



## Housing and source of energy for home use at Kersa Demographic Surveillance and Health Research Center field site.

This brief describes the characteristics of housing and source of energy for home use among the households in 12 selected kebeles of Kersa demographic surveillance and health research center field site. The result is based on census conducted on July 2007 in Kersa District, Eastern Hararge, Eastern Ethiopia.

### Introduction

Shelter is one of the basic needs of human being. Appropriate housing is essential for healthy life of any family. Proper housing includes living room, bed room and place for cooking. Animals should be separated from living with human being. Proper housing doesn't mean to construct the house with expensive items; it is to have sufficient place for proper activity of life.

A study was conducted on 48,192 residents living in 10,256 households of the study site.. The highest population count was recorded in Adele Key Key kebele and the lowest in Kersa town. Which is 6053 and 1811 respectively.

### Residential Housing

Total residential households ranges from 448 (4.4%) in Kersa town to 1,099 (10.7%) in Adele Key Key (a rural kebele). It was found out that the number of family members ranges from 1 to 20. The average family size is 4.7, 4.8 for rural and 4.2 for urban population .

Table 1. Distribution of households in the selected 12 studied kebele Kersa District, Eastern Hararge, Eastern Ethiopia. July 2007.

Name of Kebele	No of Households	Total pop.	Mean household size
Kersa Town	448	1811	4.0
Metekoma	944	6401	4.9
Yabeta Lencha	920	4441	4.8
Ifa Jalela	1081	4769	4.4
Meda Odda	898	4020	4.5
Water Town	761	3427	4.5
Handura Kosum	865	4031	4.7
Tolla	935	4146	4.4
Gola Belina	726	3937	5.4
Bereka	575	2550	4.4
Walteha Bilisuma	1004	4403	4.4
Adele Key Key	1099	6053	5.5
<b>Total</b>	<b>10256</b>	<b>48192</b>	<b>4.7</b>

Regarding the ownership of the residential houses, the study indicates that majority of the houses (94.1%) are privately owned.

Table 2. Distribution of ownership of the houses of the studied households in the selected 12 kebeles of Kersa District, Eastern Hararge, Eastern Ethiopia. July 2007.

Ownership status of house	Frequency	%
Private	9623	94.1
Rented from kebele/ Government	422	4.3
Rented from Private	142	1.4
Others	43	0.4
<b>Total</b>	<b>10230</b>	<b>100</b>

Only less than half (44.1%) have separate kitchen while the rest responded that they do not have separate kitchen. This means that they may use living room to cook their food.

The available number of rooms in different households of the study area ranges from 1 to 21. The majority (63.8%) of the households have single room, followed by those who have double rooms which account for 26.8% of the respondents. The average number of rooms in the studied households was 1.5.

Majority (69.9%) of the roofs of the houses in the study area are covered with corrugated sheet of iron while the rest (29.7%) houses are covered with grass.

Almost all (96.8%) of the houses' walls are built of wood and mud, and 1.6 % of the houses are made of wood and grass. The rest (1.4 %) of the house are made of stone and cement, stone and mud, cement and bloket, and corrugated sheet of iron.

Table 3. Type of wall of residential houses of the studied households in the selected 12 kebeles of Kersa District Eastern Hararge, Eastern Ethiopia July 2007

Type of wall	Number	%
Wood and mud	9930	97.1
Wood and grass	161	1.6
Other	139	1.4
<b>Total</b>	<b>10230</b>	<b>100</b>

Regarding the availability of windows, majority (81.2%) of the houses do not have windows. The rest (12.9 %) do have windows that can be ‘Opened and Closed: The rest (5.7 %) have window that are either do not open or only with small holes.

### Main Source of Energy

The main source of energy (for cooking and lighting) is found to be wood including leaves and bush-wood in 10,071 (98.2%) of these households. The second main source has been indicated to be kerosene which was responded by 82 (0.8%) of the households. In general, biomass (that includes woods, animal dug and charcoal) account for about 98.6% of the fuel use in the study community and 0.2 % of the households

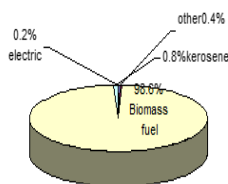


Fig.2:- Source of energy among in habitats in Kersa District, Eastern Hararge, Eastern Ethiopia,2007.

## Conclusion

More than 85 % of the residential houses lack appropriate windows indicating poor air ventilation and increased indoor pollution leading to respiratory tract problems and spread of communicable diseases.

Wood including leaves and bush wood is the major source of energy for household consumption in 98 % of the households. This is believed to exert negative influence on ecosystem degradation as well as the health effect of the population which would require further studies to seek for alternative sources of energy and appropriate intervention.

## Recommendation

Appropriate house construction education should be given for the population at large. The focus of education should be on having appropriate number of rooms and availing space for windows. The health consequence of not having windows should be emphasized.

Alternative source of energy, like the use of biogas production, or apparatus which spares firewood energy should be emphasized. Side by side cultivation of forests for personal use shall be encouraged.

## Kersa Demographic Surveillance and Health

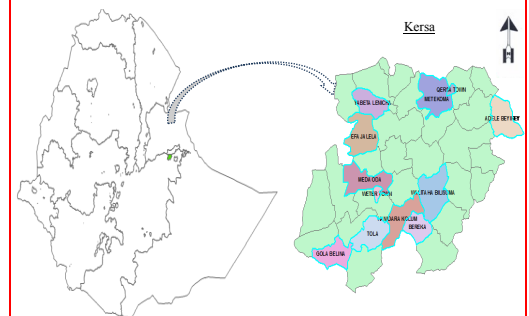
### Research Center (KDS-HRC),

### Haramaya University:

The surveillance site was established in September 2007 in Kersa district, Eastern Hararge of Oromia region, East Ethiopia with aim of tracking demographic changes like death, birth, migration and marital status change. The surveillance activities further extended by adding surveys in Nutrition, Reproductive Health, Environmental Health, HIV/AIDS, Morbidity/health seeking behavior and health care utilization during the month of January-March 2008.

The surveillance activity is instituted in 12 kebeles (the smallest administrative unit in Ethiopia with approximate population Size of 4-5 thousand). Two of the kebeles are semi urban and the remaining 10 are rural kebeles.

According to the first census there were 10,256



households and 53,482 people in the study site with an average household size of 5.2 and sex ratio of 104.5. In the study area the crude birth and death rates were 26.8 and 9.2 per 1000 population. Infant and under five mortality rates were 44.9 and 108.2 per 1000 live births respectively.

The activities of the surveillance are lead by a coordinator and a group of six staff members from the College of Health and Medical Sciences.

