REGION_URBAN	1,705,825	100.0	47.2	1.6	.1	51.0
SOMALI REGION-URBAN	193,194	100.0	42.9	3.5	.8	52.8
BENISHANGUL-GUMUZ REGION-URBAN	55,699	100.0	47.4	1.6	.1	50.9
S.N.N.P REGION-URBAN	701,849	100.0	46.5	2.1	.2	51.2
GAMBELLA REGION_URBAN	38,809	100.0	47.6	1.5	.1	50.8
HARARI REGION-URBAN	55,650	100.0	47.9	1.3	.1	50.7
ADDIS ABABA CITY ADMINISTRATION-URBAN	1,284,106	100.0	47.2	1.6	.2	51.0
DIRE DAWA CITY ADMINISTRATION-URBAN	105,780	100.0	46.6	2.0	.1	51.2
SPECIAL ENUMERATION AREA_URBAN	12,307	100.0	47.5	1.4	.2	50.9

Appendix 13: Table 4.15 Percentage Distribution of Housing Units Cross-Classified by Number of Households Per Housing Unit, Number of Rooms Per Housing Unit and Region, Urban Ethiopia: 2007

Number of Households Per Housing Unit	All Housing Units	Number of Rooms Per Housing Unit						
		Total	1	2	3	4	5	6+
COUNTRY TOTAL								
1	2,693,327	100.0	46.2	25.8	14.8	6.9	3.2	3.1
2	176,330	100.0	47.5	25.5	14.4	6.6	2.8	3.2
3 and Above	27,361	100.0	60.2	18.8	9.7	5.8	2.8	2.6
Total	2,897,018	100.0	46.4	25.8	14.8	6.9	3.1	3.1
TIGRAY REGION								
1	217,785	100.0	62.5	18.9	8.7	4.5	2.4	3.0
2	12,719	100.0	66.5	17.5	8.5	3.3	1.6	2.7
3 and Above	1,322	100.0	81.0	9.2	4.3	1.5	1.6	2.3
Total	231,826	100.0	62.8	18.8	8.7	4.4	2.3	3.0
AFAR REGION								
1	40,765	100.0	56.9	30.3	7.6	3.1	1.1	1.0
2	2,290	100.0	59.4	29.6	5.8	2.5	1.6	1.1
3 and Above	706	100.0	67.3	27.8	2.1	2.1	-	.7
Total	43,761	100.0	57.2	30.2	7.5	3.0	1.1	1.0
AMHARA REGION								
1	550,007	100.0	51.0	23.5	15.1	6.2	2.4	1.8
2	35,784	100.0	52.8	22.8	14.6	5.9	2.2	1.6
3 and Above	5,637	100.0	63.7	16.9	8.9	6.7	2.0	1.9
Total	591,428	100.0	51.2	23.4	15.0	6.2	2.4	1.7
OROMIA REGION								
1	778,108	100.0	41.2	29.3	16.2	7.5	3.2	2.5
2	51,012	100.0	41.3	29.1	15.7	7.7	3.0	3.1
3 and Above	6,954	100.0	55.6	20.1	9.6	7.3	3.8	3.7
Total	836,074	100.0	41.3	29.2	16.1	7.5	3.2	2.6
SOMALI REGION								
1	80,093	100.0	67.3	23.0	5.7	2.0	.8	1.2
2	8,555	100.0	63.9	25.3	5.4	1.7	1.3	2.3
3 and Above	2,594	100.0	70.0	22.1	3.7	1.5	.5	2.1
Total	91,242	100.0	67.0	23.2	5.7	1.9	.9	1.3
BENISHANGUL-GUMUZ REGION								
1	25,734	100.0	48.9	24.3	14.2	7.0	3.1	2.4
2	1,468	100.0	59.5	17.8	14.5	4.7	1.0	2.5
3 and Above	147	100.0	79.6	13.6	6.8	-	-	-
Total	27,349	100.0	49.7	23.9	14.2	6.9	2.9	2.4
S.N.N.P REGION								
1	314,105	100.0	41.1	27.0	18.0	8.5	3.0	2.4
2	24,844	100.0	39.6	28.7	18.0	9.1	2.6	2.0
3 and Above	3,275	100.0	55.8	19.7	13.6	6.8	2.8	1.2
Total	342,224	100.0	41.1	27.0	18.0	8.5	3.0	2.4
GAMBELLA REGION								
1	18,207	100.0	62.3	19.9	9.9	3.7	2.3	1.9
2	808	100.0	68.1	14.2	8.4	5.2	3.3	.7
3 and Above	65	100.0	75.4	-	16.9	-	-	7.7
Total	19,080	100.0	62.6	19.6	9.9	3.7	2.4	1.8
HARARI REGION								
1	26,080	100.0	50.1	26.0	11.5	6.1	3.3	3.0
2	1,193	100.0	55.3	25.7	9.9	3.9	3.0	2.2
3 and Above	143	100.0	82.5	7.0	-	7.0	3.5	-
Total	27,416	100.0	50.5	25.9	11.4	6.0	3.3	2.9
ADDIS ABABA CITY ADMINISTRATION								
1	588,423	100.0	39.1	26.1	15.8	8.1	4.8	6.1
2	34,554	100.0	42.5	24.6	15.4	6.9	4.2	6.4
3 and Above	6,009	100.0	52.6	19.6	14.1	6.4	4.0	3.3
Total	628,986	100.0	39.4	25.9	15.8	8.1	4.7	6.1

Appendix 13: Table 4.15 Percentage Distribution of Housing Units Cross-Classified by Number of Households Per Housing Unit, Number of Rooms Per Housing Unit and Region, Urban Ethiopia: 2007

Number of Households Per Housing Unit	All Housing Units	Number of Rooms Per Housing Unit						
		Total	1	2	3	4	5	6+
DIRE DAWA CITY ADMINISTRATION								
1	48,362	100.0	61.0	20.7	9.5	4.3	2.0	2.5
2	2,788	100.0	62.2	16.8	8.4	5.7	2.0	4.9
3 and Above	444	100.0	73.2	11.5	2.5	5.2	2.5	5.2
Total	51,594	100.0	61.2	20.4	9.4	4.4	2.0	2.7
SPECIAL ENUMERATION AREA								
1	5,659	100.0	60.5	26.5	8.5	2.8	.5	1.3
2	317	100.0	48.3	32.8	15.5	3.5	-	-
3 and Above	65	100.0	75.4	16.9	7.7	-	-	-
Total	6,041	100.0	60.0	26.7	8.9	2.8	.4	1.2

Appendix 14: Table 4.16 Percentage Distribution of Housing Units by Source of Drinking Water and Region, Ethiopia :2007

Urban/Rural	All Housing Units	Total	Source of Drinking Water		
			Safe Water	Unprotected Well or Spring	River/Lake/Pond
COUNTRY TOTAL					
Urban+Rural	15,103,134	100.0	45.5	27.9	26.6
Urban	2,897,018	100.0	91.6	4.6	3.8
Rural	12,206,116	100.0	34.5	33.5	32.0
TIGRAY REGION					
Urban+Rural	957,685	100.0	63.8	18.7	17.5
Urban	231,826	100.0	96.2	2.4	1.4
Rural	725,859	100.0	53.5	23.9	22.6
AFAR REGION					
Urban+Rural	235,753	100.0	31.7	29.6	38.7
Urban	43,761	100.0	87.9	6.4	5.7
Rural	191,992	100.0	18.9	34.8	46.2
AMHARA REGION					
Urban+Rural	3,849,140	100.0	47.6	31.8	20.5
Urban	591,428	100.0	91.5	5.4	3.0
Rural	3,257,712	100.0	39.6	36.6	23.7
OROMIA REGION					
Urban+Rural	5,425,093	100.0	37.9	28.6	33.5
Urban	836,074	100.0	90.3	5.0	4.7
Rural	4,589,019	100.0	28.3	32.9	38.7
SOMALI REGION					
Urban+Rural	648,541	100.0	26.3	36.2	37.6
Urban	91,241	100.0	59.3	15.1	25.7
Rural	557,300	100.0	20.9	39.6	39.5
BENISHANGUL-GUMUZ REGION					
Urban+Rural	167,750	100.0	36.7	19.1	44.2
Urban	27,348	100.0	66.9	17.5	15.6
Rural	140,402	100.0	30.8	19.4	49.8
S.N.N.P REGION					
Urban+Rural	2,993,046	100.0	43.5	29.9	26.6
Urban	342,224	100.0	88.6	7.4	4.1
Rural	2,650,822	100.0	37.7	32.8	29.6
GAMBELLA REGION					
Urban+Rural	63,692	100.0	49.6	12.4	38.1
Urban	19,080	100.0	86.3	3.5	10.2
Rural	44,612	100.0	33.9	16.1	50.0
HARARI REGION					
Urban+Rural	44,914	100.0	76.9	15.8	7.3
Urban	27,414	100.0	95.5	1.7	2.8
Rural	17,500	100.0	47.8	37.9	14.3
ADDIS ABABA CITY ADMINISTRATION					
Urban+Rural	628,986	100.0	98.6	1.1	.3
Urban	628,986	100.0	98.6	1.1	.3
Rural	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION					
Urban+Rural	72,937	100.0	87.7	6.7	5.7
Urban	51,595	100.0	99.9	.1	-
Rural	21,342	100.0	58.1	22.7	19.2
SPECIAL ENUMERATION AREA					
Urban+Rural	15,596	100.0	57.7	26.7	15.6
Urban	6,041	100.0	97.3	2.6	.1
Rural	9,555	100.0	32.7	41.9	25.4

Table 4.17 Percentage Distribution of Housing Units by Source of Drinking Water Region,Urban Ethiopia:2007

Urban Areas	All Housing Units	Total	Source of Drinking Water						
			Tap Inside the House	Tap in Compound, Private	Tap in Compound, Shared	Tap Outside Compound	Protected Well or Spring	Unprotected Well or Spring	River/Lake/Pond
COUNTRY TOTAL-URBAN	2,897,018	100.0	3.4	15.4	25.0	41.9	5.9	4.6	3.8
TIGRAY REGION-URBAN	231,825	100.0	5.9	13.9	31.1	40.7	4.6	2.4	1.4
AFAR REGION_URBAN	43,761	100.0	3.7	15.5	21.1	43.7	3.8	6.4	5.7
AMHARA REGION-URBAN	591,427	100.0	2.4	12.9	24.1	44.4	7.7	5.4	3.0
OROMIA REGION_URBAN	836,074	100.0	2.1	13.0	20.2	48.6	6.5	5.0	4.7
SOMALI REGION-URBAN	91,242	100.0	2.9	4.1	7.8	32.5	12.0	15.1	25.7
BENISHANGUL-GUMUZ REGION-URBAN	27,348	100.0	1.2	2.0	5.1	37.4	21.2	17.5	15.6
S.N.N.P REGION-URBAN	342,224	100.0	2.4	11.9	18.4	45.8	10.0	7.4	4.1
GAMBELLA REGION_URBAN	19,080	100.0	1.5	4.0	12.0	60.1	8.7	3.5	10.2
HARARI REGION-URBAN	27,414	100.0	2.8	17.4	35.0	37.2	3.2	1.7	2.8
ADDIS ABABA CITY ADMINISTRATION-URBAN	628,985	100.0	5.8	25.9	37.6	28.4	1.0	1.1	.3
DIRE DAWA CITY ADMINISTRATION-URBAN	51,596	100.0	5.1	13.9	20.1	60.4	.5	.1	-
SPECIAL ENUMERATION AREA_URBAN	6,041	100.0	.6	6.2	19.5	70.7	.4	2.6	.1

Appendix 15: Table 4.18 Percentage Distribution of Housing Units by Main Source of Drinking Water, Level of Education of Head of Household and region, Ethiopia: 2007

Source of Drinking Water and Region	All Housing Unit	Highest Grade Completed by Head of Household				
		Total	Non-Regular	Pre-School	Primary	Secondary and Above
COUNTRY TOTAL						
Safe Water	6,867,234	100.0	3.1	1.0	25.1	70.9
Unprotected/Wall/Spring	4,217,932	100.0	3.5	.9	17.8	77.8
River/Lake/Pond	4,017,967	100.0	2.5	.9	17.8	78.8
Total	15,103,133	100.0	3.0	1.0	21.1	74.9
TIGRAY REGION						
Safe Water	611,327	100.0	3.3	1.1	23.8	71.7
Unprotected/Wall/Spring	178,674	100.0	4.3	1.2	16.2	78.2
River/Lake/Pond	167,683	100.0	4.2	1.3	16.1	78.4
Total	957,684	100.0	3.7	1.2	21.1	74.1
AFAR REGION						
Safe Water	74,760	100.0	2.2	.7	19.5	77.6
Unprotected/Wall/Spring	69,697	100.0	1.3	.4	3.2	95.1
River/Lake/Pond	91,297	100.0	1.5	.4	3.9	94.3
Total	235,754	100.0	1.6	.5	8.7	89.2
AMHARA REGION						
Safe Water	1,832,497	100.0	7.0	.9	17.5	74.6
Unprotected/Wall/Spring	1,225,660	100.0	8.5	.8	11.4	79.3
River/Lake/Pond	790,984	100.0	7.5	.9	10.3	81.3
Total	3,849,141	100.0	7.6	.9	14.1	77.5
OROMIA REGION						
Safe Water	2,055,659	100.0	1.7	1.0	28.0	69.3
Unprotected/Wall/Spring	1,552,409	100.0	1.7	.9	21.4	76.0
River/Lake/Pond	1,817,024	100.0	1.3	.9	21.8	76.0
Total	5,425,092	100.0	1.5	1.0	24.0	73.4
SOMALI REGION						
Safe Water	170,494	100.0	.6	.9	7.7	90.8
Unprotected/Wall/Spring	234,492	100.0	.9	.8	3.0	95.2
River/Lake/Pond	243,555	100.0	1.7	1.0	4.2	93.2
Total	648,541	100.0	1.1	.9	4.7	93.3
BENISHANGUL-GUMUZ REGION						
Safe Water	61,576	100.0	3.3	.8	26.2	69.7
Unprotected/Wall/Spring	31,962	100.0	2.7	1.1	23.0	73.2
River/Lake/Pond	74,210	100.0	1.6	.6	20.7	77.1
Total	167,748	100.0	2.5	.7	23.2	73.6
S.N.N.P REGION						
Safe Water	1,301,430	100.0	.4	1.1	30.2	68.4
Unprotected/Wall/Spring	894,190	100.0	.3	.9	25.5	73.3
River/Lake/Pond	797,427	100.0	.4	1.1	22.1	76.4
Total	2,993,047	100.0	.4	1.0	26.6	72.0
GAMBELLA REGION						
Safe Water	31,582	100.0	.8	.7	34.1	64.4
Unprotected/Wall/Spring	7,872	100.0	.3	.8	30.6	68.3
River/Lake/Pond	24,240	100.0	.1	.7	16.6	82.6
Total	63,694	100.0	.5	.7	27.0	71.8
HARARI REGION						
Safe Water	34,554	100.0	2.2	.9	29.0	67.9
Unprotected/Wall/Spring	7,087	100.0	1.4	1.6	15.7	81.3
River/Lake/Pond	3,274	100.0	3.6	1.4	10.1	84.9
Total	44,915	100.0	2.2	1.0	25.5	71.3
ADDIS ABABA CITY ADMINISTRATION						
Safe Water	620,410	100.0	2.4	1.2	32.0	64.4
Unprotected/Wall/Spring	6,855	100.0	1.9	1.1	35.2	61.8
River/Lake/Pond	1,722	100.0	2.1	2.5	29.0	66.3
Total	628,987	100.0	2.4	1.2	32.1	64.4

Appendix 15: Table 4.18 Percentage Distribution of Housing Units by Main Source of Drinking Water, Level of Education of Head of Household and region, Ethiopia: 2007

Source of Drinking Water and Region	All Housing Unit	Total	Highest Grade Completed by Head of Household			
			Non-Regular	Pre-School	Primary	Secondary and Above
DIRE DAWA CITY ADMINISTRATION						
Safe Water	63,941	100.0	1.6	.8	31.1	66.5
Unprotected/Wall/Spring	4,875	100.0	.3	.3	10.9	88.5
River/Lake/Pond	4,121	100.0	1.4	.9	10.6	87.0
Total	72,937	100.0	1.5	.8	28.6	69.2
SPECIAL ENUMERATION AREA						
Safe Water	9,004	100.0	2.0	.4	26.1	71.6
Unprotected/Wall/Spring	4,160	100.0	.1	-	1.7	98.2
River/Lake/Pond	2,432	100.0	-	.4	2.8	96.8
Total	15,596	100.0	1.2	.3	15.9	82.6

Appendix 16: Table 4.19 Percentage Distribution of Housing Units
by Availability of Toilet and Region, Ethiopia: 2007

Urban/Rural	All Housing Units	Total	Availability of Toilet	
			Has Toilet	Has no Toilet
COUNTRY TOTAL				
Urban+Rural	15,103,135	100.0	33.3	66.7
Urban	2,897,018	100.0	71.8	28.2
Rural	12,206,117	100.0	24.2	75.8
TIGRAY REGION				
Urban+Rural	957,685	100.0	23.9	76.1
Urban	231,826	100.0	50.2	49.8
Rural	725,859	100.0	15.4	84.6
AFAR REGION				
Urban+Rural	235,754	100.0	9.3	90.7
Urban	43,762	100.0	43.6	56.4
Rural	191,992	100.0	1.4	98.6
AMHARA REGION				
Urban+Rural	3,849,141	100.0	24.4	75.6
Urban	591,428	100.0	62.8	37.2
Rural	3,257,713	100.0	17.5	82.5
OROMIA REGION				
Urban+Rural	5,425,093	100.0	28.3	71.7
Urban	836,074	100.0	74.5	25.5
Rural	4,589,019	100.0	19.9	80.1
SOMALI REGION				
Urban+Rural	648,541	100.0	11.2	88.8
Urban	91,241	100.0	49.5	50.5
Rural	557,300	100.0	5.0	95.0
BENISHANGUL-GUMUZ REGION				
Urban+Rural	167,749	100.0	35.1	64.9
Urban	27,347	100.0	72.8	27.2
Rural	140,402	100.0	27.8	72.2
S.N.N.P REGION				
Urban+Rural	2,993,046	100.0	51.9	48.1
Urban	342,224	100.0	79.2	20.8
Rural	2,650,822	100.0	48.3	51.7
GAMBELLA REGION				
Urban+Rural	63,692	100.0	25.6	74.4
Urban	19,080	100.0	43.6	56.4
Rural	44,612	100.0	17.9	82.1
HARARI REGION				
Urban+Rural	44,914	100.0	51.2	48.8
Urban	27,414	100.0	79.6	20.4
Rural	17,500	100.0	6.7	93.3
ADDIS ABABA CITY ADMINISTRATION				
Urban+Rural	628,986	100.0	85.7	14.3
Urban	628,986	100.0	85.7	14.3
Rural	-	-	-	-
DIRE DAWA CITY ADMINISTRATION				
Urban+Rural	72,938	100.0	57.8	42.2
Urban	51,595	100.0	80.1	19.9
Rural	21,343	100.0	3.8	96.2
SPECIAL ENUMERATION AREA				
Urban+Rural	15,596	100.0	30.5	69.5
Urban	6,041	100.0	71.5	28.5
Rural	9,555	100.0	4.5	95.5

Appendix 17: Table 4.20 Percentage Distribution of Housing Units by Type of Toilet Facility and Region, Urban Ethiopia : 2007

Urban Areas	All Housing Units	Total	Type of Toilet Facility						
			No Toilet Facility	Flush Toilet, Private	Flush Toilet, Shared	VIP Latrine, Private	VIP Latrine, Shared	Pit Latrine, Private	Pit Latrine, Shared
COUNTRY TOTAL-URBAN	2,897,018	100.0	28.2	3.4	3.2	2.6	6.5	18.9	37.2
TIGRAY REGION-URBAN	231,826	100.0	49.8	4.7	10.2	3.3	7.5	7.4	17.2
AFAR REGION_URBAN	43,762	100.0	56.4	2.2	1.8	2.9	6.5	8.6	21.5
AMHARA REGION-URBAN	591,428	100.0	37.2	1.3	1.9	1.4	3.6	16.7	38.0
OROMIA REGION_URBAN	836,074	100.0	25.5	1.5	1.3	1.8	3.2	25.8	41.0
SOMALI REGION-URBAN	91,241	100.0	50.5	1.3	2.1	3.5	6.1	15.0	21.5
BENISHANGUL-GUMUZ REGION-URBAN	27,346	100.0	27.2	1.0	.2	1.2	2.1	27.8	40.4
S.N.N.P REGION-URBAN	342,224	100.0	20.8	1.3	1.2	1.9	3.0	33.3	38.5
GAMBELLA REGION_URBAN	19,080	100.0	56.4	1.6	1.0	1.5	5.2	9.3	25.0
HARARI REGION-URBAN	27,413	100.0	20.4	2.6	2.9	4.6	10.1	17.0	42.4
ADDIS ABABA CITY ADMINISTRATION_URBAN	628,986	100.0	14.3	9.2	5.7	4.6	15.2	9.9	41.1
DIRE DAWA CITY ADMINISTRATION	51,594	100.0	19.9	5.0	5.6	4.1	10.1	16.5	38.8
SPECIAL ENUMERATION AREA_URBAN	6,042	100.0	28.5	-	-	1.1	5.3	9.9	55.2

Appendix 18: Table 4.21 Percentage Distribution of Housing Units by Type of Kitchen and Region, Urban Ethiopia : 2007

Urban Areas	All Housing Units	Total	Type of Kitchen								
			No Kitchen	Traditionl Kitchen Inside Private	Traditionl Kitchen Inside Shared	Traditionl Kitchen Outside Private	Traditionl Kitchen Outside Shared	Modern Kitchen Inside Private	Modern Kitchen Inside Shared	Modern Kitchen Outside Private	Modern Kitchen Outside Shared
COUNTRY TOTAL-URBAN	2,897,018	100.0	27.5	5.3	2.3	25.7	34.5	2.1	.6	1.2	.9
TIGRAY REGION-URBAN	231,827	100.0	39.4	6.1	5.6	15.8	27.9	2.3	1.1	1.0	.8
AFAR REGION_URBAN	43,761	100.0	43.8	6.5	2.2	20.3	25.0	.8	.3	.6	.4
AMHARA REGION-URBAN	591,428	100.0	34.9	4.2	1.7	22.9	33.9	.6	.5	.6	.8
OROMIA REGION_URBAN	836,074	100.0	21.6	4.9	1.6	32.6	35.6	1.1	.6	1.1	.9
SOMALI REGION-URBAN	91,241	100.0	44.0	7.0	2.6	25.7	17.6	.9	.4	1.0	.7
BENISHANGUL-GUMUZ REGION-URBAN	27,348	100.0	31.5	4.5	.9	33.3	27.5	.8	.6	.6	.3
S.N.N.P REGION-URBAN	342,225	100.0	24.1	10.0	1.8	31.4	28.5	1.2	.5	1.3	1.3
GAMBELLA REGION_URBAN	19,081	100.0	65.0	3.4	1.9	12.8	15.3	.1	.4	.6	.5
HARARI REGION-URBAN	27,413	100.0	27.9	3.2	1.1	28.4	35.9	1.4	.3	1.0	.8
ADDIS ABABA CITY ADMINISTRATION-URBAN	628,985	100.0	20.1	3.9	2.7	20.4	43.8	5.7	.8	1.8	.8
DIRE DAWA CITY ADMINISTRATION-URBAN	51,594	100.0	33.7	4.3	2.9	25.8	28.2	2.1	.5	1.7	.7
SPECIAL ENUMERATION AREA_URBAN	6,042	100.0	40.9	.7	2.5	15.3	36.2	.4	.7	.8	2.4

Appendix 19: Table 4.22 Percentage Distribution of Housing Units by Type of Kitchen and Region,Rural Ethiopia : 2007

Rural Areas	All Housing Units	Total	Type of Kitchen					
			No Kitchen	Traditionl Kitchen Inside the Housing Unit	Traditionl Kitchen Outside the Housing Unit	Modern Kitchen Inside the Housing Unit	Modern Kitchen Outside the Housing Unit	
COUNTRY TOTAL-RURAL	12,206,117	100.0	53.8	23.3	21.7	.9	.4	
TIGRAY REGION-RURAL	725,859	100.0	26.4	37.6	34.6	1.1	.3	
AFAR REGION-RURAL	191,992	100.0	75.0	16.6	8.2	.2	-	
AMHARA REGION-RURAL	3,257,714	100.0	56.8	16.4	25.9	.6	.3	
OROMIA REGION-RURAL	4,589,019	100.0	54.2	22.1	22.2	.9	.5	
SOMALI REGION-RURAL	557,300	100.0	69.7	9.8	19.3	.5	.7	
BENISHANGUL-GUMUZ REGION-RURAN	140,402	100.0	62.6	17.9	18.6	.6	.3	
S.N.N.P REGION-RURAL	2,650,822	100.0	51.1	33.8	13.6	1.1	.4	
GAMBELLA REGION-RURAL	44,612	100.0	66.9	15.7	16.5	.5	.5	
HARARI REGION-RURAL	17,500	100.0	28.8	9.3	60.1	1.1	.7	
ADDIS ABABA CITY ADMINISTRATION-URBAN	-	-	-	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION_URBAN	21,343	100.0	78.6	7.5	13.4	.3	.3	
SPECIAL ENUMERATION AREA-RURAL	9,556	100.0	69.4	5.8	24.1	.6	.1	

Table 4.23 Percentage Distribution of Housing Units by Whether Livestock Spend the Night in the Room Where Persons also Spend the Night and Region in Rural Ethiopia:2007

Rural Areas	All Housing Units	Total	Whether Livestock Spend the Night in the Same Room as Persons		
			Yes	No	No Livestock
COUNTRY TOTAL-RURAL	12,206,116	100.0	48.6	41.2	10.2
TIGRAY REGION-RURAL	725,859	100.0	12.4	73.3	14.3
AFAR REGION-RURAL	191,992	100.0	5.3	86.7	8.0
AMHARA REGION-RURAL	3,257,713	100.0	42.7	45.5	11.8
OROMIA REGION-RURAL	4,589,019	100.0	54.1	36.5	9.3
SOMALI REGION-RURAL	557,300	100.0	9.2	88.9	1.9
BENISHANGUL-GUMUZ REGION-RURAL	140,402	100.0	23.0	48.6	28.4
S.N.N.P REGION-RURAL	2,650,822	100.0	69.6	21.0	9.4
GAMBELLA REGION-RURAL	44,612	100.0	10.6	62.0	27.4
HARARI REGION-RURAL	17,500	100.0	56.0	33.6	10.4
DIRE DAWA CITY ADMINISTRATION-RURAL	21,343	100.0	70.8	24.3	4.9
SPECIAL ENUMERATION AREA-RURAL	9,555	100.0	16.9	77.1	6.1

Appendix 20: Table 4.24 Percentage Distribution Housing Units by Type of Lighting and Region,Urban Ethiopia:2007

Urban Areas	All Housing Units	Total	Type Fuel of Lighting								
			Electricity/ Meter/ Private	Electricity/ Meter/ Shared	Electricity from Generator (No Meter)	Solar Energy	Lantern	Bio-Gas	Lamps	Candle/ Wax Candle	Firewood
COUNTRY TOTAL-URBAN	2,897,018	100.0	28.1	49.6	2.2	-	6.1	.1	12.3	.6	1.1
TIGRAY REGION-URBAN	231,827	100.0	28.5	54.6	2.3	-	5.1	.1	8.6	.7	.2
AFAR REGION_URBAN	43,762	100.0	19.1	48.4	4.7	-	12.8	.1	7.9	.5	6.6
AMHARA REGION-URBAN	591,427	100.0	19.2	47.9	3.7	-	4.9	.1	23.1	.5	.7
OROMIA REGION_URBAN	836,073	100.0	25.5	50.9	1.8	-	9.2	.1	11.4	.5	.6
SOMALI REGION-URBAN	91,241	100.0	10.9	20.9	3.9	-	39.7	.3	13.0	.6	10.6
BENISHANGUL-GUMUZ REGION-URBAN	27,348	100.0	15.4	52.4	2.0	-	4.5	.1	17.1	2.6	5.9
S.N.N.P REGION-URBAN	342,225	100.0	22.9	48.1	3.1	-	3.2	.1	20.8	.6	1.2
GAMBELLA REGION_URBAN	19,080	100.0	15.5	43.6	2.1	-	3.5	.1	11.2	14.9	9.0
HARARI REGION-URBAN	27,414	100.0	34.6	60.5	.5	-	.8	-	2.7	.1	1.0
ADDIS ABABA CITY ADMINISTRATION-URBAN	628,985	100.0	46.1	51.4	.6	-	.1	-	1.5	.2	-
DIRE DAWA CITY ADMINISTRATION-URBAN	51,596	100.0	34.8	58.3	.7	-	3.3	.1	2.3	.3	.1
SPECIAL ENUMERATION AREA_URBAN	6,041	100.0	11.4	69.1	.1	-	12.8	-	3.3	.5	2.7

Appendix 21A: Table 4.25a Percentage Distribution of Housing Units By Whether Electricity Used as Fuel for Cooking and Region,Ethiopia:2007

Urban/Rural	All Housing Units	Total	Whether Electricity Used as Fuel for Cooking	
			Yes	No
COUNTRY TOTAL				
Urban+Rural	15,103,135	100.0	2.3	97.7
Urban	2,897,018	100.0	11.1	88.9
Rural	12,206,117	100.0	0.2	99.8
TIGRAY REGION				
Urban+Rural	957,685	100.0	2.5	97.5
Urban	231,826	100.0	9.5	90.5
Rural	725,859	100.0	0.3	99.7
AFAR REGION				
Urban+Rural	235,754	100.0	0.9	99.1
Urban	43,762	100.0	3.0	97.0
Rural	191,992	100.0	0.4	99.6
AMHARA REGION				
Urban+Rural	3,849,141	100.0	0.4	99.6
Urban	591,428	100.0	2.1	97.9
Rural	3,257,713	100.0	0.1	99.9
OROMIA REGION				
Urban+Rural	5,425,093	100.0	1.1	98.9
Urban	836,074	100.0	4.8	95.2
Rural	4,589,019	100.0	0.4	99.6
SOMALI REGION				
Urban+Rural	648,541	100.0	0.8	99.2
Urban	91,241	100.0	3.9	96.1
Rural	557,300	100.0	0.3	99.7
BENISHANGUL-GUMUZ REGION				
Urban+Rural	167,749	100.0	0.6	99.4
Urban	27,347	100.0	2.8	97.2
Rural	140,402	100.0	0.2	99.8
S.N.N.P REGION				
Urban+Rural	2,993,046	100.0	0.6	99.4
Urban	342,224	100.0	3.6	96.4
Rural	2,650,822	100.0	0.2	99.8
GAMBELLA REGION				
Urban+Rural	63,692	100.0	1.7	98.3
Urban	19,080	100.0	2.9	97.1
Rural	44,612	100.0	1.2	98.8
HARARI REGION				
Urban+Rural	44,914	100.0	15.2	84.8
Urban	27,414	100.0	23.1	76.9
Rural	17,500	100.0	2.9	97.1
ADDIS ABABA CITY ADMINISTRATION				
Urban+Rural	628,986	100.0	34.7	65.3
Urban	628,986	100.0	34.7	65.3
Rural	-	-	-	-
DIRE DAWA CITY ADMINISTRATION				
Urban+Rural	72,938	100.0	5.9	94.1
Urban	51,595	100.0	8.3	91.7
Rural	21,343	100.0	0.2	99.8
SPECIAL ENUMERATION AREA				
Urban+Rural	15,596	100.0	0.4	99.6
Urban	6,041	100.0	1.0	99.0
Rural	9,555	100.0	0.1	99.9

Appendix 21B: Table 4.25b Percentage Distribution of Housing Units By Whether Gas Used as Fuel for Cooking and Region, Ethiopia:2007

Urban/Rural	All Housing Units	Total	Whether Gas Used as Fuel for Cooking	
			Yes	No
COUNTRY TOTAL				
Urban+Rural	15,103,135	100.0	0.4	99.6
Urban	2,897,018	100.0	1.8	98.2
Rural	12,206,117	100.0	0.1	99.9
TIGRAY REGION				
Urban+Rural	957,685	100.0	0.2	99.8
Urban	231,826	100.0	0.5	99.5
Rural	725,859	100.0	0.1	99.9
AFAR REGION				
Urban+Rural	235,754	100.0	0.1	99.9
Urban	43,762	100.0	0.3	99.7
Rural	191,992	100.0	-	100.0
AMHARA REGION				
Urban+Rural	3,849,141	100.0	0.1	99.9
Urban	591,428	100.0	0.3	99.7
Rural	3,257,713	100.0	-	100.0
OROMIA REGION				
Urban+Rural	5,425,093	100.0	0.2	99.8
Urban	836,074	100.0	0.6	99.4
Rural	4,589,019	100.0	0.1	99.9
SOMALI REGION				
Urban+Rural	648,541	100.0	0.2	99.8
Urban	91,241	100.0	0.7	99.3
Rural	557,300	100.0	0.1	99.9
BENISHANGUL-GUMUZ REGION				
Urban+Rural	167,749	100.0	0.1	99.9
Urban	27,347	100.0	0.2	99.8
Rural	140,402	100.0	-	100.0
S.N.N.P REGION				
Urban+Rural	2,993,046	100.0	0.1	99.9
Urban	342,224	100.0	0.6	99.4
Rural	2,650,822	100.0	-	100.0
GAMBELLA REGION				
Urban+Rural	63,692	100.0	0.1	99.9
Urban	19,080	100.0	0.3	99.7
Rural	44,612	100.0	-	100.0
HARARI REGION				
Urban+Rural	44,914	100.0	1.2	98.8
Urban	27,414	100.0	1.7	98.3
Rural	17,500	100.0	0.4	99.6
ADDIS ABABA CITY ADMINISTRATION				
Urban+Rural	628,986	100.0	6.2	93.8
Urban	628,986	100.0	6.2	93.8
Rural	-	-	-	-
DIRE DAWA CITY ADMINISTRATION				
Urban+Rural	72,938	100.0	0.9	99.1
Urban	51,595	100.0	1.2	98.8
Rural	21,343	100.0	0.1	99.9
SPECIAL ENUMERATION AREA				
Urban+Rural	15,596	100.0	-	100.0
Urban	6,041	100.0	-	100.0
Rural	9,555	100.0	0.1	99.9

Appendix 21C: Table 4.25c Percentage Distribution of Housing Units By Whether Kerosene Used as Fuel for Cooking and Region, Ethiopia: 2007

Urban/Rural	All Housing Units	Whether Kerosene Used as Fuel for Cooking		
		Total	Yes	No
COUNTRY TOTAL				
Urban+Rural	15,103,135	100.0	11.9	88.1
Urban	2,897,018	100.0	40.0	60.0
Rural	12,206,117	100.0	5.2	94.8
TIGRAY REGION				
Urban+Rural	957,685	100.0	10.5	89.5
Urban	231,826	100.0	24.4	75.6
Rural	725,859	100.0	6.0	94.0
AFAR REGION				
Urban+Rural	235,754	100.0	3.0	97.0
Urban	43,762	100.0	10.3	89.7
Rural	191,992	100.0	1.4	98.6
AMHARA REGION				
Urban+Rural	3,849,141	100.0	6.3	93.7
Urban	591,428	100.0	21.9	78.1
Rural	3,257,713	100.0	3.5	96.5
OROMIA REGION				
Urban+Rural	5,425,093	100.0	11.6	88.4
Urban	836,074	100.0	32.8	67.2
Rural	4,589,019	100.0	7.7	92.3
SOMALI REGION				
Urban+Rural	648,541	100.0	5.5	94.5
Urban	91,241	100.0	11.7	88.3
Rural	557,300	100.0	4.5	95.5
BENISHANGUL-GUMUZ REGION				
Urban+Rural	167,749	100.0	2.7	97.3
Urban	27,347	100.0	7.4	92.6
Rural	140,402	100.0	1.7	98.3
S.N.N.P REGION				
Urban+Rural	2,993,046	100.0	5.6	94.4
Urban	342,224	100.0	21.7	78.3
Rural	2,650,822	100.0	3.5	96.5
GAMBELLA REGION				
Urban+Rural	63,692	100.0	3.8	96.2
Urban	19,080	100.0	7.7	92.3
Rural	44,612	100.0	2.1	97.9
HARARI REGION				
Urban+Rural	44,914	100.0	54.3	45.7
Urban	27,414	100.0	79.0	21.0
Rural	17,500	100.0	15.7	84.3
ADDIS ABABA CITY ADMINISTRATION				
Urban+Rural	628,986	100.0	87.3	12.7
Urban	628,986	100.0	87.3	12.7
Rural	-	-	-	-
DIRE DAWA CITY ADMINISTRATION				
Urban+Rural	72,938	100.0	47.1	52.9
Urban	51,595	100.0	64.1	35.9
Rural	21,343	100.0	6.2	93.8
SPECIAL ENUMERATION AREA				
Urban+Rural	15,596	100.0	6.4	93.6
Urban	6,041	100.0	12.7	87.3
Rural	9,555	100.0	2.5	97.5

Appendix 21D: Table 4.25d Percentage Distribution of Housing Units By Whether Charcoal Used as Fuel for Cooking and Region, Ethiopia: 2007

Urban/Rural	All Housing Units	Whether Charcoal Used as Fuel for Cooking		
		Total	Yes	No
COUNTRY TOTAL				
Urban+Rural	15,103,135	100.0	17.6	82.4
Urban	2,897,018	100.0	63.7	36.3
Rural	12,206,117	100.0	6.7	93.3
TIGRAY REGION				
Urban+Rural	957,685	100.0	45.6	54.4
Urban	231,826	100.0	83.2	16.8
Rural	725,859	100.0	33.6	66.4
AFAR REGION				
Urban+Rural	235,754	100.0	19.4	80.6
Urban	43,762	100.0	71.0	29.0
Rural	191,992	100.0	7.6	92.4
AMHARA REGION				
Urban+Rural	3,849,141	100.0	14.2	85.8
Urban	591,428	100.0	63.7	36.3
Rural	3,257,713	100.0	5.2	94.8
OROMIA REGION				
Urban+Rural	5,425,092	100.0	14.5	85.5
Urban	836,074	100.0	62.8	37.2
Rural	4,589,018	100.0	5.6	94.4
SOMALI REGION				
Urban+Rural	648,541	100.0	16.7	83.3
Urban	91,241	100.0	47.6	52.4
Rural	557,300	100.0	11.6	88.4
BENISHANGUL-GUMUZ REGION				
Urban+Rural	167,749	100.0	14.0	86.0
Urban	27,347	100.0	55.9	44.1
Rural	140,402	100.0	5.9	94.1
S.N.N.P REGION				
Urban+Rural	2,993,046	100.0	7.1	92.9
Urban	342,224	100.0	47.7	52.3
Rural	2,650,822	100.0	1.9	98.1
GAMBELLA REGION				
Urban+Rural	63,692	100.0	20.2	79.8
Urban	19,080	100.0	57.2	42.8
Rural	44,612	100.0	4.4	95.6
HARARI REGION				
Urban+Rural	44,914	100.0	45.7	54.3
Urban	27,414	100.0	70.8	29.2
Rural	17,500	100.0	6.5	93.5
ADDIS ABABA CITY ADMINISTRATION				
Urban+Rural	628,986	100.0	67.8	32.2
Urban	628,986	100.0	67.8	32.2
Rural	-	-	-	-
DIRE DAWA CITY ADMINISTRATION				
Urban+Rural	72,938	100.0	48.3	51.7
Urban	51,595	100.0	66.9	33.1
Rural	21,343	100.0	3.4	96.6
SPECIAL ENUMERATION AREA				
Urban+Rural	15,596	100.0	36.0	64.0
Urban	6,041	100.0	76.7	23.3
Rural	9,555	100.0	10.4	89.6

Appendix 21E: Table 4.25e Percentage Distribution of Housing Units By Whether Firewood Used as Fuel for Cooking and Region, Ethiopia: 2007

Urban/Rural	All Housing Units	Whether Firewood Used as Fuel for Cooking		
		Total	Yes	No
COUNTRY TOTAL				
Urban+Rural	15,103,135	100.0	86.5	13.5
Urban	2,897,018	100.0	74.8	25.2
Rural	12,206,117	100.0	89.3	10.7
TIGRAY REGION				
Urban+Rural	957,685	100.0	93.2	6.8
Urban	231,826	100.0	85.7	14.3
Rural	725,859	100.0	95.6	4.4
AFAR REGION				
Urban+Rural	235,754	100.0	89.7	10.3
Urban	43,762	100.0	78.2	21.8
Rural	191,992	100.0	92.4	7.6
AMHARA REGION				
Urban+Rural	3,849,141	100.0	89.7	10.3
Urban	591,428	100.0	87.6	12.4
Rural	3,257,713	100.0	90.1	9.9
OROMIA REGION				
Urban+Rural	5,425,093	100.0	86.8	13.2
Urban	836,074	100.0	79.1	20.9
Rural	4,589,019	100.0	88.3	11.7
SOMALI REGION				
Urban+Rural	648,541	100.0	84.0	16.0
Urban	91,241	100.0	74.4	25.6
Rural	557,300	100.0	85.6	14.4
BENISHANGUL-GUMUZ REGION				
Urban+Rural	167,749	100.0	89.1	10.9
Urban	27,347	100.0	83.3	16.7
Rural	140,402	100.0	90.2	9.8
S.N.N.P REGION				
Urban+Rural	2,993,046	100.0	87.9	12.1
Urban	342,224	100.0	79.6	20.4
Rural	2,650,822	100.0	89.0	11.0
GAMBELLA REGION				
Urban+Rural	63,692	100.0	80.0	20.0
Urban	19,080	100.0	73.4	26.6
Rural	44,612	100.0	82.8	17.2
HARARI REGION				
Urban+Rural	44,914	100.0	68.7	31.3
Urban	27,414	100.0	53.3	46.7
Rural	17,500	100.0	92.7	7.3
ADDIS ABABA CITY ADMINISTRATION				
Urban+Rural	628,986	100.0	51.8	48.2
Urban	628,986	100.0	51.8	48.2
Rural	-	-	-	-
DIRE DAWA CITY ADMINISTRATION				
Urban+Rural	72,938	100.0	70.4	29.6
Urban	51,595	100.0	60.5	39.5
Rural	21,343	100.0	94.1	5.9
SPECIAL ENUMERATION AREA				
Urban+Rural	15,596	100.0	84.8	15.2
Urban	6,041	100.0	72.4	27.6
Rural	9,555	100.0	92.7	7.3

Appendix 21F: Table 4.25f Percentage Distribution of Housing Units By Whether
Dung Used as Fuel for Cooking and Region, Ethiopia:2007

Urban/Rural	All Housing Units	Whether Dung Used as Fuel for Cooking		
		Total	Yes	No
COUNTRY TOTAL				
Urban+Rural	15,103,135	100.0	37.1	62.9
Urban	2,897,018	100.0	20.0	80.0
Rural	12,206,117	100.0	41.2	58.8
TIGRAY REGION				
Urban+Rural	957,685	100.0	47.4	52.6
Urban	231,826	100.0	21.6	78.4
Rural	725,859	100.0	55.6	44.4
AFAR REGION				
Urban+Rural	235,754	100.0	10.0	90.0
Urban	43,762	100.0	3.9	96.1
Rural	191,992	100.0	11.4	88.6
AMHARA REGION				
Urban+Rural	3,849,141	100.0	73.0	27.0
Urban	591,428	100.0	37.8	62.2
Rural	3,257,713	100.0	79.4	20.6
OROMIA REGION				
Urban+Rural	5,425,093	100.0	30.3	69.7
Urban	836,074	100.0	23.6	76.4
Rural	4,589,019	100.0	31.5	68.5
SOMALI REGION				
Urban+Rural	648,541	100.0	14.8	85.2
Urban	91,241	100.0	8.5	91.5
Rural	557,300	100.0	15.8	84.2
BENISHANGUL-GUMUZ REGION				
Urban+Rural	167,749	100.0	6.4	93.6
Urban	27,347	100.0	7.6	92.4
Rural	140,402	100.0	6.2	93.8
S.N.N.P REGION				
Urban+Rural	2,993,046	100.0	16.0	84.0
Urban	342,224	100.0	6.2	93.8
Rural	2,650,822	100.0	17.3	82.7
GAMBELLA REGION				
Urban+Rural	63,692	100.0	9.2	90.8
Urban	19,080	100.0	3.0	97.0
Rural	44,612	100.0	11.8	88.2
HARARI REGION				
Urban+Rural	44,914	100.0	7.7	92.3
Urban	27,414	100.0	1.6	98.4
Rural	17,500	100.0	17.4	82.6
ADDIS ABABA CITY ADMINISTRATION				
Urban+Rural	628,986	100.0	11.7	88.3
Urban	628,986	100.0	11.7	88.3
Rural	-	-	-	-
DIRE DAWA CITY ADMINISTRATION				
Urban+Rural	72,938	100.0	3.9	96.1
Urban	51,595	100.0	2.4	97.6
Rural	21,343	100.0	7.4	92.6
SPECIAL ENUMERATION AREA				
Urban+Rural	15,596	100.0	7.0	93.0
Urban	6,041	100.0	0.4	99.6
Rural	9,555	100.0	11.3	88.7

Appendix 21G: Table 4.25g Percentage Distribution of Housing Units By Whether Bio-Gas Used as Fuel for Cooking and Region, Ethiopia:2007

Urban/Rural	All Housing Units	Total	Whether Bio-Gas Used as Fuel for Cooking	
			Yes	No
COUNTRY TOTAL				
Urban+Rural	15,103,134	100.0	0.4	99.6
Urban	2,897,018	100.0	0.4	99.6
Rural	12,206,116	100.0	0.4	99.6
TIGRAY REGION				
Urban+Rural	957,685	100.0	0.5	99.5
Urban	231,826	100.0	0.7	99.3
Rural	725,859	100.0	0.5	99.5
AFAR REGION				
Urban+Rural	235,754	100.0	0.2	99.8
Urban	43,762	100.0	0.2	99.8
Rural	191,992	100.0	0.2	99.8
AMHARA REGION				
Urban+Rural	3,849,141	100.0	0.4	99.6
Urban	591,428	100.0	0.3	99.7
Rural	3,257,713	100.0	0.4	99.6
OROMIA REGION				
Urban+Rural	5,425,093	100.0	0.3	99.7
Urban	836,074	100.0	0.3	99.7
Rural	4,589,019	100.0	0.3	99.7
SOMALI REGION				
Urban+Rural	648,541	100.0	0.7	99.3
Urban	91,241	100.0	0.9	99.1
Rural	557,300	100.0	0.7	99.3
BENISHANGUL-GUMUZ REGION				
Urban+Rural	167,749	100.0	0.2	99.8
Urban	27,347	100.0	0.3	99.7
Rural	140,402	100.0	0.2	99.8
S.N.N.P REGION				
Urban+Rural	2,993,046	100.0	0.4	99.6
Urban	342,224	100.0	0.6	99.4
Rural	2,650,822	100.0	0.4	99.6
GAMBELLA REGION				
Urban+Rural	63,692	100.0	0.7	99.3
Urban	19,080	100.0	1.2	98.8
Rural	44,612	100.0	0.5	99.5
HARARI REGION				
Urban+Rural	44,914	100.0	0.3	99.7
Urban	27,414	100.0	0.2	99.8
Rural	17,500	100.0	0.3	99.7
ADDIS ABABA CITY ADMINISTRATION				
Urban+Rural	628,986	100.0	0.4	99.6
Urban	628,986	100.0	0.4	99.6
Rural	-	-	-	-
DIRE DAWA CITY ADMINISTRATION				
Urban+Rural	72,938	100.0	0.2	99.8
Urban	51,595	100.0	0.3	99.7
Rural	21,343	100.0	0.1	99.9
SPECIAL ENUMERATION AREA				
Urban+Rural	15,596	100.0	0.5	99.5
Urban	6,041	100.0	0.5	99.5
Rural	9,555	100.0	0.5	99.5

Appendix 21H: Table 4.25h Percentage Distribution of Housing Units By Whether Other Fuel Used for Cooking and Region, Ethiopia:2007

Urban/Rural	All Housing Units	Total	Whether Other Fuel Used for Cooking	
			Yes	No
COUNTRY TOTAL				
Urban+Rural	15,103,135	100.0	15.8	84.2
Urban	2,897,018	100.0	8.0	92.0
Rural	12,206,117	100.0	17.6	82.4
TIGRAY REGION				
Urban+Rural	957,685	100.0	6.4	93.6
Urban	231,826	100.0	6.9	93.1
Rural	725,859	100.0	6.2	93.8
AFAR REGION				
Urban+Rural	235,754	100.0	11.2	88.8
Urban	43,762	100.0	6.3	93.7
Rural	191,992	100.0	12.3	87.7
AMHARA REGION				
Urban+Rural	3,849,141	100.0	5.7	94.3
Urban	591,428	100.0	3.2	96.8
Rural	3,257,713	100.0	6.2	93.8
OROMIA REGION				
Urban+Rural	5,425,093	100.0	21.8	78.2
Urban	836,074	100.0	11.9	88.1
Rural	4,589,019	100.0	23.6	76.4
SOMALI REGION				
Urban+Rural	648,541	100.0	20.8	79.2
Urban	91,241	100.0	12.4	87.6
Rural	557,300	100.0	22.2	77.8
BENISHANGUL-GUMUZ REGION				
Urban+Rural	167,749	100.0	22.3	77.7
Urban	27,347	100.0	13.6	86.4
Rural	140,402	100.0	24.0	76.0
S.N.N.P REGION				
Urban+Rural	2,993,046	100.0	22.7	77.3
Urban	342,224	100.0	15.4	84.6
Rural	2,650,822	100.0	23.6	76.4
GAMBELLA REGION				
Urban+Rural	63,692	100.0	26.1	73.9
Urban	19,080	100.0	18.8	81.2
Rural	44,612	100.0	29.2	70.8
HARARI REGION				
Urban+Rural	44,914	100.0	11.8	88.2
Urban	27,414	100.0	4.7	95.3
Rural	17,500	100.0	23.1	76.9
ADDIS ABABA CITY ADMINISTRATION				
Urban+Rural	628,986	100.0	3.2	96.8
Urban	628,986	100.0	3.2	96.8
Rural	-	-	-	-
DIRE DAWA CITY ADMINISTRATION				
Urban+Rural	72,938	100.0	7.3	92.7
Urban	51,595	100.0	6.5	93.5
Rural	21,343	100.0	9.1	90.9
SPECIAL ENUMERATION AREA				
Urban+Rural	15,596	100.0	9.4	90.6
Urban	6,041	100.0	0.6	99.4
Rural	9,555	100.0	15.0	85.0

Appendix 22: Table 4.26 Percentage Distribution of Housing Units by Type of Waste Disposal and Region, Ethiopia:2007

Urban/Rural	All Housing Units	Type of Waste Disposal						
		Total	Collected by Municipality	Collected by Private Establishments/ Individuals	Open Space/ Behind the Housnig Unit	Dump in River	Burn/ Bury	Other
COUNTRY TOTAL								
Urban+Rural	15,103,135	100.0	3.9	2.2	77.9	2.7	12.4	1.0
Urban	2,897,018	100.0	18.7	10.5	36.2	7.7	25.9	.9
Rural	12,206,117	100.0	.4	.2	87.8	1.5	9.1	1.0
TIGRAY REGION								
Urban+Rural	957,686	100.0	13.3	.6	57.3	3.6	23.9	1.3
Urban	231,826	100.0	53.6	1.8	28.6	5.4	9.6	1.0
Rural	725,860	100.0	.4	.3	66.4	3.0	28.4	1.4
AFAR REGION								
Urban+Rural	235,754	100.0	.5	.8	78.6	8.4	10.0	1.7
Urban	43,762	100.0	1.4	3.5	48.1	9.1	36.7	1.3
Rural	191,992	100.0	.3	.2	85.6	8.3	3.9	1.8
AMHARA REGION								
Urban+Rural	3,849,143	100.0	2.2	.4	82.1	2.6	12.1	.6
Urban	591,429	100.0	13.0	1.6	46.7	9.1	29.0	.6
Rural	3,257,714	100.0	.2	.1	88.6	1.4	9.0	.6
OROMIA REGION								
Urban+Rural	5,425,093	100.0	1.5	.7	84.0	2.0	10.8	1.0
Urban	836,073	100.0	7.2	3.3	47.6	6.7	34.3	1.0
Rural	4,589,020	100.0	.5	.2	90.6	1.1	6.5	1.0
SOMALI REGION								
Urban+Rural	648,542	100.0	2.4	.7	83.8	2.3	8.2	2.6
Urban	91,241	100.0	15.0	3.8	54.3	4.1	21.2	1.6
Rural	557,301	100.0	.4	.2	88.6	2.0	6.1	2.8
BENISHANGUL-GUMUZ REGION								
Urban+Rural	167,750	100.0	.2	.8	84.3	1.4	12.9	.4
Urban	27,347	100.0	.6	3.4	62.2	2.2	31.2	.4
Rural	140,403	100.0	.2	.3	88.6	1.2	9.4	.4
S.N.N.P REGION								
Urban+Rural	2,993,045	100.0	1.0	.9	83.3	1.4	12.5	.9
Urban	342,223	100.0	6.5	6.4	47.1	2.7	36.1	1.2
Rural	2,650,822	100.0	.2	.2	88.0	1.3	9.4	.8
GAMBELLA REGION								
Urban+Rural	63,691	100.0	1.4	1.1	70.9	3.0	22.6	1.0
Urban	19,079	100.0	1.4	3.3	50.9	5.0	38.6	.9
Rural	44,612	100.0	1.5	.1	79.5	2.1	15.7	1.1
HARARI REGION								
Urban+Rural	44,916	100.0	15.3	6.6	43.9	9.4	23.4	1.4
Urban	27,414	100.0	24.6	10.6	20.0	14.2	28.6	2.1
Rural	17,502	100.0	.9	.2	81.5	1.8	15.3	.4

Appendix 22: Table 4.26 Percentage Distribution of Housing Units by Type of Waste Disposal and Region,Ethiopia:2007

Urban/Rural	All Housing Units	Type of Waste Disposal						
		Total	Collected by Municipality	Collected by Private Establishments/ Individuals	Open Space/ Behind the Housnig Unit	Dump in River	Burn/ Bury	Other
ADDIS ABABA CITY ADMINISTRATION								
Urban+Rural	628,986	100.0	34.0	35.6	5.8	11.6	12.3	.7
Urban	628,986	100.0	34.0	35.6	5.8	11.6	12.3	.7
Rural	-	-	-	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION								
Urban+Rural	72,938	100.0	32.6	10.0	37.4	8.7	10.2	1.1
Urban	51,595	100.0	45.8	14.1	14.3	11.8	12.9	1.2
Rural	21,343	100.0	.8	.3	93.1	1.4	3.6	.8
SPECIAL ENUMERATION AREA								
Urban+Rural	15,596	100.0	.5	2.0	70.7	4.3	22.0	.6
Urban	6,040	100.0	.7	4.9	38.6	8.8	46.7	.3
Rural	9,556	100.0	.3	.1	90.9	1.4	6.4	.8

Appendix 23: Table 4.27 Percentage Distribution of Housing Units by Availability of Radio, Telephone, Television and Region, Ethiopia:2007

Urban/Rural	All Housing Units	Total	Radio		All Housing Units	Total	Telephone		All Housing Units	Total	Television	
			Has Radio	Has no Radio			Has Telephone	Has no Telephone			Has TV	Has no TV
COUNTRY TOTAL												
Urban+Rural	15,103,135	100.0	37.5	62.5	15,103,135	100.0	4.1	95.9	15,103,134	100.0	5.7	94.3
Urban	2,897,018	100.0	68.5	31.5	2,897,018	100.0	20.1	79.9	2,897,018	100.0	27.5	72.5
Rural	12,206,117	100.0	30.1	69.9	12,206,117	100.0	.3	99.7	12,206,116	100.0	.5	99.5
TIGRAY REGION												
Urban+Rural	957,685	100.0	34.4	65.6	957,685	100.0	4.0	96.0	957,685	100.0	5.8	94.2
Urban	231,826	100.0	61.3	38.7	231,826	100.0	16.1	83.9	231,826	100.0	23.1	76.9
Rural	725,859	100.0	25.9	74.1	725,859	100.0	.2	99.8	725,859	100.0	.3	99.7
AFAR REGION												
Urban+Rural	235,754	100.0	40.1	59.9	235,754	100.0	1.8	98.2	235,754	100.0	4.4	95.6
Urban	43,762	100.0	51.1	48.9	43,762	100.0	9.2	90.8	43,762	100.0	22.0	78.0
Rural	191,992	100.0	37.6	62.4	191,992	100.0	.1	99.9	191,992	100.0	.4	99.6
AMHARA REGION												
Urban+Rural	3,849,141	100.0	28.1	71.9	3,849,141	100.0	2.2	97.8	3,849,141	100.0	2.3	97.7
Urban	591,428	100.0	56.9	43.1	591,428	100.0	13.0	87.0	591,428	100.0	14.0	86.0
Rural	3,257,713	100.0	22.9	77.1	3,257,713	100.0	.2	99.8	3,257,713	100.0	.2	99.8
OROMIA REGION												
Urban+Rural	5,425,093	100.0	41.1	58.9	5,425,093	100.0	2.8	97.2	5,425,093	100.0	3.9	96.1
Urban	836,074	100.0	70.1	29.9	836,074	100.0	15.8	84.2	836,074	100.0	21.3	78.7
Rural	4,589,019	100.0	35.9	64.1	4,589,019	100.0	.4	99.6	4,589,019	100.0	.7	99.3
SOMALI REGION												
Urban+Rural	648,541	100.0	31.9	68.1	648,541	100.0	1.5	98.5	648,541	100.0	2.6	97.4
Urban	91,241	100.0	47.5	52.5	91,241	100.0	7.9	92.1	91,241	100.0	16.4	83.6
Rural	557,300	100.0	29.4	70.6	557,300	100.0	.4	99.6	557,300	100.0	.4	99.6
BENISHANGUL-GUMUZ REGION												
Urban+Rural	167,749	100.0	35.2	64.8	167,749	100.0	1.7	98.3	167,749	100.0	2.5	97.5
Urban	27,347	100.0	58.3	41.7	27,347	100.0	7.8	92.2	27,347	100.0	11.9	88.1
Rural	140,402	100.0	30.6	69.4	140,402	100.0	.5	99.5	140,402	100.0	.7	99.3
S.N.N.P REGION												
Urban+Rural	2,993,046	100.0	34.0	66.0	2,993,046	100.0	1.7	98.3	2,993,046	100.0	2.3	97.7
Urban	342,224	100.0	65.9	34.1	342,224	100.0	12.7	87.3	342,224	100.0	17.6	82.4
Rural	2,650,822	100.0	29.9	70.1	2,650,822	100.0	.3	99.7	2,650,822	100.0	.4	99.6
GAMBELLA REGION												
Urban+Rural	63,692	100.0	27.4	72.6	63,692	100.0	3.5	96.5	63,692	100.0	5.1	94.9
Urban	19,080	100.0	45.8	54.2	19,080	100.0	11.1	88.9	19,080	100.0	16.3	83.7
Rural	44,612	100.0	19.6	80.4	44,612	100.0	.3	99.7	44,612	100.0	.3	99.7
HARARI REGION												
Urban+Rural	44,914	100.0	67.8	32.2	44,914	100.0	17.4	82.6	44,914	100.0	38.8	61.2
Urban	27,414	100.0	81.1	18.9	27,414	100.0	27.6	72.4	27,414	100.0	58.8	41.2
Rural	17,500	100.0	47.0	53.0	17,500	100.0	1.5	98.5	17,500	100.0	7.4	92.6

Appendix 23: Table 4.27 Percentage Distribution of Housing Units by Availability of Radio, Telephone, Television and Region, Ethiopia:2007

Urban/Rural	All Housing Units	Total	Radio		All Housing Units	Total	Telephone		All Housing Units	Total	Television	
			Has Radio	Has no Radio			Has Telephone	Has no Telephone			Has TV	Has no TV
ADDIS ABABA CITY ADMINISTRATION												
Urban+Rural	628,986	100.0	86.2	13.8	628,986	100.0	40.8	59.2	628,986	100.0	55.6	44.4
Urban	628,986	100.0	86.2	13.8	628,986	100.0	40.8	59.2	628,986	100.0	55.6	44.4
Rural	-	-	-	-	-	-	-	-	-	-	-	-
DIRE DAWA CITY ADMINISTRATION												
Urban+Rural	72,938	100.0	55.0	45.0	72,938	100.0	17.1	82.9	72,938	100.0	34.6	65.4
Urban	51,595	100.0	68.3	31.7	51,595	100.0	23.9	76.1	51,595	100.0	48.6	51.4
Rural	21,343	100.0	23.1	76.9	21,343	100.0	.8	99.2	21,343	100.0	.7	99.3
SPECIAL ENUMERATION AREA												
Urban+Rural	15,596	100.0	42.6	57.4	15,596	100.0	4.7	95.3	15,596	100.0	5.2	94.8
Urban	6,041	100.0	65.8	34.2	6,041	100.0	11.9	88.1	6,041	100.0	13.1	86.9
Rural	9,555	100.0	27.9	72.1	9,555	100.0	.2	99.8	9,555	100.0	.2	99.8

Appendix 24: Table 4.28 Percentage Distribution of Housing Units by Type of Tenure and Region, Urban Ethiopia: 2007

Urban Areas	All Housing Units	Total	Type of Tenure						
			Owner Occupied	Rent Free	Rented from Kebele	Rented from House Renting Agency	Rented from Other Organization	Rented from Private Household	Occupied Difference Rent
COUNTRY TOTAL-URBAN	2,897,019	100.0	39.3	6.9	11.9	.8	.6	40.4	.1
TIGRAY REGION-URBAN	231,827	100.0	36.7	8.6	1.6	.5	.3	52.2	.1
AFAR REGION_URBAN	43,761	100.0	40.6	12.0	2.8	.8	1.4	42.3	.1
AMHARA REGION-URBAN	591,428	100.0	39.1	5.3	9.0	.5	.4	45.6	.1
OROMIA REGION_URBAN	836,074	100.0	39.1	7.1	11.3	.4	.7	41.3	.1
SOMALI REGION-URBAN	91,241	100.0	68.2	13.5	3.2	.3	.3	14.2	.2
BENISHANGUL-GUMUZ REGION-URBAN	27,346	100.0	49.1	6.9	.6	.8	.8	41.8	.1
S.N.N.P REGION-URBAN	342,225	100.0	46.6	7.1	6.6	.4	.6	38.6	.1
GAMBELLA REGION_URBAN	19,081	100.0	44.9	11.9	3.2	1.0	2.0	36.6	.5
HARARI REGION-URBAN	27,414	100.0	29.4	8.5	25.3	2.2	.7	33.7	.1
ADDIS ABABA CITY ADMINISTRATION-URBAN	628,986	100.0	32.6	5.9	23.6	1.8	.5	35.4	.1
DIRE DAWA CITY ADMINISTRATION-URBAN	51,595	100.0	34.5	9.1	20.2	2.7	1.1	32.4	.1
SPECIAL ENUMERATION AREA_URBAN	6,040	100.0	41.2	5.9	2.9	.6	.3	49.2	-



ETHIOPIA POPULATION CENSUS COMMISSION

2007 Population and Housing Census

SHORT FORM

INSTRUCTIONS
 Please mark boxes like this .
DO NOT USE RED INK.

ENUMERATOR NAME	DATE
ENUMERATOR SIGNATURE	

ENUMERATOR NUMBER					
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SECTION 1: AREA IDENTIFICATION															
1. REGION		2. ZONE		3. WEREDA		4. TOWN		5. KEFTEGNA		6. S.A.		7. KEBELE		8. E.A.	
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<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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SUPERVISOR NAME	DATE
SUPERVISOR SIGNATURE	

Remember to fill in the area identification particulars on the back of this form!

IF THIS IS A CONTINUATION BOOKLET FOR THIS HOUSEHOLD MARK THIS BOX

SECTION 2: TYPE OF RESIDENCE AND HOUSING IDENTIFICATION

1. Type of Residence

Conventional household	[1]	Correctional facility	[5]
Hotel/Hostel	[2]	Other Collective Quarters	[6]
Orphanage	[3]	Pastoralists (wandering in search of water and grass)	[7]
Boarding School/College/University	[4]	Homeless	[8]

2. Housing Serial Number

[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]

3. Household Serial Number

[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]

SECTION 3: DETAILED PARTICULARS OF PERSONS IN THE HOUSEHOLD

1. Serial No. of Household Member	2. List of all persons in the household in chronological order of age <i>List all persons in the household in the following order:- Head, Spouse, Children living in the household in age order, Other relatives, Members who are not related, Visitors</i>	3. Residence status			4. What is the relationship of (NAME) to the head of the household?							5. What is (NAME's) sex?			
		Res Present	Res Absent	Visitor	Head	Spouse	Son/daughter of head&spouse	Parent/parent-in-law	Brother/sister or Bro/sis-in-law	Niece/nephew	Grandchild Other relative	Non relative	Male	Female	
[1]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[2]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[3]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[4]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[5]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[6]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[7]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[8]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]

SECTION 3: DETAILED PARTICULARS OF PERSONS IN THE HOUSEHOLD continued

Serial No. of Household Member	6. What is (NAME's) age? <i>(Record in completed years - if less than one year code 00, if more or equal to 97 code 97)</i> EXAMPLE: NAME is 37 [3][0][0]	7. What is (NAME's) religion? Orthodox Protestant Catholic Muslim/Islam Traditionalist Other	8. What is (NAME's) mother tongue? <i>Please enter the appropriate code here</i>	9. What is (NAME's) ethnic group? <i>Please enter the appropriate code here</i>	10. Does (NAME) have any physical or mental difficulties?							11. If yes, what is (NAME's) type of difficulty or problem?							12. What was the cause of (NAME's) disability?			AGE 0-17 ONLY											
					Blind	Seeing difficulty	Deaf	Hearing difficulty	Unable to speak	Speaking difficulty	Deaf and unable to speak	Non functional upper limbs	Non functional lower limbs	Body movement problem	Learning difficulties	Mental problem (go to 13)	Other	Car accident	Other accident	Polio	Hanson disease	Other (Postnatal)	Prenatal	War/mines	Not known	Others	16. Is (NAME's) biological mother alive?	17. Is (NAME's) biological father alive?					
[1]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[2]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[3]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[4]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[5]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[6]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[7]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]
[8]		[1]	[2]	[3]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[1]	[2]

FOR WOMEN OF AGE 10 AND ABOVE							
Serial No. of Household Member	26. How many children have you borne who are now living with you? How many are male and how many are female. <i>* Record "0" if none.</i>		27. How many children have you borne who are now living elsewhere? How many are male and how many are female. <i>* Record "0" if none.</i>		28. Did you have children who have died? How many are male and how many are female. <i>* Record "0" if none.</i>		29. Did (NAME) have any live births between 29 May 06 and 28 May 07? <i>If yes, record number of children. If no, record "0"</i>
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	
1	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4
2	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4
3	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4
4	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4
5	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4
6	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4
7	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4
8	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4

SECTION 4: DEATHS IN THE HOUSEHOLD			
1. Did a death occur in the household since 29 May 06? <i>If yes, record number of deaths in the box on the right and further details below. If no, record "0" and go to Section 5 (Housing)</i>			
			0 1 2 3 4 5 6 7 8 9
2. Name of deceased	3. Sex of deceased	4. Age at death	ONLY FOR WOMEN AGE 12-49
			5. Did (NAME) die during pregnancy, childbirth or within 2 months after childbirth?
	Male	0 1 2 3 4 5 6 7 8 9	Yes
	Female	0 1 2 3 4 5 6 7 8 9	No
	Male	0 1 2 3 4 5 6 7 8 9	Yes
	Female	0 1 2 3 4 5 6 7 8 9	No
	Male	0 1 2 3 4 5 6 7 8 9	Yes
	Female	0 1 2 3 4 5 6 7 8 9	No
	Male	0 1 2 3 4 5 6 7 8 9	Yes
	Female	0 1 2 3 4 5 6 7 8 9	No
	Male	0 1 2 3 4 5 6 7 8 9	Yes
	Female	0 1 2 3 4 5 6 7 8 9	No

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SUPERVISOR VALIDATION		
Supervisor Name	Supervisor Signature	Date

SECTION 5 - INFORMATION ON HOUSING UNIT

To be answered by enumerator

1 Will housing unit information be collected?

Yes	[1]
No	[2]

2 How many years ago was this housing unit built?

Less than 5 years	[1]
5 - 9 years	[2]
10 - 14 years	[3]
15 - 19 years	[4]
20 years or more	[5]

3 How many ROOMS are in the housing unit?

	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9

4 What is the main source of DRINKING WATER for the members of this housing unit?

Tap inside the house	[1]
Tap in compound, private	[2]
Tap in compound, shared	[3]
Tap outside compound/From private tap, public tap, other organisation/(bought or free of charge)	[4]
Protected well or spring	[5]
Unprotected well or spring	[6]
River/Lake/Pond	[7]

5 What type of TOILET facility does the housing unit have?

No toilet facility	[1]
Flush toilet	[2]
VIP Latrine	[3]
Pit Latrine	[4]

If coded 2 - 4 only in Question 5

6 Does the household share the toilet with other households?

Yes	[1]
No	[2]

7 What type of BATHING facility does the housing unit have?

No bathing facility	[1]
Bathtub private	[2]
Bathtub shared	[3]
Shower private	[4]
Shower shared	[5]
Other	[6]

8 What type of KITCHEN does the housing unit have?

No kitchen	[1]
A room used for traditional kitchen inside the housing unit	[2]
A room used for traditional kitchen outside the housing unit	[3]
A room used for modern kitchen inside the housing unit	[4]
A room used for modern kitchen outside the housing unit	[5]

If coded 2 - 5 only in Question 8

9 Does the household share the kitchen with other households?

Yes	[1]
No	[2]

10 What type of FUEL is used for cooking in the housing unit?

	YES	NO
Electricity	[1]	[2]
Gas/cylinder	[1]	[2]
Kerosene	[1]	[2]
Charcoal	[1]	[2]
Firewood/Leaves/Sawdust	[1]	[2]
Dung/manure	[1]	[2]
Bio-gas	[1]	[2]
Other	[1]	[2]

11 What type of LIGHTING does the housing unit have?

Electricity/Meter private	[1]
Electricity/Meter shared	[2]
Electricity from generator (No Meter)	[3]
Solar energy	[4]
Lantern	[5]
Bio-gas	[6]
Kerosene	[7]
Candle/Wax candle	[8]
Firewood	[9]

12 Does the housing unit have: YES NO

Radio	[1]	[2]
Fixed Telephone/Wireless Telephone	[1]	[2]
Television	[1]	[2]

13 How does the housing unit dispose of SOLID WASTE?

Collected by Municipality (Public Dump)	[1]
Collected by private establishments/individuals	[2]
Dumped in street/Open space	[3]
Dumped in river	[4]
Burned/Buried solid waste	[5]
Other	[6]

14 Do livestock spend the night in the room(s) where members spend the night?

Yes	[1]
No	[2]
No livestock	[3]

15 What is the type of TENURE of the housing unit?

Owner occupied	[1]
Rent free	[2]
Rented from Kebele	[3]
Rented from agency of rented houses	[4]
Rented from other organisation	[5]
Rented from private household	[6]
Occupied difference in rent	[7]

For Questions 16 - 20 please mark by observation and/or asking

16 What is the type of housing unit?

Conventional	[1]
Improvised	[2]
Mobile	[3]
Other	[4]

17 What is the major material used for the construction of the WALL of the housing unit?

Wood and mud	[1]
Wood and thatch/Wood only	[2]
Stone and mud	[3]
Stone and cement	[4]
Plastered hollow blocks	[5]
Unplastered hollow blocks	[6]
Bricks	[7]
Corrugated iron	[8]
Reed/Bamboo	[9]
Mud Bricks	[10]
Other	[11]

18 What is the major material used for the construction of the major part of the CEILING of the housing unit?

None	[1]
Fabrics	[2]
Bamboo/Reed	[3]
Chip wood/Hardboard	[4]
Parquet or polished wood	[5]
Wood planks	[6]
Concrete/Cement	[7]
Polythene sheet "Madaberia"	[8]
Other	[9]

19 What is the major material used for the construction of the major part of the ROOF of the housing unit?

Corrugated iron sheet	[1]
Concrete or cement	[2]
Thatch	[3]
Wood and mud	[4]
Bamboo or reed	[5]
Plastic/Shera	[6]
Asbestos	[7]
Other	[8]

20 What is the major material used for the construction of the major part of the FLOOR of the housing unit?

Mud	[1]
Bamboo/Reed	[2]
Wood planks	[3]
Parquet or polished wood	[4]
Cement screed/Cement screed not applied	[5]
Plastic tiles	[6]
Cement tile/Brick tile	[7]
Ceramic/Marble tiles	[8]
Other	[9]

VALIDATION

Enumerator Name
Enumerator Signature
Date

References

- Anon, World Health Organization Guideline for Drinking- water Quality, Volume I, 2nd edition, WHO, Geneva, 1993.
- Anon, World Health Organization Guideline for Drinking- water Quality, Volume II, 2nd edition, WHO, Geneva, 1996.
- Biswas AK: Institutional arrangements for international cooperation in water resources. *Water Resources Development* 1995, 11:139-45.
- Bradley, David et.al.; (1992) A Review of Environmental Health Impacts in Developing Country Cities. *Urban Management Program Discussion Paper Series*, World Bank Washington DC
<http://www.worldbank.org>.
- Bryce J, Boschi-Pinto C, Shibuya K, Black RE, the WHO Child Health Epidemiology Reference Group: WHO estimates of the causes of death in children. *The Lancet* 2005, 365:1147-52.
- CSA (1987), Population and Housing Census of Ethiopia, 1984 , Analytical Report on Results for Country Level, Vol.1, Number 1, Ethiopia.
- CSA (1998), The 1994 Population and Housing Census of Ethiopia, Result for Country Level, Volume II Analytical Report, Addis Ababa, Ethiopia.
- CSA (1998), The 1994 Population and Housing Census of Ethiopia, Result for Country Level, Volume II Analytical Report, Addis Ababa, Ethiopia.
- Diana Wilkinson, 1999. Poor Housing and Ill health, A Summary of Research Evidence, Central Research Unit, Scotland.
- Environment and Urbanization (eds.); (1999) Healthy Cities, Neighborhoods and Homes. *Environment and Urbanization* Vol. 11, No. 1 April 1999.
- Environmental Health Project; (1996) *Health & the Environment in Urban Poor Areas: Avoiding a Crisis Through Prevention* Capsule Report No. 1, March 1999
<http://www.ehproject.org/live/Rptspub.html>
- Esrey, S.A., Feacham, K.G. and Hughes, J.M., Interventions for the Control of Diarrheal Disease Among Young Children: Improving Water Supplies and Excreta Disposal Facilities, *Bulletin of the World Health Organization*, Vol. 63, No. 4, pp. 757-772, 1985.
- Gebeyehu A., Marco B. and Behailu G,M, (2001), Housing Condition and Demand for Housing in Urban Ethiopia, Addis Ababa, Ethiopia.
- Grover B: Twenty-five years of international cooperation in water-related development assistance, 1972-1997. *Water Policy* 1998, 1:29-43.

Hardy A: Acute Diarrhea. The American Journal of Nursing 1942, 42:512-5.

Harving H, Korsgaard J, Dahi R. House Dust Mite Exposure Reduction in Special Designed, Mechanically Ventilated 'Healthy' Homes. Journal of Allergy 1994; **49**: 713-718.

Hide DW, Mathews L, Stevens M et al. Effect of Allergen Avoidance in Infancy on Allergic Manifestations at Age Two Years. Journal of Allergy and Clinical Immunology 1994; **93**: 842-846.

Hofkes, E.H. (ed), Small Community Water Supplies, John Wiley and Sons. Chicester. 1986.

Huttly S 2002, The Impact of Inadequate Sanitary Conditions on Health in Developing Countries, Maternal and Child Epidemiology Unit, London School of Hygiene and Tropical Medicine, London.

James H. Kilabuko and Satoshi Naki, Effects of Cooking Fuels on Acute Respiratory Infections in Children in Tanzania, International Journal of Environmental Research and Public Health, 2007.

Jennifer G Cooks (2009), Public Health in Africa, A Report of CSI Global Health Policy Center.

Ministry of Federal Affaires (2005), Urban Development Policy, Addis Ababa, Ethiopia.

National Population Policy of Ethiopia, Addis Ababa, Ethiopia, Office of the Prime Minister, April 1993.

Peat JK, Dickerson J. Effects of Damp and Mould in the Home on Respiratory Health: A Review of the Literature. Journal of Allergy 1998; **53**: 120-128.

Shryock, H.S. and Siegel J.S., (1973), The Methods and Materials of Demography (condensed edition). Academic Press Inc. New York, U.S.A.

Tunicliffe WS, Burge PS, Ayres JG. Effect of Domestic Concentrations of Nitrogen Dioxide on Airway Responses to Inhaled Allergen in Asthmatic Patients. Lancet 1994; **344**: 1733-

United Nations (2008): The Millennium Development Goals Reports, New York 2008.

UN (2000). UN Habitat Agenda Need for Effective Housing Policies, UN Habitat for a Better Urban Future.

UN (1985), Multilingual Demographic Dictionary, Department of Economic and Social Affairs, New York.

UN (1967), Method of Estimating Housing Needs, Series F, No. 12. P. 48.

Varavithya W, Sunthornkachit R, Eampokalap B: Oral rehydration therapy for invasive diarrhea. Reviews of Infectious Diseases 1991, 13:325-31.

[WWW.http://](http://www.who.int/water_sanitation_health/dwq/S01.pdf) Internet.
www.who.int/water_sanitation_health/dwq/S01.pdf.

Zhao L, Tatara K, Kuroda K, Takayama Y. Mortality of Fragile Elderly People Living at Home in Relation to Housing Conditions, Journal of Epidemiology and Community Health, 1993; **47** ;298-302.