

UNDERSTANDING HOUSEHOLD INCOMES: PAKISTAN

DECEMBER 2022



Reall is an innovator and investor in climate-smart, 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 favourable conditions for low-income households to secure homes.

Effectively measuring household incomes is notoriously challenging. No data is likely to be 'accurate', but using the Household Integrated Economic Survey (HIES) 2018/19, supplemented with data from the Demographic and Health Survey (DHS) 2017/18, this fact sheet uses public sector data on household incomes to help inform decision-making in key locations within urban Pakistan (see Methodology for further information).

Reall-funded affordable housing project
by Ansaar Management Company
Faisalabad, Punjab



URBAN NATIONAL AND PROVINCES

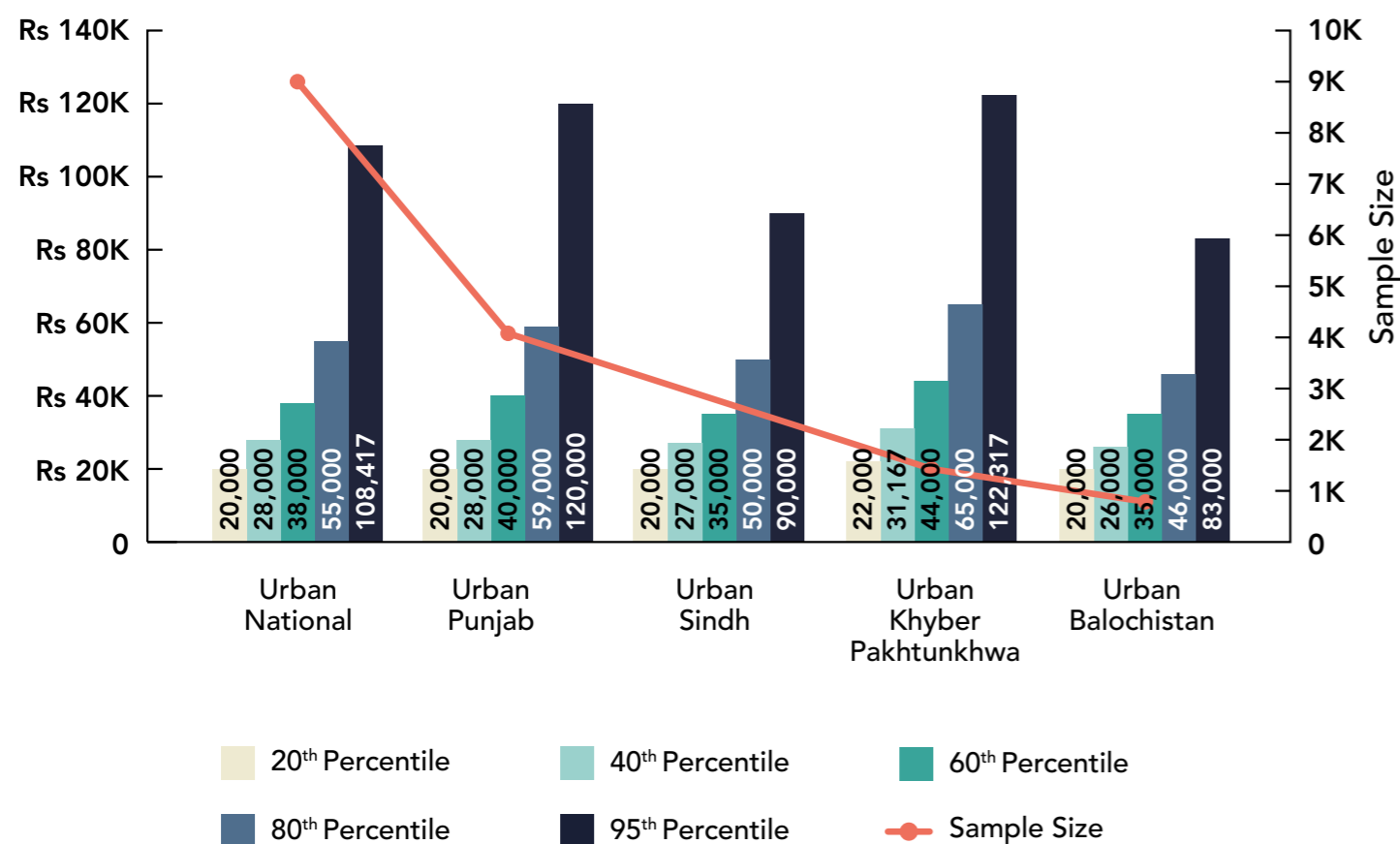
In Pakistan, formal and informal urban employment is dominated by men, with over 95% of men aged 15-45 having worked in the past 7 days, compared with under 15% of women of the same age. There is little variation across wealth quintiles.¹ As a result, the majority of households have just one income earner (further detailed below), constraining household incomes.

Published HIES data labels each household in terms of province and division,² meaning that the data below can be confidently relied upon to reflect the relevant province, with appropriate sample sizes.

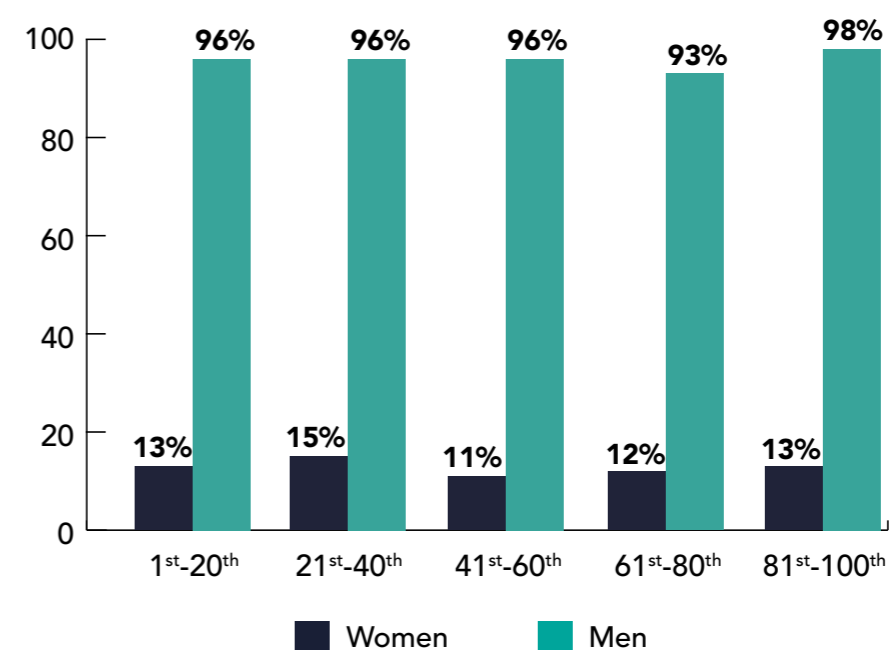
Unsurprisingly across all provinces, number of earners per household increases the further up the income scale you go, ranging from an urban national average of 1.2 for the 1st-20th percentiles to 1.8 for the 61st-80th percentiles. However, in all but one case (61st-80th percentiles in Urban Sindh), the mean is under two earners per household.

As a result, at a national urban level UB40 households earn a maximum of PKR 28,000 (USD 172)³ per month, rising to PKR 55,000 (USD 337) for the 80th percentile. At a provincial level there is significant variation at the upper end of the income pyramid (PKR 46,000-65,000 or USD 282-399), but variations are more limited at the 40th percentile (PKR 26,000-31,167 or USD 159-191).

Maximum household monthly income by quintile, and sample sizes



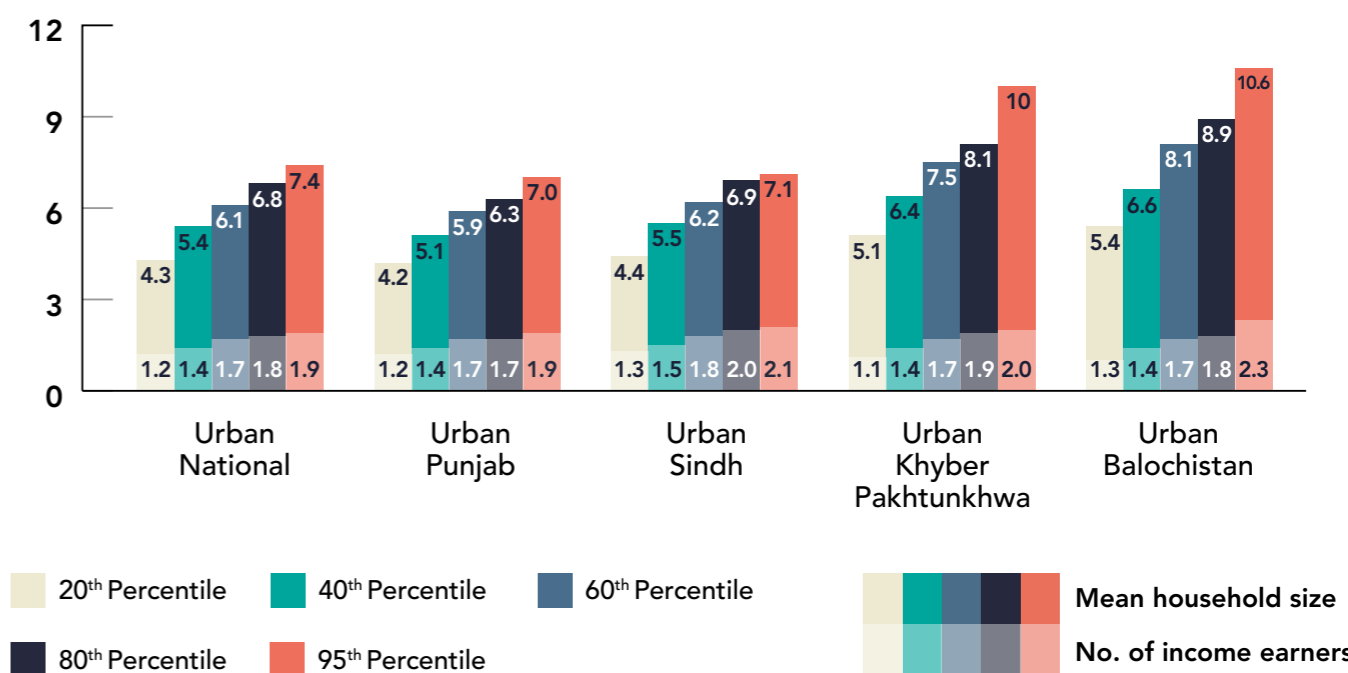
Proportion of national urban women and men currently working, by wealth quintile



40th percentile household monthly income in USD

Region	Urban National	Urban Punjab	Urban Sindh	Urban KPK	Urban Balochistan
40th Percentile (USD) (\$1 = PKR 162.98 on 30/06/19)	USD 172	USD 172	USD 166	USD 191	USD 160

Mean household size and No. of income earners by income quintile



¹ Data is split into 'quintiles' or fifths of total population, with the 1st-20th Percentiles referring to the bottom quintile or the poorest households. Within the DHS, households are grouped into 'wealth quintiles' based on assets rather than income. This is discussed further in the methodology section of this brief.
² Divisions are large administrative areas made up of multiple districts, often covering a combination of rural and urban areas.
³ Exchange rate is USD 1 = PKR 162.98 and based on 30/06/2019, the final day of data collection.

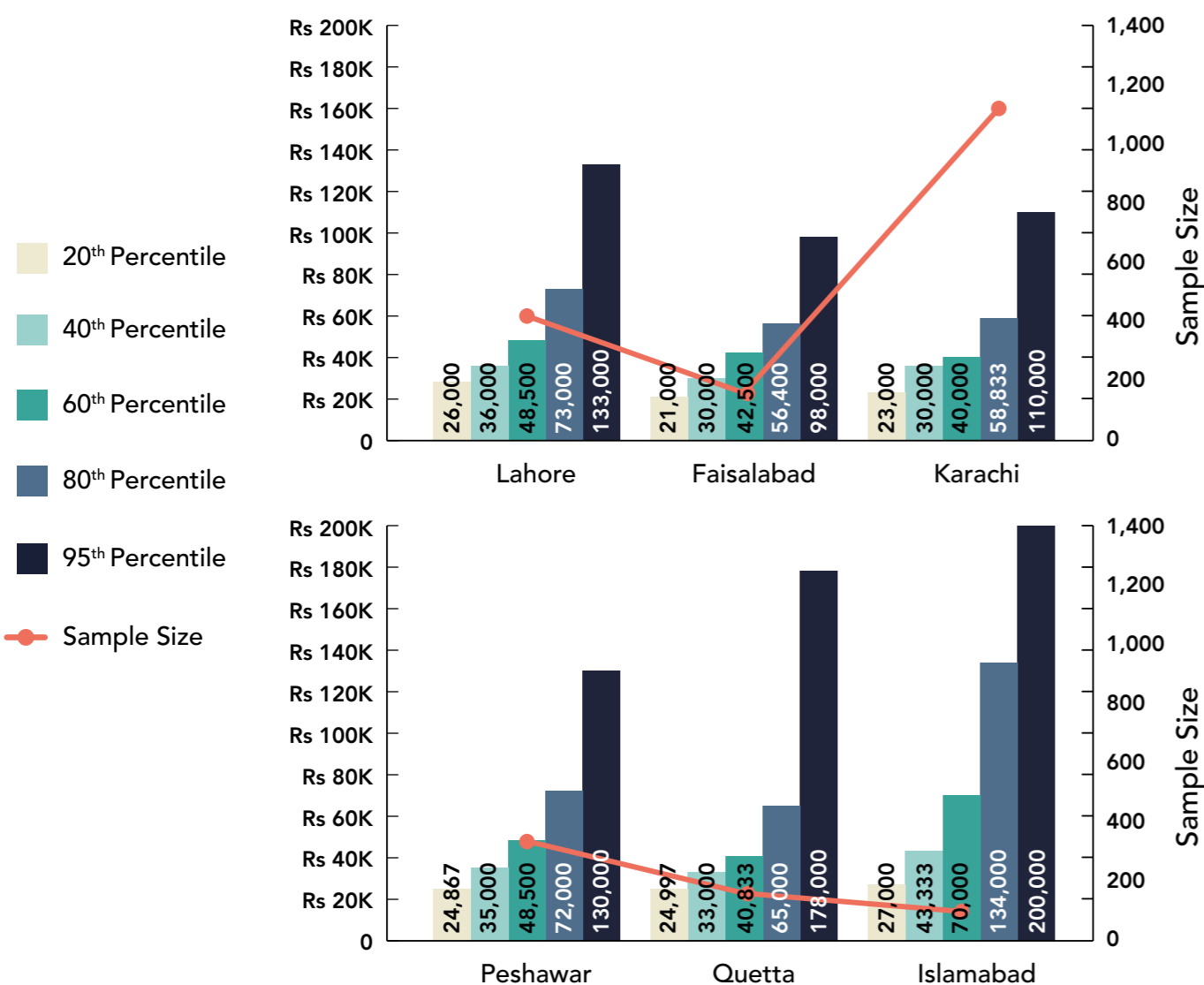
CITIES

City data is not directly available through the raw data, with built-in aggregations only showing data localised to division level. However, by utilising data on distance from the local Pakistan Bureau of Statistics office and comparing with satellite imagery, it is possible to create a sample. Using this technique, data has been established for Lahore and Faisalabad, Punjab; Karachi, Sindh; Peshawar, Khyber Pakhtunkhwa (KPK); Quetta, Balochistan; and Islamabad, National Capital Territory.⁴ As this methodology is not in-built within the data (with the exception of Islamabad) and sample sizes are significantly smaller than those for provinces, caution is advised when using these figures.

Incomes for selected cities are generally higher than the equivalent urban provincial figures. This is true for both the lower and upper ends of the spectrum, but particularly the case at the upper end. For the 40th percentile, figures range from around PKR 30,000 (USD 184) in Faisalabad, Karachi and Quetta, to PKR 40,000 (USD 245) in Islamabad. At the upper end, households at the 80th percentile in Islamabad earn significantly more than in any other city (PKR 134,000, USD 822).

There is a mixed picture when comparing household sizes at urban provincial level with those in selected large cities. In the case of Punjab, Faisalabad household sizes are similar to those across the wider province (mean of 5.7), but those in Lahore are smaller (mean of 5.2). Those in Peshawar are larger than wider KPK (7.8 vs 7.5), but the opposite is true for Karachi and Sindh (5.7 vs 6.0). It is a similar story for number of earners within a household, with higher figures in Lahore and Peshawar, but lower in Karachi and Faisalabad.

Maximum household monthly income by quintile, and sample sizes

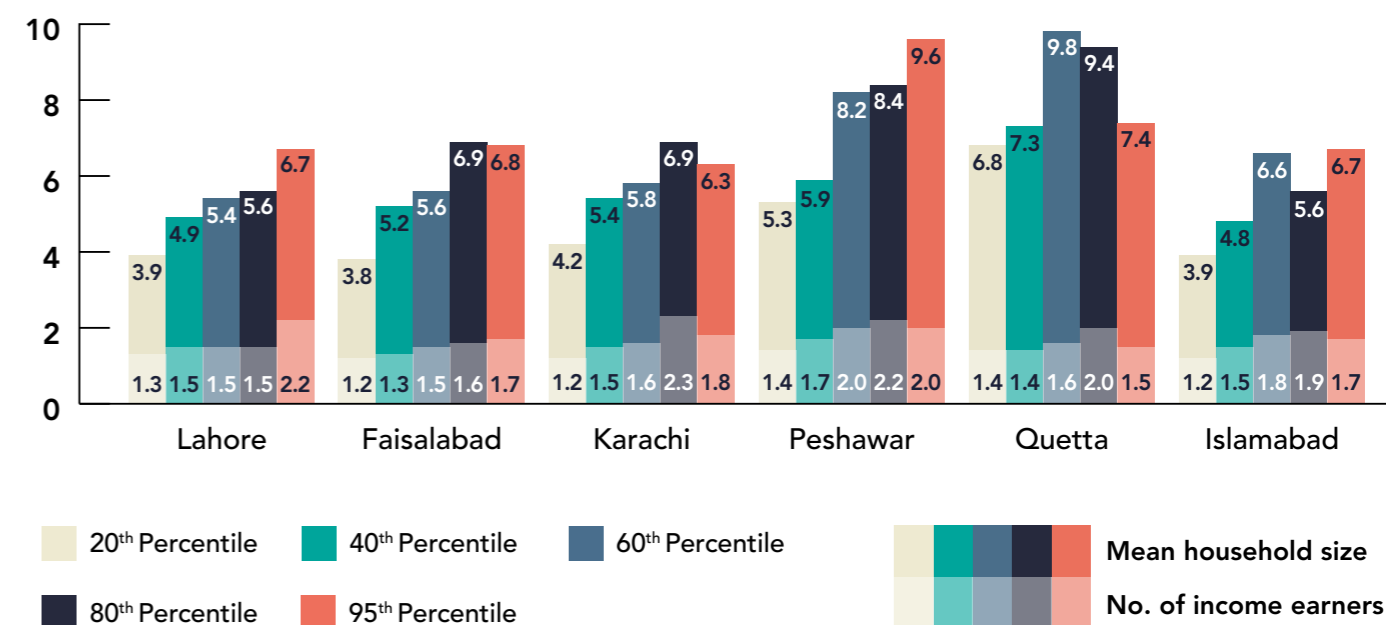


⁴ Distances used were the following: Faisalabad, Peshawar and Quetta (12km), Lahore (15km), Karachi (25km).

40th percentile household monthly income in USD

City	Lahore	Faisalabad	Karachi	Peshawar	Quetta	Islamabad
40th Percentile (USD) (\$1 = PKR 162.98 on 30/06/19)	USD 220	USD 184	USD 184	USD 215	USD 202	USD 266

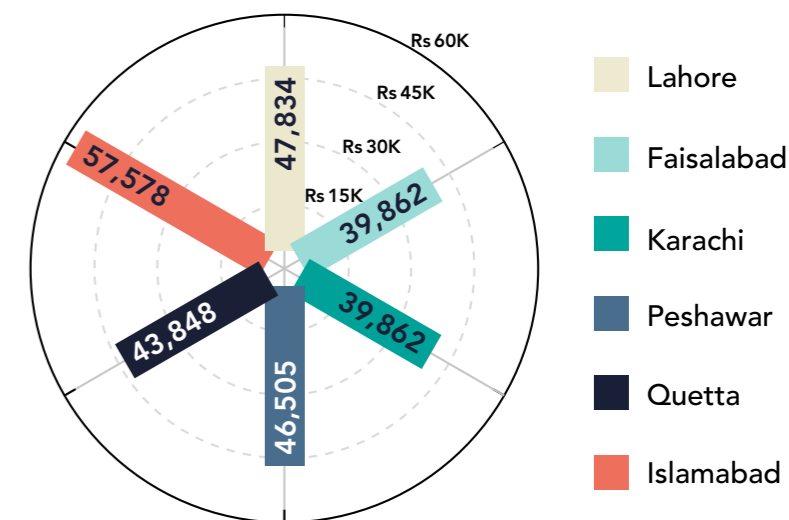
Mean household size and No. of income earners by income quintile



ADJUSTING FOR 2022

Income data presented here represents 2018, 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, the Consumer Prices Index is likely the simplest way to model this. Pakistan has seen CPI increase by 10.58% in 2019, 9.74% in 2020, and 9.50% in 2021, resulting in an overall increase of 32.87%.⁵ The table to the right shows the impact of this on the 40th percentile for selected cities, inflating 2018 data to represent 2022.

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



⁵ <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG>

METHODOLOGY

The Household Integrated Economic Survey (HIES) and Demographic and Health Survey (DHS) are produced by the Pakistan Bureau of Statistics (PBS), with DHS following an international standard and approach led by USAID.

DHS are standardised and nationally representative household surveys that provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. Anonymised raw data is freely available for download and analysis, and using the DHS Wealth Index, users can isolate urban households by wealth quintile, providing rich data on the Bottom 40% of the income pyramid. In Pakistan, samples of 14,540 households, 15,068 females (aged 15-49) and 3,691 males (aged 15-49) were used. Data can be downloaded from the DHS website⁶ and is coded in household, female and male files. This brief used the female and male files to produce data on proportion of men and women currently working, filtering on wealth⁷ and currently working.⁸

HIES is also a nationally representative household survey focused on presenting income and consumption expenditure data, with the current round covering 24,809 households. The full published report and tables⁹ provide a broad overview of the landscape, with the raw data freely available for more detailed analysis.¹⁰ Data is split into separate data files for different sections of the survey, meaning that a certain amount of data engineering is required to create a single dataset for analysis.

Key sections of the HIES survey used for this work are section 00, which provides distance of household location from PBS office; section 1a providing number of people per household; section 12a providing number of income earners per household and income per person; and section 12CE, which provides summarised income and expenditure for each household.

HIES uses robust processes for calculating both income and consumption expenditure, with both containing both cash and in-kind receipts. Section 12CE contains a verification process, checking whether income is at least 85% of expenditure, and if not, requesting additional data from the respondent. This sheet uses this income data, rather than expenditure, using the 'best case' of the first figure where it is at least 85% of expenditure, or the second figure where this was not the case.

Finally, though both this sheet and the HIES full report split both income and expenditure into quintiles, different approaches are taken. Within the HIES report, households are put into quintiles at a national level, meaning that different proportions of households are in each quintile for each province. Furthermore, expenditure is adjusted for household size to shift focus to per capita consumption.¹¹ In comparison, Reall is interested in understanding income groups within each province and city, so households are grouped at these levels. Additionally, rather than understanding per capita consumption, Reall's interest is in actual household incomes, so no adjustments are made for household size.

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

⁶ <https://www.dhsprogram.com/methodology/survey/survey-display-523.cfm>

⁷ 'Household wealth index in quintiles for urban/rural' – V190a and MV190a

⁸ 'Currently working' – V714 and MV714

⁹ <https://www.pbs.gov.pk/publication/household-integrated-economic-survey-hies-2018-19>

¹⁰ <https://www.pbs.gov.pk/content/pslm-hies-2018-19-microdata>

¹¹ See Appendix A of the report for further details, available at https://www.pbs.gov.pk/sites/default/files/pslm/publications/hies2018-19/hies_2018-19_writeup.pdf

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. This data can be further explored at reall.net/msi.

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



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