UNDERSTANDING HOUSEHOLD INCOMES: KENYA
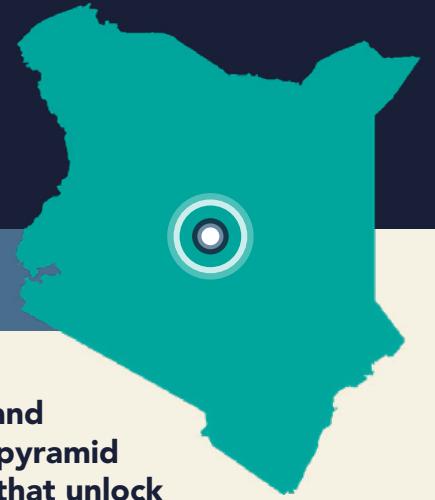
Reall is an innovator and investor in affordable housing in Africa and Asia. Specifically targeting the urban bottom 40% of the income pyramid (UB40), we develop, refine and share innovative housing models that unlock the political will, capital investment and end-user finance needed to create conditions for low-income households to secure homes.

Effectively measuring household incomes is notoriously challenging. This fact sheet uses household expenditure as a proxy for income, a common approach that is generally seen as more accurate for countries with large informal sectors. However, this approach can result in an underestimate of actual incomes in the case of upper income households.

Using the Integrated Household Budget Survey 2015-2016, this brief uses public sector data on household consumption to help inform decision making in key locations within urban Kenya (see Methodology for further information).

URBAN NATIONAL AND COUNTIES

Kenya's devolved government is split into 47 counties. The country's largest cities of Nairobi and Mombasa align with the boundaries of Nairobi County and Mombasa County respectively. Other counties cover significantly larger geographical areas though, often including a primary urban area plus additional smaller towns. As such, caution should be taken in using this data.

This brief focuses on Nairobi and its surrounding counties (Machakos, Kiambu, Kajiado), plus Mombasa, Nakuru and Kisumu. At a national urban level, UB40 households earn a maximum of KES 19,623 (USD 194)[1] per month, rising to KES 42,231 (USD 417) for the 80th percentile. Unsurprisingly, incomes in Urban Nairobi County are significantly higher than this, with figures of KES 24,541 (USD 242) at the 40th percentile and KES 50,366 (USD 498) at the 80th percentile.

Using consumption as a proxy for income means that data is particularly sensitive to household sizes, and unsurprisingly both household size and number of earners per household generally increase the further up the consumption scale you go, ranging from a national average of 1.8 persons per home for the 1st-20th percentiles to 3.9 for the 61st-80th percentiles.

■ **Maximum household monthly income by quintile, and sample sizes**
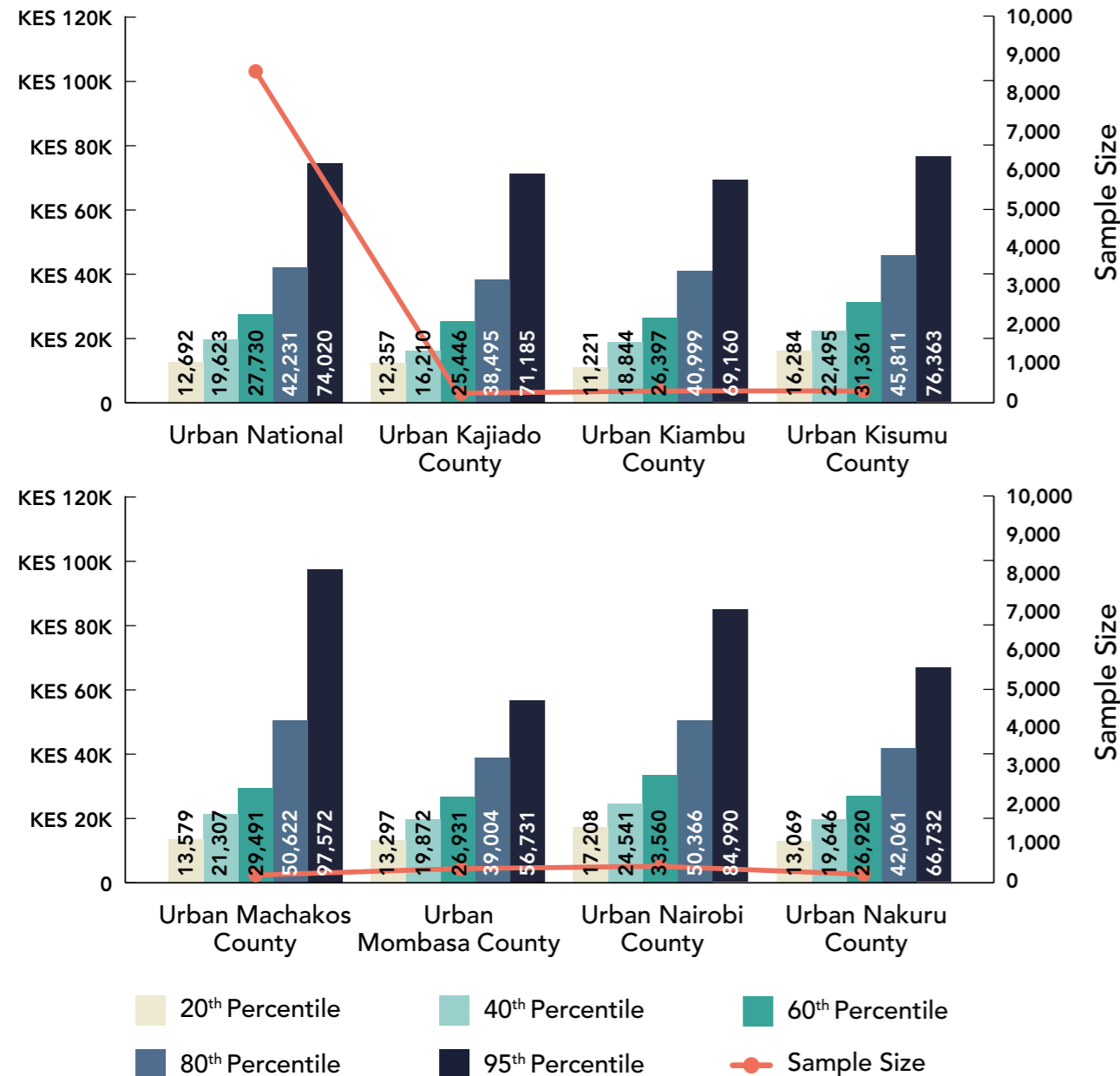

Household sizes in Urban Nairobi County are generally smaller than in other locations, with a mean of 3.0 persons (compared to 3.3 at national urban level), and 2.5 at the 21st-40th percentile level (compared to 2.6). However, the opposite is true for Mombasa households, with a mean of 4.0. There is a similar pattern in terms of number of earners per household, with a mean of 1.6 for national urban households, 1.5 for Nairobi households and 1.9 for Mombasa households.

■ **40th percentile household monthly income in USD**

Region	Urban National	Urban Kajiado County	Urban Kiambu County	Urban Kisumu County	Urban Machakos County	Urban Mombasa County	Urban Nairobi County	Urban Nakuru County
40th Percentile (USD) ($1 = INR 101.22 on 31/08/16)	USD 194	USD 160	USD 186	USD 222	USD 211	USD 196	USD 242	USD 194

■ **Mean household size and No. of income earners by income quintile**
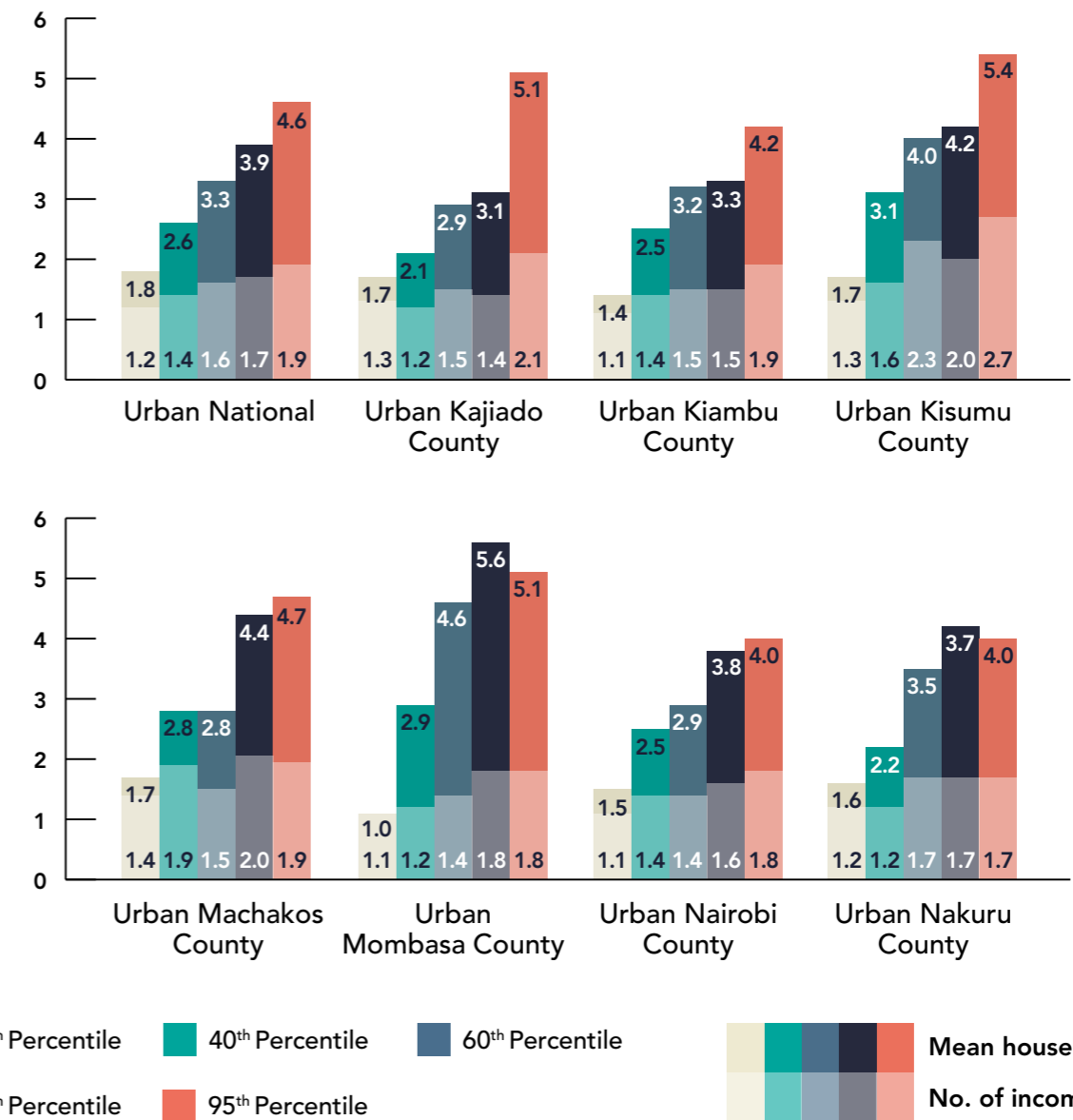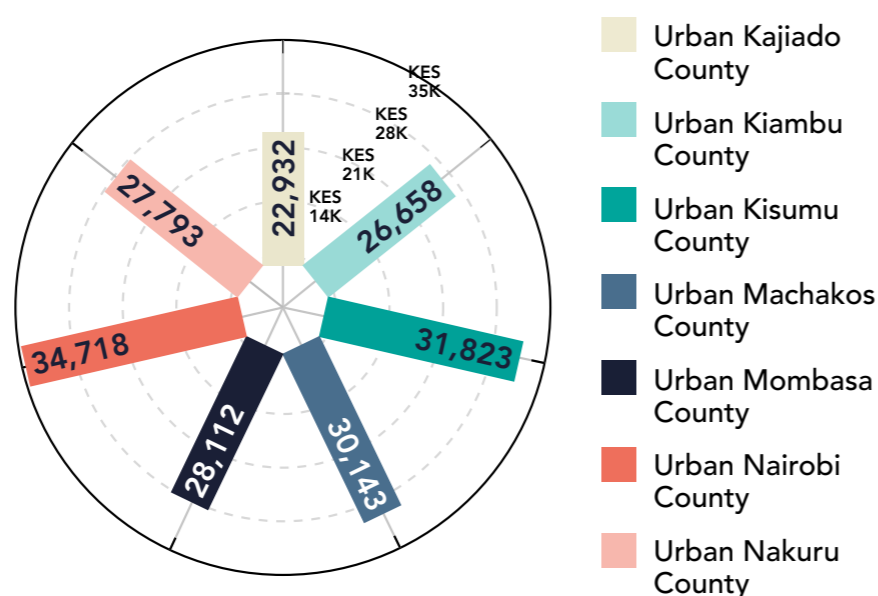
1 Exchange rate is USD 1 = KES 101.22 and based on 31/08/2016, the final day of data collection.

ADJUSTING FOR 2022

Income data presented here represents 2016, and needs adjusting to accurately reflect 2022. Taking the same approach across all income groups is problematic as inflation impacts households differently depending on their wealth and consumption patterns, particularly as a result of the COVID pandemic. However, utilising the Consumer Price Index is likely the simplest way to model this. Kenya has seen its CPI increase by 6.29% in 2016, 8.01% in 2017, 4.69% in 2018, 5.24% in 2019, 5.40% in 2020, and 6.11% in 2021, resulting in an overall increase of 41.47%.[2] The table to the right shows the impact of this on the 40th percentile for selected cities, inflating 2016 data to represent 2022.

Maximum household monthly income for the 40th percentile (2022 projected)

- Urban Kajiado County
- Urban Kiambu County
- Urban Kisumu County
- Urban Machakos County
- Urban Mombasa County
- Urban Nairobi County
- Urban Nakuru County

METHODOLOGY

The Integrated Household Budget Survey (IHBS) is produced by the Kenya National Bureau of Statistics. IHBS is a nationally representative household survey focused on presenting income and consumption expenditure data, with the current round covering 21,774 households. The full data and descriptions are freely available from the Kenya National Data Archive,[3] with further information also available from the International Household Survey Network.[4] Data is split into separate data files for different sections of the survey, meaning that a certain amount of engineering is required to create a single dataset for analysis.

Key sections of the IHBS survey used for this work are Consumption_aggregate, which provides all household expenditure, household sizes and weightings; and HH_Members_Information, which provides employment data for each household member.

The IHBS focuses on consumption expenditure, so this is used as a proxy for income. This is generally seen as good practice, providing more reliable responses from participants. However, it may also result in slightly lower figures than would have been collected for income, particularly for wealthier households.

Reall's analysis of this data and wider work on incomes and affordability is continuing to be built on, and subject to change. Please check Reall's website for the latest version of these briefs and aligned work.

2   https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG
3   https://statistics.knbs.or.ke/nada/index.php/catalog/13/study-description
4   https://catalog.ihsn.org/catalog/7432/study-description

FURTHER INFORMATION

This brief forms part of a collection of fact sheets looking at household income and wider data on the urban bottom 40% of the income pyramid, which can be found at **reall.net**. The data builds on the Market Shaping Indicators programme, an initiative created by Reall and the **Centre for Affordable Housing Finance in Africa (CAHF)**, collating housing market data for individual countries and making it available to all. Reall and CAHF partnered with **71point4** to compile data for African countries, which can be further explored at **reall.net/msi**.

Select counties are published in this brief based on Reall's current focus and activities. However, this work can be undertaken for other counties too. To discuss this data further, please contact the Global Policy and Influence team at **info@reall.net.**

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2022