HOUSING CHARACTERISTICS & AMENITIES

SUMMARY OF THE THEMATIC REPORT

TIMOR-LESTE POPULATION & HOUSING CENSUS 2015
Households in Timor-Leste are larger than in neighboring countries. The average household size in Indonesia, for example, is 4.0, in Papua New Guinea it is 5.3 and 4.8 in Vanuatu. It can be argued that the average household size in a country is driven mainly by fertility rates, but it may also be attributed to other factors such as socio-cultural reasons, as well as political and economic motivations.

### Average household sizes in selected countries in South-east Asia

![Average household sizes in selected countries in South-east Asia](image)

Furthermore, comparing 2015 Census data at national level over time, going back to 2004, shows that:

* There has been no real change in the average household size at national level since the 2010 Census,
* Households in urban area are bigger than in rural areas (6.4 compared to 5.5 people in the 2015 Census)

This trend is supported by the latest Demographic and Health Survey (DHS) data.

### Mean household sizes (Census 2004-2015, DHS 2016)

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<tbody>
<tr>
<td>Timor-Leste</td>
<td>5.8</td>
<td>5.7</td>
<td>4.3</td>
<td>5.3</td>
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<tr>
<td>Urban</td>
<td>6.4</td>
<td>6.4</td>
<td>4.9</td>
<td>6</td>
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<tr>
<td>Rural</td>
<td>5.5</td>
<td>5.4</td>
<td>4.1</td>
<td>5</td>
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### Building Materials

In general, there is a marked trend towards the use of more modern, more durable building materials in Timor-Leste, which indicates a rise in the overall quality of housing.

For the construction of external walls, concrete and bricks are now the preferred choice, while the use of bamboo is decreasing.

Similarly, durable floor materials (concrete and tiles) are on the rise, while there is a marked fall in the use of non-durable flooring materials (wood, soil, bamboo). A similar trend can be observed for roof materials.

While this is positive news, indicating a trend towards higher-quality and more durable building materials, the urban-rural divide is still significant, and the overall increase in the use of durable, modern building materials (such as concrete or bricks) is mainly driven by changes in Dili. In the other municipalities, more than 70% of houses are using bamboo, wood, mud, or similar traditional materials for the construction of external walls, and 1 out of 4 houses in rural areas has a ‘traditional’ roof made of palm leaves, thatch or grass.

Of course, the use of traditional building materials itself does not necessarily indicate an inferior housing standard. Nonetheless, in a country like Timor-Leste with its tropical climate and prolonged rainy season, an upgrade of housing stock in rural areas would no doubt make a difference to the overall living conditions of the majority of the population.
Since the previous Census in 2010, good progress has been made towards achieving the Millennium Development Goals, especially regarding urban water supply and sanitation. 91% of households in urban areas have access to an improved water source.

Improved water sources include piped water, public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, as well as rainwater collection.

At the national level, 75% of households have access to an improved drinking water source, and the use of unimproved water sources in rural areas has dropped by 10% from 2010, down to 32% in 2015. Unimproved water sources include unprotected wells or springs, and surface water.

However, on-going commitment and investment is needed in order to achieve the Sustainable Development Goal on access to safely managed water sources and sanitation for all by 2030.

More than half of all households at a national level have access to outdoor or public taps/pumps. That is more than a 10% increase since the 2010 Census, and certainly a major improvement for the lives of many. Nonetheless, progress in achieving access to safely managed water sources has been limited, with only 6.8% of all households being able to use these water sources compared to 6% in 2010.

Households' access to drinking water, National level (Census 2010, 2015)
For a water source to be considered ‘safely managed’, the source must meet three conditions:

* It should be located on premises.
* Water should be available when needed.
* Water should be free from faecal and chemical contamination.

In line with international practice, if any of these conditions is not met or cannot be determined, then the source will be categorised as ‘basic’. In rural areas, the situation is far worse than in towns and cities. Nearly one in three households (29.6%) are relying on either surface water or water from an unimproved source as their main source of drinking water, and only 1.8% have access to safely managed water sources as compared to 20.7% in urban areas.

Households' access to drinking water, urban/rural (Census 2010, 2015)

Regarding sanitation, at a national level good progress has been made; nearly a third of households (31%) are using an improved toilet facility that is not shared with other households and where waste is safely disposed of. However, nearly 1 in 5 households (18%) nationally still have to practice open defecation. In rural areas, more than half of all households (51.7%) either practice open defecation or use an unimproved toilet facility.

Sanitation levels, urban/rural (Census 2015)

Water and sanitation related diseases are still a major concern in Timor-Leste, threatening the lives of especially the youngest in society, and causing huge costs, both for people and for the economy. Progress towards achieving the Sustainable Development Goal on water and sanitation has been limited so far, and especially in rural areas. Work remains to be done in order to improve the lives of the majority of the population and to achieve access to clean drinking water and sanitation for all.
The type of cooking fuels used is linked to electrification rates. More than 30% of rural households do not have access to electricity. In addition, the price of appliances that use clean cooking fuels exceeds what most rural households are able to pay.

As for lighting fuels, in rural areas the use of clean lighting fuels (solar, electricity) tripled from 24% in 2010 to 77% in 2015, while the use of marginally clean fuels (kerosene, candles, biogas) fell from more than 60% to 20%. In almost all municipalities, between 78% and 86% of households had access to clean lighting fuel in 2015—the only outlier being Viqueque with only 70% of households using clean fuels for lighting.

The use of some cooking fuels, especially when used indoors, can have detrimental effects on household members’ health. Indoor air pollution is associated with inflammation of the airways and lungs, pneumonia, chronic bronchitis, stroke, lung cancer and damage to the immune defense system generally. The World Health Organization estimates that globally, each year 3.8 million people die prematurely from illnesses attributable to the household air pollution caused by the inefficient use of solid fuels and kerosene for cooking.

At a national level, unclean energy sources are still the predominantly used cooking fuel—82% of households rely on wood to prepare food. In the rural areas, the percentage is even higher at 92%. On the positive side, in urban areas we can see a 20% drop in the use of unclean energy sources for cooking, and a 20% rise in the use of clean sources such as electricity and gas. While this trend is encouraging, the high percentage of households in rural areas using unclean energy sources for food preparation is a reason for concern.

### Cooking fuels used by households, per cent (Census 2015)

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<tbody>
<tr>
<td>Clean</td>
<td>11.8</td>
<td>32.0</td>
<td>1.3</td>
<td>6.0</td>
<td>4.0</td>
<td>12.9</td>
</tr>
<tr>
<td>Marginally clean</td>
<td>14.2</td>
<td>14.6</td>
<td>3.4</td>
<td>1.9</td>
<td>6.2</td>
<td>5.3</td>
</tr>
<tr>
<td>Unclean</td>
<td>74.0</td>
<td>53.4</td>
<td>95.3</td>
<td>92.2</td>
<td>89.8</td>
<td>81.8</td>
</tr>
</tbody>
</table>

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### Clean lighting fuels used by households, selected Municipalities, per cent (Census 2010, 2015)

![Chart showing clean lighting fuels used by households, selected Municipalities, per cent (Census 2010, 2015)]
To assess the overall quality of the available housing stock in Timor-Leste, an aggregate score for each dwelling was calculated. The methodology used is simple: for example, wall, roofing and floor materials are assigned values according to their durability. Similarly, the main source of drinking water is ranked based on how hygienic the conditions of the water source are, and the same approach is used for the assessment of fuel used for lighting and cooking.

At a national level, only 0.9% of houses are classified as being of the lowest quality. While this is encouraging, it is the urban-rural divide that stands out from the data. In Dili, 80% of houses are of either the highest or the second highest quality, and no dwellings are in the bottom category. However, in a number of municipalities such as Baucau and Oecusse, over a third of all dwelling are of either the lowest or the second lowest quality.

Households by housing quality ranking (Census 2015)
The data shows a strong correlation between employment status of the household head and the quality of the dwelling. More than 60% of heads of households residing in accommodation of the highest quality are employees in the public or private sector. On the other end of the spectrum, the majority of household heads occupying houses of the lowest quality are own-account workers.

Houses of the highest quality are predominantly occupied by government and private sector employees, while own account workers more commonly reside in lower quality housing. Further research should investigate whether this is caused by income differences (i.e. own-account workers cannot afford higher quality housing), or if this is just a geographical correlation – higher percentages of government and private sector employees reside in Dili, which is also where the overall housing stock is of a higher quality compared to the other municipalities.

**Key Findings**

- Timor-Leste’s average household size is 5.8, much larger than in neighbouring countries.
- Less than 1 in 10 households nationally (6.8%) have access to safely managed water sources. In rural areas, nearly every third household (29.6%) is relying on surface water or water from an unimproved source as their main source of drinking water.
- Nearly 1 in 5 households is still practicing open defecation. The number is even higher in rural areas where more than half of all households (51.7%) are relieving themselves in bushes or fields or use an unimproved toilet facility.
- More than 90% of households in rural areas are using unclean sources of cooking fuel, thereby exposing household members to increased health risks.
- Generally, housing in rural areas is of significantly lower quality than in urban areas, Dili in particular.
- More detailed monitoring of drinking water quality is needed to track improvements in living conditions, with reference to SDG 6 (‘Ensure availability and sustainable management of water and sanitation for all’).
Timor-Leste Population & Housing Census 2015

https://www.mof.gov.tl/?lang=en
http://www.statistics.gov.tl/
http://timor-leste.unfpa.org/en