

Chapter 7

HOUSING INFRASTRUCTURE AND ENVIRONMENT

7.0 Introduction

The IHS2 survey collected information on housing characteristics in section G of the questionnaire and was being asked to the household head. . The information collected on housing characteristics includes the type of dwelling occupied by the households, type of tenure, type building materials for roof, wall and floor. The survey also gathered information on sources of drinking water, toilet facilities and type of fuel households are using for lighting and cooking. Information on these characteristics is quite useful insofar as it reflects on household's socio-economic status.

For the purpose of the survey a housing/dwelling unit was defined as all the living space occupied by one household regardless of the physical arrangement of facilities available. It may be one room or more occupied by household members or it may be one, two or more dwelling units occupied by an extended family.

7.1 Tenure

Table 7.1 shows that slightly over 80 percent of all the households in Malawi stay in owner-occupied houses. Rural areas are predominantly owner-occupied with a about 85 percent of rural households living in such houses while only 42 percent of urban households are in such owner-occupied dwellings. As table 7.1 reveals, the proportion of owner-occupied dwellings is higher in female-headed households at 84 percent relative to male-headed households at 80 percent.

Table 7.1 Distribution of households by type of housing tenure according to background characteristics, Malawi 2005

| Background characteristics | Type of tenure | | | | | | Total |
|---|----------------|-----------------|-------------------|------------------|----------------------|-------------|------------|
| | Owner occupied | Being purchased | Employer provides | Free, authorized | Free, not authorized | Rented | |
| Malawi | 80.6 | 0.3 | 3.5 | 6.3 | 0.3 | 9.0 | 100 |
| Place of residence | | | | | | | |
| Urban | 42.0 | 0.1 | 1.3 | 5.6 | 0.2 | 50.8 | 100 |
| Rural | 85.8 | 0.3 | 3.8 | 6.4 | 0.3 | 3.4 | 100 |
| Sex of Household Head | | | | | | | |
| Male | 79.7 | 0.3 | 4.2 | 5.3 | 0.2 | 10.3 | 100 |
| Female | 83.6 | 0.2 | 1.2 | 9.7 | 0.4 | 4.9 | 100 |
| Household per capita expenditure | | | | | | | |
| 1 st | 88.8 | 0.4 | 2.0 | 6.6 | 0.6 | 1.6 | 100 |
| 2 nd | 87.7 | 0.3 | 1.5 | 5.7 | 0.6 | 4.0 | 100 |
| 3 rd | 82.3 | 0.6 | 2.9 | 5.2 | 0.6 | 8.4 | 100 |
| 4 th | 78.2 | 0.1 | 4.3 | 7.4 | 0.3 | 9.7 | 100 |
| 5 th | 59.7 | 0.4 | 6.6 | 7.6 | 0.1 | 25.6 | 100 |
| Northern Region | | | | | | | |
| Northern Region | 88.0 | 0.1 | 5.2 | 3.7 | 0.1 | 3.0 | 100 |
| Chitipa | 92.5 | 0.0 | 0.4 | 1.3 | 0.0 | 5.8 | 100 |
| Karonga | 92.1 | 0.0 | 1.3 | 1.7 | 0.0 | 5.0 | 100 |
| Nkhata Bay | 81.7 | 0.8 | 8.8 | 6.3 | 0.0 | 2.5 | 100 |
| Rumphu | 87.5 | 0.0 | 0.0 | 6.7 | 0.0 | 5.8 | 100 |
| Mzimba | 87.3 | 0.0 | 8.4 | 3.5 | 0.2 | 0.6 | 100 |
| Mzuzu City | 57.1 | 0.0 | 0.8 | 2.5 | 0.0 | 39.6 | 100 |
| Central Region | | | | | | | |
| Central Region | 85.7 | 0.3 | 3.0 | 7.6 | 0.3 | 3.1 | 100 |
| Kasungu | 82.1 | 0.0 | 9.8 | 3.3 | 1.3 | 3.5 | 100 |
| Nkhotakota | 77.5 | 0.0 | 3.3 | 12.1 | 0.0 | 7.1 | 100 |
| Ntchisi | 88.3 | 0.4 | 7.5 | 0.0 | 0.0 | 3.8 | 100 |
| Dowa | 84.8 | 1.0 | 1.3 | 7.5 | 0.2 | 5.2 | 100 |
| Salima | 86.3 | 0.4 | 0.8 | 10.0 | 0.0 | 2.5 | 100 |
| Lilongwe Rural | 87.5 | 0.0 | 2.4 | 7.5 | 0.3 | 2.3 | 100 |
| Lilongwe City | 45.4 | 0.2 | 0.8 | 9.4 | 0.2 | 44.0 | 100 |
| Mchinji | 83.3 | 0.8 | 0.0 | 10.8 | 0.0 | 5.0 | 100 |
| Dedza | 90.4 | 0.4 | 1.3 | 7.1 | 0.0 | 0.8 | 100 |
| Ntcheu | 85.8 | 0.0 | 2.5 | 10.2 | 0.0 | 1.5 | 100 |
| Southern Region | | | | | | | |
| Southern Region | 75.9 | 0.3 | 3.5 | 5.9 | 0.3 | 14.1 | 100 |
| Mangochi | 83.9 | 0.1 | 2.9 | 6.4 | 0.6 | 6.1 | 100 |
| Machinga | 89.4 | 0.0 | 2.1 | 5.8 | 0.0 | 2.7 | 100 |
| Zomba Rural | 86.3 | 0.0 | 0.8 | 11.3 | 0.0 | 1.7 | 100 |
| Zomba Municipality | 36.3 | 0.0 | 0.8 | 8.3 | 0.0 | 54.6 | 100 |
| Chiradzulu | 93.3 | 0.0 | 1.7 | 3.3 | 0.0 | 1.7 | 100 |
| Blantyre Rural | 82.1 | 0.0 | 1.3 | 9.2 | 0.0 | 7.5 | 100 |
| Blantyre City | 36.3 | 0.0 | 2.1 | 1.7 | 0.2 | 59.8 | 100 |
| Mwanza | 92.5 | 0.4 | 1.3 | 3.8 | 0.0 | 2.1 | 100 |
| Thyolo | 77.5 | 0.0 | 13.5 | 2.3 | 1.7 | 5.0 | 100 |
| Mulanje | 80.0 | 0.0 | 8.5 | 2.1 | 0.0 | 9.4 | 100 |
| Phalombe | 85.8 | 0.0 | 1.3 | 9.6 | 0.0 | 3.3 | 100 |
| Chikwawa | 87.1 | 0.8 | 9.0 | 1.7 | 0.0 | 1.5 | 100 |
| Nsanje | 82.5 | 6.3 | 1.3 | 6.7 | 0.0 | 3.3 | 100 |
| Balaka | 90.8 | 0.0 | 0.8 | 7.9 | 0.0 | 0.4 | 100 |

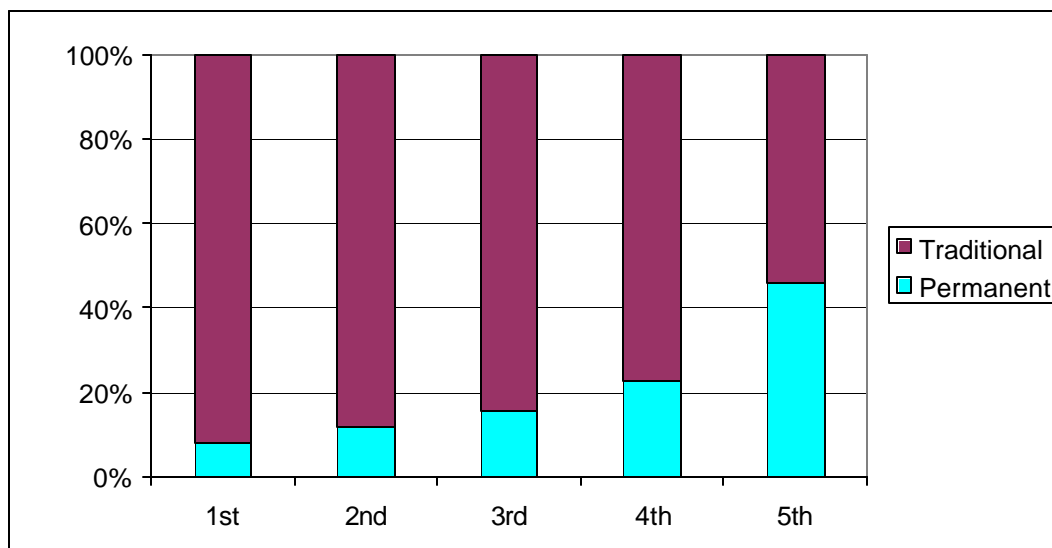
In terms of per capita expenditure quintiles, the lowest quintile has the highest proportion of owner-occupied dwellings while the highest quintile has the lowest proportion. Of the three main regions of the country, the northern region has the highest proportion of houses of owner-occupied dwellings at 89 percent followed by the centre and then the south at 86 and 76 percent respectively. Within these regions, Chiradzulu has reported the highest proportion of owner-occupied dwellings while Blantyre City and Zomba Municipality have the least proportion of owner-occupied dwellings.

7.2 Type of structure

A housing unit is classified as “traditional” if it is generally made from traditional materials. On the other hand, a house is classified as “permanent” if the house or block is generally built using modern or durable facilities. A semi-permanent house is the one that has generally been built using modern and partial lasting materials

Table 7.2 shows that almost 66 percent of the houses in Malawi are traditional houses and only about 35 percent are either permanent or semi-permanent houses. In urban areas the percentages are different- about 81 percent of households live in either permanent or semi-permanent houses while only 19 percent live in traditional houses. However, rural areas of Malawi have about 72 percent of traditional houses with 28 percent of them being either permanent or semi permanent houses. By sex of household head, the proportion of male-headed households living in permanent houses is greater at 17 percent than that in female-headed households at 11 percent. However, it may be noted that traditional houses still dominate whereby almost two-thirds of the houses in both male and female-headed households are of that type.

Figure 7.1 Type of building material by per capita expenditure quintile



As figure 7.1 above shows, the lowest expenditure quintile has the highest proportion of households living in traditional dwellings and the situation is seen to be reversing the higher the expenditure quintile.

Table 7.2 Percentage Distribution of households by type of construction materials according to background characteristics, Malawi 2005

| Background characteristics | Type of Construction Materials | | | Total |
|---|--------------------------------|----------------|-------------|------------|
| | Permanent | Semi-Permanent | Traditional | |
| Malawi | 15.8 | 18.7 | 65.5 | 100 |
| Place of residence | | | | |
| Urban | 42.8 | 38.0 | 19.2 | 100 |
| Rural | 12.2 | 16.0 | 71.8 | 100 |
| Sex of Household Head | | | | |
| Male | 17.2 | 19.3 | 63.5 | 100 |
| Female | 11.3 | 16.5 | 72.2 | 100 |
| Household per capita expenditure | | | | |
| 1 st | 5.4 | 15.2 | 79.4 | 100 |
| 2 nd | 8.2 | 16.0 | 75.8 | 100 |
| 3 rd | 11.2 | 19.5 | 69.3 | 100 |
| 4 th | 17.7 | 20.7 | 61.6 | 100 |
| 5 th | 36.6 | 21.8 | 41.6 | 100 |
| Northern Region | | | | |
| Chitipa | 9.2 | 28.8 | 62.1 | 100 |
| Karonga | 9.2 | 35.0 | 55.8 | 100 |
| Nkhata Bay | 22.5 | 55.4 | 22.1 | 100 |
| Rumphi | 12.1 | 23.0 | 64.9 | 100 |
| Mzimba | 12.7 | 11.7 | 75.6 | 100 |
| Mzuzu City | 30.8 | 42.3 | 26.9 | 100 |
| Central Region | | | | |
| Kasungu | 12.9 | 9.6 | 77.5 | 100 |
| Nkhotakota | 15.8 | 14.2 | 70.0 | 100 |
| Ntchisi | 12.5 | 2.9 | 84.6 | 100 |
| Dowa | 9.2 | 14.2 | 76.7 | 100 |
| Salima | 8.8 | 50.0 | 41.3 | 100 |
| Lilongwe Rural | 7.0 | 17.1 | 75.9 | 100 |
| Lilongwe City | 57.7 | 35.2 | 7.1 | 100 |
| Mchinji | 12.9 | 7.1 | 80.0 | 100 |
| Dedza | 9.4 | 3.8 | 86.9 | 100 |
| Ntcheu | 22.1 | 5.8 | 72.1 | 100 |
| Southern Region | | | | |
| Mangochi | 11.1 | 12.9 | 75.9 | 100 |
| Machinga | 6.7 | 15.2 | 78.1 | 100 |
| Zomba Rural | 7.7 | 12.7 | 79.5 | 100 |
| Zomba Municipality | 45.8 | 32.5 | 21.7 | 100 |
| Chiradzulu | 11.7 | 27.5 | 60.8 | 100 |
| Blantyre | 20.0 | 15.4 | 64.6 | 100 |
| Blantyre City | 30.0 | 33.3 | 36.7 | 100 |
| Mwanza | 7.5 | 3.8 | 88.7 | 100 |
| Thyolo | 24.8 | 23.5 | 51.7 | 100 |
| Mulanje | 29.6 | 21.0 | 49.4 | 100 |
| Phalombe | 9.6 | 22.5 | 67.9 | 100 |
| Chikwawa | 14.0 | 11.9 | 74.2 | 100 |
| Nsanje | 5.4 | 8.8 | 85.8 | 100 |
| Balaka | 3.3 | 18.0 | 78.7 | 100 |

7.3 Room occupancy rate and overcrowding

Almost half of the households in Malawi have no more than one person per room. Slightly above half of households in urban areas have on average one person per room while slightly less than half of households in rural areas have one person per room. As table 7.3 also reveals, the proportion of households with one person per room is higher in female-headed households at 57 percent than it is for male-headed households at 47 percent. In terms of per capita expenditure quintiles, there is a clear pattern whereby the lowest quintile has the least proportion of households with an average of one person per room at 25 percent and the trend is increasing such that the highest quintile has 74 percent of households with an average of one person per room. It is also important to note that the proportion of households with an average of more than one person per room is higher in the lowest quintile while the opposite is true for the highest quintile. At regional level, the north and the southern region have almost the same proportion of households with an average of one person per room at 54 and 53 percent respectively while the central has the least proportion at 42 percent. Among the districts, Rumphi has the highest proportion of households with an average of one person per room while Mchinji has the least. As the table below shows, Mchinji has registered the highest proportion of households with an average of more than 4 persons per room.

7.4 Access to potable water

Access to safe drinking water is one of the Millennium Development Goals (MDGs) and Malawi poverty reduction strategy targets (MPRS). It is one of the objectives of this survey to update figures on MDGs as well as the MPRS. The survey estimates that two-thirds of households in Malawi have access to safe water. The proportion is higher in urban areas at 85 percent than in rural areas at 64 percent. In terms of sex of household head, both female and male-headed households seem to have almost the same access to safe water. However, taking into consideration per capita expenditure quintiles, it may be noted that the lowest quintile has the lowest proportion of households with access to safe water registering only 63 percent while the highest quintile has the highest proportion of households with access to safe water at 75 percent. Of the three regions of the country, three-quarters of the households in the southern region have access to safe water while slightly less than two-thirds of the households in the northern region have access to safe water while the central region has only registered slightly above half of households with access to safe water. In terms of rural districts, Balaka, Mulanje, Rumphi, Chiradzulu and Nsanje have registered higher proportions of households with access to safe water of above 80 percent while Kasungu, Ntchisi and Mchinji have less than 40 percent.

Table 7.3 Percentage Distribution of households by number of persons per room according to background characteristics, Malawi 2005

| Background characteristics | Mean number of persons per room | | | | Total |
|---|---------------------------------|-------------|-------------|-------------------|------------|
| | 1 person | 2 persons | 3 persons | 4 persons or more | |
| Malawi | 49.1 | 26.5 | 12.2 | 12.2 | 100 |
| Place of residence | | | | | |
| Urban | 51.8 | 26.0 | 12.1 | 10.0 | 100 |
| Rural | 48.7 | 26.6 | 12.2 | 12.5 | 100 |
| Sex of Household Head | | | | | |
| Male | 46.9 | 27.3 | 13.1 | 12.6 | 100 |
| Female | 56.7 | 23.9 | 8.9 | 10.5 | 100 |
| Household per capita expenditure | | | | | |
| 1st | 25.5 | 35.0 | 18.2 | 21.2 | 100 |
| 2nd | 39.6 | 29.1 | 15.3 | 16.1 | 100 |
| 3rd | 48.7 | 28.1 | 11.6 | 11.7 | 100 |
| 4th | 57.3 | 24.2 | 10.2 | 8.4 | 100 |
| 5th | 74.4 | 16.5 | 5.6 | 3.5 | 100 |
| Northern Region | | | | | |
| Chitipa | 48.8 | 37.1 | 12.9 | 1.3 | 100 |
| Karonga | 59.0 | 28.0 | 8.8 | 4.2 | 100 |
| Nkhata Bay | 70.0 | 19.2 | 7.9 | 2.9 | 100 |
| Rumphi | 76.7 | 20.0 | 1.3 | 2.1 | 100 |
| Mzimba | 41.7 | 29.4 | 16.1 | 12.8 | 100 |
| Mzuzu City | 64.8 | 23.8 | 6.5 | 5.0 | 100 |
| Central Region | | | | | |
| Kasungu | 70.4 | 22.1 | 5.3 | 2.3 | 100 |
| Nkhotakota | 49.2 | 24.6 | 15.0 | 11.3 | 100 |
| Ntchisi | 29.5 | 25.9 | 17.7 | 26.8 | 100 |
| Dowa | 50.8 | 34.2 | 10.8 | 4.2 | 100 |
| Salima | 47.7 | 26.1 | 13.1 | 13.1 | 100 |
| Lilongwe Rural | 39.8 | 27.1 | 13.0 | 20.1 | 100 |
| Lilongwe City | 36.9 | 27.5 | 18.9 | 16.8 | 100 |
| Mchinji | 19.7 | 24.5 | 19.7 | 36.2 | 100 |
| Dedza | 23.9 | 30.6 | 16.8 | 28.6 | 100 |
| Ntcheu | 43.5 | 28.3 | 12.7 | 15.6 | 100 |
| Southern Region | | | | | |
| Mangochi | 36.4 | 32.0 | 16.3 | 15.3 | 100 |
| Machinga | 31.1 | 28.6 | 18.2 | 22.1 | 100 |
| Zomba Rural | 68.1 | 22.3 | 7.1 | 2.5 | 100 |
| Zomba Municipality | 72.9 | 22.5 | 3.3 | 1.3 | 100 |
| Chiradzulu | 67.9 | 21.7 | 7.9 | 2.5 | 100 |
| Blantyre Rural | 75.0 | 18.3 | 5.4 | 1.3 | 100 |
| Blantyre City | 39.6 | 33.3 | 16.3 | 10.8 | 100 |
| Mwanza | 59.2 | 27.5 | 10.0 | 3.3 | 100 |
| Thyolo | 54.6 | 22.7 | 12.5 | 10.2 | 100 |
| Mulanje | 60.0 | 23.5 | 10.6 | 5.8 | 100 |
| Phalombe | 75.4 | 18.3 | 3.3 | 2.9 | 100 |
| Chikwawa | 54.6 | 30.0 | 9.0 | 6.5 | 100 |
| Nsanje | 28.3 | 39.6 | 19.6 | 12.5 | 100 |
| Balaka | 33.3 | 25.8 | 15.8 | 25.0 | 100 |

Table 7.4 Proportion of households with access to safe water and percentage distribution of households by main source of drinking water according to background characteristics, Malawi 2005

| Background characteristics | Proportion with access to improved water source | Source of drinking water | | | | | Total |
|---|---|--------------------------|----------------------------------|-----------------------------------|------------------|-----------------------------|------------|
| | | Piped into dwelling | Piped outside/communal standpipe | Hand pump/borehole/protected well | Unprotected well | River, spring, lake & other | |
| Malawi | 66.4 | 2.2 | 17.7 | 46.5 | 25.4 | 8.2 | 100 |
| Place of residence | | | | | | | |
| Urban | 85.1 | 12.6 | 62.3 | 10.2 | 11.1 | 3.8 | 100 |
| Rural | 63.9 | 0.8 | 11.7 | 51.4 | 27.3 | 8.8 | 100 |
| Sex of Household Head | | | | | | | |
| Male | 66.1 | 2.4 | 18.4 | 45.2 | 25.7 | 8.2 | 100 |
| Female | 67.5 | 1.5 | 15.5 | 50.5 | 24.2 | 8.3 | 100 |
| Household per capita expenditure | | | | | | | |
| 1st | 63.2 | 0.2 | 10.6 | 52.4 | 26.1 | 10.8 | 100 |
| 2nd | 62.7 | 0.2 | 14.1 | 48.4 | 27.9 | 9.4 | 100 |
| 3rd | 65.7 | 0.4 | 15.3 | 49.9 | 26.2 | 8.2 | 100 |
| 4th | 66.0 | 1.1 | 19.8 | 45.2 | 26.1 | 7.8 | 100 |
| 5th | 74.5 | 9.2 | 29.0 | 36.3 | 20.6 | 4.8 | 100 |
| North | 63.7 | 0.5 | 13.1 | 50.1 | 24.2 | 12.1 | 100 |
| Chitipa | 65.4 | 0.0 | 4.2 | 61.3 | 12.5 | 22.1 | 100 |
| Karonga | 74.2 | 1.3 | 21.7 | 51.3 | 2.1 | 23.8 | 100 |
| Nkhata Bay | 63.8 | 1.3 | 10.4 | 52.1 | 24.2 | 12.1 | 100 |
| Rumphi | 81.7 | 0.4 | 54.6 | 26.7 | 10.8 | 7.5 | 100 |
| Mzimba | 53.9 | 0.0 | 1.9 | 52.0 | 40.7 | 5.4 | 100 |
| Mzuzu City | 81.6 | 16.9 | 51.0 | 13.6 | 16.5 | 1.9 | 100 |
| Center | 54.3 | 0.5 | 9.2 | 44.6 | 38.6 | 7.1 | 100 |
| Kasungu | 37.9 | 0.2 | 3.3 | 34.4 | 52.7 | 9.4 | 100 |
| Nkhotakota | 57.5 | 1.3 | 10.4 | 45.8 | 35.4 | 7.1 | 100 |
| Ntchisi | 37.5 | 3.3 | 5.4 | 28.8 | 26.3 | 36.3 | 100 |
| Dowa | 61.9 | 0.8 | 7.3 | 53.8 | 27.7 | 10.4 | 100 |
| Salima | 76.7 | 0.0 | 0.0 | 76.7 | 18.8 | 4.6 | 100 |
| Lilongwe Rural | 49.0 | 0.5 | 4.3 | 44.2 | 46.8 | 4.3 | 100 |
| Lilongwe City | 95.4 | 9.6 | 79.5 | 6.3 | 3.5 | 1.0 | 100 |
| Mchinji | 36.7 | 0.4 | 1.7 | 34.6 | 58.8 | 4.6 | 100 |
| Dedza | 65.8 | 0.0 | 28.2 | 37.6 | 32.4 | 1.9 | 100 |
| Ntcheu | 68.5 | 0.0 | 18.8 | 49.7 | 25.3 | 6.3 | 100 |
| South | 74.9 | 3.7 | 24.2 | 47.0 | 16.9 | 8.2 | 100 |
| Mangochi | 73.3 | 0.0 | 5.6 | 67.8 | 21.5 | 5.1 | 100 |
| Machinga | 55.6 | 0.2 | 9.2 | 46.3 | 37.3 | 7.1 | 100 |
| Zomba Rural | 79.6 | 0.2 | 17.3 | 62.1 | 15.2 | 5.2 | 100 |
| Zomba Munic. | 81.3 | 14.2 | 51.7 | 15.4 | 9.6 | 9.2 | 100 |
| Chiradzulu | 81.3 | 0.4 | 1.7 | 79.2 | 18.3 | 0.4 | 100 |
| Blantyre City | 74.6 | 1.3 | 10.0 | 63.3 | 15.4 | 10.0 | 100 |
| Blantyre City | 56.7 | 3.8 | 45.8 | 7.1 | 20.4 | 22.9 | 100 |
| Mwanza | 72.1 | 0.0 | 0.0 | 72.1 | 7.9 | 20.0 | 100 |
| Thyolo | 59.8 | 6.3 | 21.0 | 32.5 | 26.7 | 13.5 | 100 |
| Mulanje | 83.5 | 1.3 | 38.5 | 43.8 | 9.6 | 6.9 | 100 |
| Phalombe | 73.3 | 0.0 | 37.5 | 35.8 | 19.6 | 7.1 | 100 |
| Chikwawa | 68.5 | 0.2 | 19.0 | 49.4 | 10.8 | 20.6 | 100 |
| Nsanje | 80.4 | 0.8 | 0.0 | 79.6 | 2.5 | 17.1 | 100 |
| Balaka | 85.4 | 0.0 | 11.3 | 74.2 | 12.9 | 1.7 | 100 |

7.5 Source of fuels used for cooking

Table 7.5 shows the distribution of households by main source of fuel. A very high proportion of households (98%) use solid fuels for cooking in Malawi. The case is even more severe in rural areas where use of solid fuels is almost universal. The results also show that the proportion of male and female-headed households that use solid fuels is almost equal at 98 percent. In terms of per capita expenditure quintiles, there is universal use of solid fuel in the lowest quintile while nearly 10 percent of the households in the highest quintile use alternative means of cooking fuel other than solid fuels. Of the three regions of the country, the southern region is the only region that has registered a higher proportion of households using alternative means of cooking fuel (3 percent) other than solid fuels than any of the other regions.

As the table further reveals, the most common source of cooking fuel is firewood. Almost nine in every ten households in Malawi use firewood for cooking. If place of residence is considered, urban areas have a rather low proportion of households using firewood as source of cooking fuel registering 38 percent while rural areas have registered almost 98 percent. More female-headed households use firewood for cooking than male-headed households. Table 7.5 also reveals that more households in the lower expenditure quintile use firewood for cooking compared to households in the higher expenditure quintile. The southern region has the least proportion of households using firewood as cooking fuel while the central region comes second and finally the northern region that has recorded 99 percent use of firewood.

7.6 Source of fuels used for lighting

Although paraffin is a rarely used source of cooking fuel in the country, the situation is different when it comes to lighting. As table 7.6 below reveals, paraffin is the most common source of lighting fuel registering about 84 percent of all the households in the country. Rural areas have the highest proportion of households using paraffin as source of lighting fuel at 88 percent while only 56 percent of urban households use paraffin. The proportion of male-headed households using paraffin as lighting fuel is higher than that of females at 86 and 79 percent respectively.

Table 7.5 Percentage Distribution of households by main source of fuels used for cooking according to background characteristics, Malawi 2005

| Background characteristics | Proportion using solid fuel | Source of fuel for cooking | | | | | | Total |
|---|-----------------------------|----------------------------|------------|-------------|-------------|------------------------|------------|------------|
| | | Firewood | Paraffin | Electricity | Charcoal | Crop residue, saw dust | Other | |
| Malawi | 98.1 | 89.9 | 0.2 | 1.7 | 6.8 | 1.1 | 0.3 | 100 |
| Place of residence | | | | | | | | |
| Urban | 87.3 | 37.9 | 1.2 | 11.5 | 48.2 | 0.5 | 0.7 | 100 |
| Rural | 99.6 | 97.0 | 0.0 | 0.4 | 1.2 | 1.2 | 0.2 | 100 |
| Sex of Household Head | | | | | | | | |
| Male | 97.9 | 89.1 | 0.2 | 1.9 | 7.5 | 1.0 | 0.3 | 100 |
| Female | 98.9 | 92.6 | 0.1 | 0.9 | 4.4 | 1.7 | 0.3 | 100 |
| Household per capita expenditure | | | | | | | | |
| 1st | 99.9 | 98.4 | 0.0 | 0.1 | 0.5 | 1.0 | 0.1 | 100 |
| 2nd | 99.8 | 96.1 | 0.0 | 0.2 | 2.2 | 1.2 | 0.2 | 100 |
| 3rd | 99.7 | 93.4 | 0.1 | 0.2 | 4.6 | 1.6 | 0.1 | 100 |
| 4th | 99.3 | 89.8 | 0.1 | 0.6 | 8.3 | 1.1 | 0.2 | 100 |
| 5th | 91.9 | 72.0 | 0.7 | 7.4 | 18.4 | 0.7 | 0.8 | 100 |
| Northern Region | 99.7 | 98.6 | 0.0 | 0.3 | 1.1 | 0.0 | 0.0 | 100 |
| Chitipa | 100.0 | 92.9 | 0.0 | 0.0 | 7.1 | 0.0 | 0.0 | 100 |
| Karonga | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 |
| Nkhata Bay | 98.3 | 98.3 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 100 |
| Rumphi | 100.0 | 98.8 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 100 |
| Mzimba | 99.8 | 99.6 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 100 |
| Mzuzu City | 84.8 | 49.2 | 1.0 | 14.2 | 33.5 | 0.8 | 1.3 | 100 |
| Central Region | 99.6 | 97.7 | 0.1 | 0.4 | 0.6 | 1.3 | 0.1 | 100 |
| Kasungu | 99.6 | 98.8 | 0.2 | 0.2 | 0.0 | 0.8 | 0.0 | 100 |
| Nkhotakota | 99.2 | 97.9 | 0.0 | 0.8 | 1.3 | 0.0 | 0.0 | 100 |
| Ntchisi | 97.5 | 96.2 | 0.0 | 2.5 | 1.3 | 0.0 | 0.0 | 100 |
| Dowa | 99.8 | 94.2 | 0.0 | 0.2 | 1.9 | 3.8 | 0.0 | 100 |
| Salima | 100.0 | 99.6 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 100 |
| Lilongwe Rural | 99.5 | 97.6 | 0.1 | 0.4 | 0.2 | 1.6 | 0.1 | 100 |
| Lilongwe City | 87.1 | 13.8 | 1.7 | 11.3 | 72.5 | 0.4 | 0.4 | 100 |
| Mchinji | 99.6 | 98.7 | 0.0 | 0.4 | 0.8 | 0.0 | 0.0 | 100 |
| Dedza | 100.0 | 97.7 | 0.0 | 0.0 | 0.0 | 2.1 | 0.2 | 100 |
| Ntcheu | 99.8 | 98.3 | 0.2 | 0.0 | 0.6 | 0.8 | 0.0 | 100 |
| Southern Regions | 96.9 | 83.3 | 0.3 | 2.8 | 11.9 | 1.2 | 0.5 | 100 |
| Mangochi | 99.6 | 97.5 | 0.1 | 0.3 | 2.1 | 0.0 | 0.0 | 100 |
| Machinga | 100.0 | 97.7 | 0.0 | 0.0 | 0.8 | 1.5 | 0.0 | 100 |
| Zomba Rural | 100.0 | 99.4 | 0.0 | 0.0 | 0.4 | 0.2 | 0.0 | 100 |
| Zomba Municipality | 94.1 | 50.8 | 0.4 | 5.5 | 43.3 | 0.0 | 0.0 | 100 |
| Chiradzulu | 100.0 | 99.6 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 100 |
| Blantyre Rural | 99.6 | 86.3 | 0.0 | 0.4 | 11.3 | 1.7 | 0.4 | 100 |
| Blantyre City | 96.3 | 85.8 | 0.0 | 3.8 | 10.4 | 0.0 | 0.0 | 100 |
| Mwanza | 100.0 | 99.6 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 100 |
| Thyolo | 98.5 | 94.2 | 0.0 | 1.5 | 1.7 | 0.0 | 2.7 | 100 |
| Mulanje | 99.6 | 98.3 | 0.0 | 0.4 | 1.0 | 0.2 | 0.0 | 100 |
| Phalombe | 100.0 | 82.1 | 0.0 | 0.0 | 0.0 | 17.9 | 0.0 | 100 |
| Chikwawa | 99.8 | 99.0 | 0.0 | 0.2 | 0.8 | 0.0 | 0.0 | 100 |
| Nsanje | 99.2 | 99.2 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 100 |
| Balaka | 100.0 | 99.6 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 100 |

Table 7.6 Percentage Distribution of households by main source of fuels used for lighting according to background characteristics, Malawi 2005

| Background characteristics | Source of fuel for lighting | | | | | | Total |
|---|-----------------------------|------------|-------------|-------------|------------|------------|------------|
| | Firewood | Grass | Paraffin | Electricity | Candles | Other | |
| Malawi | 3.9 | 4.1 | 84.4 | 5.6 | 1.6 | 0.4 | 100 |
| Place of residence | | | | | | | |
| Urban | 1.2 | 0.7 | 56.0 | 32.7 | 9.2 | 0.2 | 100 |
| Rural | 4.2 | 4.5 | 88.3 | 1.9 | 0.6 | 0.5 | 100 |
| Sex of Household Head | | | | | | | |
| Male | 2.7 | 2.9 | 86.0 | 6.3 | 1.7 | 0.4 | 100 |
| Female | 7.7 | 8.1 | 79.4 | 3.0 | 1.3 | 0.5 | 100 |
| Household per capita expenditure | | | | | | | |
| 1st | 5.5 | 7.5 | 86.0 | 0.2 | 0.3 | 0.4 | 100 |
| 2nd | 4.3 | 4.9 | 89.2 | 0.9 | 0.4 | 0.4 | 100 |
| 3rd | 3.7 | 3.3 | 89.9 | 1.8 | 1.0 | 0.2 | 100 |
| 4th | 3.0 | 3.0 | 87.3 | 4.5 | 1.7 | 0.4 | 100 |
| 5th | 2.7 | 1.7 | 69.8 | 20.4 | 4.6 | 0.7 | 100 |
| Northern Region | | | | | | | |
| Chitipa | 5.4 | 1.7 | 90.8 | 2.1 | 0.0 | 0.0 | 100 |
| Karonga | 7.9 | 0.0 | 91.7 | 0.4 | 0.0 | 0.0 | 100 |
| Nkhata Bay | 0.0 | 0.0 | 97.9 | 2.1 | 0.0 | 0.0 | 100 |
| Rumphi | 1.3 | 3.3 | 93.8 | 0.8 | 0.8 | 0.0 | 100 |
| Mzimba | 3.3 | 9.4 | 85.6 | 1.0 | 0.2 | 0.4 | 100 |
| Mzuzu City | 2.1 | 1.7 | 53.9 | 29.6 | 12.5 | 0.2 | 100 |
| Central Region | | | | | | | |
| Kasungu | 2.7 | 12.9 | 79.2 | 1.5 | 2.9 | 0.8 | 100 |
| Nkhotakota | 3.3 | 7.9 | 83.7 | 3.3 | 0.8 | 0.8 | 100 |
| Ntchisi | 19.7 | 4.6 | 65.3 | 6.7 | 3.3 | 0.4 | 100 |
| Dowa | 2.1 | 7.9 | 85.8 | 2.7 | 1.5 | 0.0 | 100 |
| Salima | 2.9 | 10.4 | 85.4 | 0.8 | 0.4 | 0.0 | 100 |
| Lilongwe Rural | 5.4 | 4.5 | 86.4 | 1.4 | 0.4 | 1.9 | 100 |
| Lilongwe City | 0.4 | 0.0 | 53.1 | 38.5 | 7.7 | 0.2 | 100 |
| Mchinji | 2.9 | 7.5 | 85.8 | 2.9 | 0.8 | 0.0 | 100 |
| Dedza | 5.4 | 4.4 | 89.6 | 0.0 | 0.2 | 0.4 | 100 |
| Ntcheu | 5.2 | 2.5 | 91.9 | 0.2 | 0.2 | 0.0 | 100 |
| Southern Region | | | | | | | |
| Mangochi | 2.5 | 1.0 | 93.9 | 2.2 | 0.3 | 0.1 | 100 |
| Machinga | 4.6 | 5.2 | 87.7 | 1.5 | 0.4 | 0.6 | 100 |
| Zomba Rural | 2.5 | 2.9 | 93.8 | 0.6 | 0.0 | 0.2 | 100 |
| Zomba Municipality | 1.7 | 0.0 | 62.5 | 33.3 | 2.5 | 0.0 | 100 |
| Chiradzulu | 0.8 | 4.2 | 94.2 | 0.8 | 0.0 | 0.0 | 100 |
| Blantyre Rural | 0.8 | 3.3 | 90.0 | 3.3 | 2.1 | 0.4 | 100 |
| Blantyre City | 0.0 | 0.0 | 75.8 | 20.0 | 4.2 | 0.0 | 100 |
| Mwanza | 4.6 | 5.0 | 90.4 | 0.0 | 0.0 | 0.0 | 100 |
| Thyolo | 1.0 | 3.8 | 86.9 | 8.1 | 0.2 | 0.0 | 100 |
| Mulanje | 2.3 | 0.4 | 92.5 | 4.4 | 0.4 | 0.0 | 100 |
| Phalombe | 4.6 | 1.3 | 91.7 | 0.0 | 0.8 | 1.7 | 100 |
| Chikwawa | 8.5 | 0.4 | 90.4 | 0.4 | 0.0 | 0.2 | 100 |
| Nsanje | 18.4 | 0.0 | 79.9 | 0.8 | 0.4 | 0.4 | 100 |
| Balaka | 4.2 | 5.0 | 90.4 | 0.0 | 0.0 | 0.4 | 100 |

In terms of per capita expenditure quintiles the proportion of households using paraffin for lighting is at 86 percent for the lowest quintile and is seen to be increasing as the quintiles are increasing, but then drops again in the third quintile. The highest quintile has the lowest proportion at 70 percent. Of the three regions of the country, the northern region has the highest proportion of households using paraffin for lighting at 90 percent while the centre comes second at 85 percent and then the south at 83 percent.

Other than paraffin, the second major source of lighting fuel is electricity. Nearly six percent of households in the country use electricity for lighting, 2 percent in rural areas and 33 percent in the cities.

7.7 Access to electricity and phones

Table 7.7 below shows that less than a quarter of households in Malawi has electricity within 100 metres from their dwelling. The proportion is higher in urban areas at 68 percent, relative to rural areas at 11 percent. By sex of household head, the proportion of households with electricity grid within 100 meters is higher in male-headed households than in female-headed households. The table also reveals that the higher the per capita expenditure quintile the higher the proportion of households with electricity grid within 100m. The centre and the northern region have 8 percent of households with electricity grid within 100 meters from their household. However, the rate is much higher in the southern region at 23 percent.

Although 16 percent of the population has electricity within 100 meters from their household, only 6 percent of households in Malawi have electricity within their household. In urban areas a third of households have electricity in their households, whilst the rate is very low in rural areas where only two percent of households have electricity in the household. More male-headed households have electricity in their household registering 6 percent, whilst only half of this is the case in female-headed households. The proportion of households with electricity in the household is much higher in households in the highest per capita expenditure quintiles, whereby almost one in every five households have electricity, than in any of the other quintiles that have registered less than 5 percent each.

Table 7.7 also reveals that there are more households with mobile phones than with landlines. Three percent of households have reported having a mobile phone while only less than one percent of households have reported having a landline telephone.

Table 7.7 Proportion of households with access to electricity within 100 metres and telephones by background characteristics, Malawi 2005

| Background characteristics | Type of household amenity | | | |
|---|---|-------------------------|--------------------|--------------|
| | Electricity within 100 metres of dwelling | Electricity in dwelling | Landline telephone | Mobile phone |
| Malawi | 16.0 | 5.7 | 0.9 | 3.0 |
| Place of residence | | | | |
| Urban | 68.0 | 33.1 | 5.6 | 18.0 |
| Rural | 11.2 | 2.0 | 0.2 | 0.9 |
| Sex of Household Head | | | | |
| Male | 16.4 | 6.4 | 1.0 | 3.4 |
| Female | 14.8 | 3.3 | 0.5 | 1.4 |
| Household per capita expenditure | | | | |
| 1st | 8.0 | 0.2 | 0.1 | 0.0 |
| 2nd | 11.3 | 0.7 | 0.1 | 0.2 |
| 3rd | 14.3 | 1.9 | 0.1 | 0.4 |
| 4th | 20.0 | 4.6 | 0.1 | 1.5 |
| 5th | 29.3 | 21.2 | 4.1 | 12.8 |
| Northern Region | | | | |
| Chitipa | 11.1 | 2.1 | 0.0 | 0.0 |
| Karonga | 22.7 | 0.4 | 0.0 | 0.8 |
| Nkhata Bay | 6.4 | 2.1 | 0.4 | 0.8 |
| Rumphi | 7.6 | 1.3 | 0.0 | 0.8 |
| Mzimba | 1.9 | 1.7 | 0.0 | 0.4 |
| Mzuzu City | 44.0 | 30.4 | 8.1 | 20.6 |
| Central Region | | | | |
| Kasungu | 8.1 | 2.1 | 0.0 | 0.4 |
| Nkhotakota | 13.8 | 3.3 | 0.8 | 2.1 |
| Ntchisi | 3.2 | 7.1 | 0.4 | 4.2 |
| Dowa | 16.1 | 2.9 | 0.6 | 1.0 |
| Salima | 5.9 | 0.8 | 0.0 | 0.8 |
| Lilongwe Rural | 6.8 | 1.4 | 0.1 | 0.2 |
| Lilongwe City | 92.5 | 38.5 | 4.0 | 16.5 |
| Mchinji | 7.7 | 2.9 | 0.0 | 0.4 |
| Dedza | 2.9 | 0.2 | 0.0 | 0.6 |
| Ntcheu | 8.8 | 0.2 | 0.0 | 1.3 |
| Southern Region | | | | |
| Mangochi | 14.2 | 2.1 | 0.0 | 1.4 |
| Machinga | 13.6 | 1.9 | 0.0 | 0.4 |
| Zomba Rural | 6.3 | 0.6 | 0.0 | 0.4 |
| Zomba Municipality | 79.2 | 33.8 | 5.0 | 16.3 |
| Chiradzulu | 2.5 | 0.8 | 0.0 | 0.0 |
| Blantyre Rural | 29.3 | 3.3 | 0.0 | 3.8 |
| Blantyre City | 78.0 | 20.4 | 1.3 | 12.9 |
| Mwanza | 7.5 | 0.0 | 0.0 | 0.0 |
| Thyolo | 34.5 | 8.1 | 1.7 | 2.1 |
| Mulanje | 28.9 | 5.0 | 0.8 | 2.5 |
| Phalombe | 10.8 | 0.0 | 0.0 | 0.4 |
| Chikwawa | 5.2 | 0.4 | 0.0 | 0.2 |
| Nsanje | 16.4 | 0.8 | 0.8 | 0.8 |
| Balaka | 2.5 | 0.0 | 0.0 | 0.4 |

7.8 Access to proper sanitation

This analysis defines proper toilet sanitation as having either flush toilet or VIP toilet or traditional latrine with a roof. As the table below reveals, almost 62 percent of households in Malawi have proper toilet sanitation. The proportion is even higher in urban areas at 78 percent while it is lower in rural areas at 60 percent. By sex of household head, more male-headed households have proper toilet sanitation than female-headed households. About two-thirds of male-headed households have proper sanitation compared to half of female-headed households. In terms of per capita expenditure quintile, the proportion of households with proper sanitation is increasing as the quintiles are increasing. As noted from the table below, the proportion of households with proper sanitation in the lowest quintile is 52 percent, while the highest quintile has almost three quarters of the households with proper sanitation.

Of the three regions of the country, the central region has the highest proportion of households with proper sanitation followed by the southern region at 62 and then the northern region at 54.

It is also important to note that although 62 percent of households have proper sanitation, 17 percent of households in Malawi do not even have a toilet. More rural households do not have toilets as reported by 19 percent of rural households compared to only 2 percent of urban households. The survey has also revealed that almost a quarter of female-headed households do not have a toilet facility while only 15 percent of male-headed households do not have a toilet facility. As table 7.8 below also reveals, about one in five households in the lowest quintile do not have a toilet while only one in ten households in the highest per capita expenditure quintile do not have a toilet facility. Of the three regions of the country, the central region has the highest proportion of households without a toilet facility at 21 percent followed by the southern region at 15 and then the northern region at 11 percent.

Table 7.8 Proportion of households with proper toilet sanitation and distribution of households by type of toilet facility being used by background characteristics, Malawi 2005

| Background characteristics | Proportion with access to improved sanitation | Type of toilet facility | | | | | | Total |
|---|---|-------------------------|-------------|-------------------------------|----------------------|-------------|------------|------------|
| | | Flush toilet | VIP latrine | Traditional latrine with roof | Latrine without roof | None | Other | |
| Malawi | 61.9 | 2.8 | 1.8 | 57.4 | 20.9 | 16.9 | 0.3 | 100 |
| Place of residence | | | | | | | | |
| Urban | 78.3 | 14.0 | 3.9 | 60.4 | 18.8 | 2.9 | 0.0 | 100 |
| Rural | 59.7 | 1.2 | 1.5 | 56.9 | 21.2 | 18.8 | 0.3 | 100 |
| Sex of Household Head | | | | | | | | |
| Male | 65.5 | 3.1 | 2.0 | 60.4 | 20.2 | 14.1 | 0.2 | 100 |
| Female | 50.1 | 1.8 | 1.1 | 47.2 | 22.9 | 26.6 | 0.4 | 100 |
| Household per capita expenditure | | | | | | | | |
| 1 st | 53.1 | 0.5 | 1.0 | 51.7 | 24.4 | 21.9 | 0.5 | 100 |
| 2 nd | 56.9 | 0.6 | 1.0 | 55.2 | 23.4 | 19.5 | 0.2 | 100 |
| 3 rd | 60.1 | 1.1 | 1.3 | 57.7 | 21.3 | 18.2 | 0.4 | 100 |
| 4 th | 64.4 | 1.7 | 1.8 | 60.9 | 20.4 | 15.1 | 0.1 | 100 |
| 5 th | 75.0 | 9.9 | 3.8 | 61.3 | 14.8 | 10.0 | 0.2 | 100 |
| Northern Region | 53.7 | 0.8 | 0.9 | 52.0 | 35.0 | 11.1 | 0.2 | 100 |
| Chitipa | 87.5 | 0.0 | 0.0 | 87.5 | 9.6 | 2.9 | 0.0 | 100 |
| Karonga | 16.3 | 1.7 | 1.3 | 13.3 | 68.8 | 14.6 | 0.4 | 100 |
| Nkhata Bay | 41.7 | 1.3 | 2.9 | 37.5 | 55.8 | 2.5 | 0.0 | 100 |
| Rumphi | 82.5 | 2.9 | 0.4 | 79.2 | 11.3 | 6.3 | 0.0 | 100 |
| Mzimba | 56.9 | 0.0 | 0.4 | 56.5 | 26.7 | 16.3 | 0.2 | 100 |
| Mzuzu City | 66.3 | 19.4 | 3.8 | 43.1 | 28.8 | 5.0 | 0.0 | 100 |
| Central Region | 63.9 | 1.4 | 1.0 | 61.5 | 15.1 | 20.7 | 0.3 | 100 |
| Kasungu | 65.1 | 0.4 | 0.0 | 64.7 | 11.9 | 23.0 | 0.0 | 100 |
| Nkhotakota | 76.2 | 10.5 | 0.0 | 65.7 | 9.2 | 14.6 | 0.0 | 100 |
| Ntchisi | 61.7 | 5.0 | 4.2 | 52.5 | 27.5 | 10.8 | 0.0 | 100 |
| Dowa | 59.4 | 0.4 | 0.6 | 58.3 | 16.5 | 24.2 | 0.0 | 100 |
| Salima | 54.4 | 0.0 | 2.9 | 51.5 | 17.2 | 28.0 | 0.4 | 100 |
| Lilongwe Rural | 68.4 | 1.1 | 0.8 | 66.5 | 13.6 | 17.7 | 0.2 | 100 |
| Lilongwe City | 90.6 | 9.6 | 3.1 | 77.9 | 8.8 | 0.6 | 0.0 | 100 |
| Mchinji | 60.0 | 1.7 | 1.7 | 56.7 | 5.4 | 34.6 | 0.0 | 100 |
| Dedza | 60.2 | 0.0 | 0.4 | 59.8 | 20.8 | 19.0 | 0.0 | 100 |
| Ntcheu | 64.9 | 0.2 | 0.6 | 64.1 | 18.0 | 15.0 | 2.1 | 100 |
| Southern Region | 62.0 | 4.0 | 2.5 | 55.5 | 22.3 | 15.4 | 0.3 | 100 |
| Mangochi | 58.6 | 1.0 | 2.8 | 54.8 | 32.8 | 8.2 | 0.4 | 100 |
| Machinga | 63.1 | 0.2 | 0.2 | 62.7 | 15.2 | 21.3 | 0.4 | 100 |
| Zomba Rural | 59.0 | 0.6 | 0.4 | 57.9 | 27.9 | 12.3 | 0.8 | 100 |
| Zomba Municipality | 81.7 | 17.9 | 3.8 | 60.0 | 17.5 | 0.8 | 0.0 | 100 |
| Chiradzulu | 42.1 | 0.0 | 0.4 | 41.7 | 53.8 | 4.2 | 0.0 | 100 |
| Blantyre Rural | 54.2 | 0.8 | 1.7 | 51.7 | 22.9 | 22.9 | 0.0 | 100 |
| Blantyre City | 78.7 | 4.6 | 8.8 | 65.3 | 16.3 | 5.0 | 0.0 | 100 |
| Mwanza | 66.3 | 0.0 | 2.1 | 64.2 | 9.6 | 24.2 | 0.0 | 100 |
| Thyolo | 71.4 | 5.0 | 2.3 | 64.1 | 19.4 | 9.2 | 0.0 | 100 |
| Mulanje | 75.4 | 2.1 | 5.4 | 67.9 | 17.1 | 100 | 2.9 | 100 |
| Phalombe | 44.6 | 0.0 | 0.4 | 44.2 | 17.9 | 36.3 | 1.3 | 100 |
| Chikwawa | 51.4 | 0.2 | 9.2 | 42.0 | 8.6 | 40.1 | 0.0 | 100 |
| Nsanje | 30.4 | 1.3 | 0.4 | 28.8 | 16.3 | 53.3 | 0.0 | 100 |
| Balaka | 49.4 | 0.0 | 0.0 | 49.4 | 31.4 | 19.2 | 0.0 | 100 |

7.9 Use of disposal facilities

The most commonly used method of disposal in households of Malawi is rubbish pit. About 49 percent of households in Malawi reported using this method. About half of rural households reported to be using this method while 45 percent of urban households are using this method. Table 7.9 below further reveals that half of male-headed households use rubbish pit as a means of garbage disposal while two in five female-headed households use this method. By per capita expenditure quintile, the proportion of households that use rubbish pit is increasing as the expenditure quintiles are increasing. The lowest quintile has reported 43 percent of households using this method while 53 percent reported using this method in the highest quintile.

The second highest means of disposing rubbish is public rubbish heaping. About 20 percent of households have reported using this method. The proportion is higher in urban areas, where nearly one in every four households reported using this method. Slightly lower than urban areas, rural areas have reported that nearly one in five households use this method for disposing their rubbish. There are not much differences between sex of household head and rubbish disposal facility being used

About 18 percent of households in Malawi have reported as using no means of disposing their garbage. The case is more severe in rural areas than in urban areas. About one in every five households in rural areas does not use any type of rubbish disposal. More female-headed households do not use any type of rubbish disposal (23 percent) than male-headed households (17 percent). The lower the expenditure quintile the higher the proportion of households having no means of rubbish disposal and the opposite is also true. The proportion of households having no any type of rubbish disposal is higher in the northern region at 29 percent followed by the southern region at 19 percent and then finally the central region at 14 percent.

Table 7.9 Percentage distributions of households by kind of rubbish disposal used by background characteristics, Malawi 2005

| Background characteristics | Type of rubbish disposal | | | | | | Total |
|---|----------------------------|-------------|------------|---------------------|------------|-------------|------------|
| | Collected from rubbish bin | Rubbish pit | Burning | Public rubbish heap | Other | None | |
| Malawi | 2.9 | 49.3 | 7.0 | 19.4 | 3.3 | 18.1 | 100 |
| Place of residence | | | | | | | |
| Urban | 16.5 | 44.9 | 7.1 | 24.5 | 1.0 | 5.9 | 100 |
| Rural | 1.0 | 49.9 | 6.9 | 18.7 | 3.6 | 19.8 | 100 |
| Sex of Household Head | | | | | | | |
| Male | 3.1 | 51.6 | 6.8 | 18.8 | 2.8 | 16.7 | 100 |
| Female | 2.1 | 41.5 | 7.5 | 21.4 | 4.9 | 22.6 | 100 |
| Household per capita expenditure | | | | | | | |
| 1st | 0.8 | 43.9 | 7.9 | 21.5 | 3.5 | 22.4 | 100 |
| 2nd | 1.2 | 46.6 | 7.7 | 20.8 | 3.9 | 19.8 | 100 |
| 3rd | 1.6 | 50.2 | 6.7 | 19.4 | 3.5 | 18.5 | 100 |
| 4th | 2.2 | 53.1 | 6.7 | 18.4 | 3.2 | 16.4 | 100 |
| 5th | 8.6 | 52.9 | 5.8 | 17.1 | 2.4 | 13.3 | 100 |
| Northern Region | 2.0 | 63.0 | 1.6 | 1.4 | 3.5 | 28.5 | 100 |
| Chitipa | 0.0 | 59.2 | 0.0 | 0.4 | 0.4 | 40.0 | 100 |
| Karonga | 5.5 | 72.7 | 0.4 | 0.4 | 9.7 | 11.3 | 100 |
| Nkhata Bay | 3.3 | 90.4 | 6.3 | 0.0 | 0.0 | 0.0 | 100 |
| Rumphi | 2.9 | 67.2 | 0.0 | 1.7 | 0.8 | 27.3 | 100 |
| Mzimba | 0.4 | 49.2 | 1.3 | 2.5 | 3.8 | 42.9 | 100 |
| Mzuzu City | 23.2 | 42.2 | 5.2 | 26.9 | 1.5 | 1.0 | 100 |
| Central Region | 0.6 | 56.8 | 7.2 | 18.2 | 2.9 | 14.3 | 100 |
| Kasungu | 0.2 | 47.3 | 0.4 | 2.9 | 0.0 | 49.2 | 100 |
| Nkhotakota | 1.7 | 51.7 | 24.2 | 20.4 | 0.4 | 1.7 | 100 |
| Ntchisi | 0.0 | 82.9 | 0.8 | 16.3 | 0.0 | 0.0 | 100 |
| Dowa | 0.8 | 56.3 | 12.1 | 20.4 | 1.5 | 9.0 | 100 |
| Salima | 1.7 | 44.2 | 2.9 | 47.1 | 0.0 | 4.2 | 100 |
| Lilongwe Rural | 0.7 | 61.8 | 2.1 | 11.6 | 3.7 | 20.1 | 100 |
| Lilongwe City | 12.7 | 43.3 | 11.7 | 26.9 | 0.4 | 5.0 | 100 |
| Mchinji | 0.8 | 87.1 | 0.0 | 12.1 | 0.0 | 0.0 | 100 |
| Dedza | 0.0 | 59.5 | 10.6 | 26.5 | 2.1 | 1.3 | 100 |
| Ntcheu | 0.2 | 27.1 | 19.8 | 23.0 | 14.4 | 15.4 | 100 |
| Southern Region | 4.5 | 42.0 | 7.8 | 23.3 | 3.5 | 18.8 | 100 |
| Mangochi | 1.0 | 40.3 | 29.4 | 6.5 | 2.9 | 19.9 | 100 |
| Machinga | 0.6 | 25.1 | 4.4 | 16.1 | 0.0 | 53.9 | 100 |
| Zomba Rural | 0.2 | 69.4 | 0.4 | 12.7 | 0.4 | 16.9 | 100 |
| Zomba Municipality | 10.0 | 64.2 | 0.4 | 12.9 | 3.3 | 9.2 | 100 |
| Chiradzulu | 1.3 | 22.1 | 0.0 | 18.3 | 0.4 | 57.9 | 100 |
| Blantyre Rural | 1.3 | 40.8 | 3.8 | 8.8 | 2.5 | 42.9 | 100 |
| Blantyre City | 5.8 | 51.7 | 0.4 | 9.2 | 0.0 | 32.9 | 100 |
| Mwanza | 0.4 | 75.3 | 0.0 | 0.0 | 0.0 | 24.3 | 100 |
| Thyolo | 2.9 | 33.2 | 0.0 | 61.2 | 0.6 | 2.1 | 100 |
| Mulanje | 0.8 | 49.6 | 1.9 | 33.3 | 0.0 | 14.4 | 100 |
| Phalombe | 0.0 | 31.7 | 14.6 | 2.5 | 0.8 | 50.4 | 100 |
| Chikwawa | 0.8 | 21.3 | 17.1 | 59.1 | 0.0 | 1.7 | 100 |
| Nsanje | 1.7 | 38.5 | 5.4 | 49.8 | 4.6 | 0.0 | 100 |
| Balaka | 2.5 | 41.3 | 0.8 | 4.6 | 50.8 | 0.0 | 100 |